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Special issue on research

Numéro spécial
sur la recherche

Número especial
dedicado a la investigación

Edited by Colette Dufresne-Tassé
and Stéphanie Wintzerith

ICOM Education 26

CECA

Committee for Education and Cultural Action



Edizioni Nuova Cultura

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Volume 1

Edited by
Colette Dufresne-Tassé
Stéphanie Wintzerith



Edizioni Nuova Cultura

Description of the collection

This collection gathers the results of the research and professional experiences of the members of the Committee for Education and Cultural Action (CECA) of the International Council of Museums (ICOM).

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Introduction

Introduction

Introducción

Introduction

During its Rio de Janeiro meeting in August 2013, the Board of the Committee for Education and Cultural Action (CECA) of the International Council of Museums (ICOM) gave to its Research Delegate the editorial direction of the current issue of ICOM Education.

CECA AND RESEARCH

CECA has always promoted the diffusion of its members' studies, either through papers read at its annual international conference, or published in ICOM Education. Since over 15 years, its Board supports research as a basic principle and his efforts to stimulate it seem to increase gradually according to levels.

In 1997, CECA added research reports sessions to the programs of its international conferences. It soon became a usage, so that for the last 20 years about 12 such reports were presented every year.

From 1998 on, many of these reports were revised to be enlarged and detailed, so they could be published as collected papers whose content is now available on the Committee's web site (see Dufresne-Tassé, 1998; 2000; 2004; 2006).

Then in 2010 the Board appointed a Research Delegate who started an international network of members devoted to research in museum education and cultural action. In 2011, thirteen of them had their first meeting in Zagreb. Every year afterwards, the network gathered during the international conference to report about its works and discuss its orientations. In Alexandria, last year, they amounted to 75 members from Asia, Latin America, North America

and Europe. Most of them are museum professionals or university people closely related to the museum world.

The Research Delegate also involved herself organising initiation workshops on applied museum research. These workshops should continue for a number of years and rapidly lead to the training of small groups of research specialists coming from each part of the world and willing to offer similar workshops in their own region. So professionals from museum education departments without university training in research could produce investigations that would give their daily work a high level of rigour. This should bring them personal pride and a better standing in their institution.

Two more actions should be undertaken with urgency. First, one should identify the consequences of the interventions practiced by museums outside their walls, as we do not possess any means to estimate their value, even if they have been increasing in many parts of the world for more than 20 years. So we should develop an instrument to study their effects at least on the institutions or places receiving them, on the persons benefiting from them and those around, as well as on the museums producing these interventions. The second action is the publication of the present issue of ICOM Education.

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The first purpose of the present issue is to publish investigations produced by the researchers network and other CECA members, as many English language journals accept research reports on museum education and cultural action, while few French or Spanish do.

Forty authors or groups answered a call for research reports launched in September 2014, and 20 of them submitted papers in March 2015. These papers included theoretical, historical, and empirical investigation reports, the more numerous being the last. The authors were from Europe, Latin America and North America. They wrote in either English, French or Spanish, the three ICOM official languages, but their abstracts come in those three languages.

Stéphanie Wintzerith, a CECA Board member, joined the Research Delegate to form an editorial team who first of all asked for an evaluation by sending each paper to two appraisers. This team had to deal with a touchy problem: the current issue was limited to only 250 pages, when the papers amounted to over 400. Taking advice

from the CECA's President, they decided to publish the first papers received in ICOM Education 26 and the others in the next issue.

This problem has a positive side: many CECA members seem to do enough research to think of publishing results. This situation shall be brought to the CECA Board meeting that will take place in Washington next September. It could lead the committee to reach a new level in its promotion of research among its members.

C. Dufresne-Tassé and S. Wintzerith,
Editors,
ICOM Education 26.

Introduction

Lors de sa réunion de Rio de Janeiro en août 2013, le Conseil du Comité international pour l'éducation et l'action culturelle (CECA) du Conseil international des musées (ICOM) confiait à sa Déléguée à la recherche la direction du présent numéro d'ICOM Éducation.

Le CECA et la recherche

Le CECA a toujours favorisé la diffusion des études réalisées par ses membres, que ce soit au moyen de rapports oraux présentés lors de ses rencontres internationales annuelles ou par le biais de textes publiés dans ICOM Éducation. Depuis un peu plus de 15 ans, son Conseil encourage systématiquement la recherche, et ses efforts pour la stimuler semblent progresser par paliers.

En 1997, il introduit dans la programmation de ses conférences internationales des sessions de rapports de recherche. Ces sessions deviennent bientôt une coutume, de sorte que depuis presque deux décennies, on prend connaissance chaque année d'une douzaine de ces rapports.

À partir de 1998, plusieurs de ces rapports sont revus, détaillés et approfondis pour publication dans des recueils dont le contenu est maintenant disponible sur le site internet du comité (voir Dufresne-Tassé, 1998 ; 2000 ; 2004 ; 2006).

Puis en 2010, le Conseil nomme une Déléguée à la recherche. Celle-ci crée un réseau international de chercheurs en éducation muséale et action culturelle. Treize de ses membres se réunissent pour la première fois à Zagreb en 2011. Puis ce réseau se rencontre chaque année à l'occasion de la conférence internationale pour faire rapport

de sa production et discuter de son évolution. À Alexandrie, en 2014, ce réseau comptait 75 membres originaires d'Asie, d'Amérique latine, d'Amérique du Nord et d'Europe. Ce sont surtout des professionnels de musées ou des universitaires étroitement liés au milieu muséal.

Une autre activité importante de la Déléguée a été l'organisation d'ateliers d'initiation à la recherche appliquée. Cette activité devrait se poursuivre encore quelques années et se doubler le plus tôt possible de la formation de petits groupes de chercheurs disposés à offrir de tels ateliers dans chaque partie du monde. Il serait en effet souhaitable que les professionnels des services d'éducation qui n'ont pas bénéficié d'une formation universitaire à la recherche s'habilitent au moins à produire des études qui assureraient un haut niveau de rigueur à leur travail. Ils en tireraient fierté personnelle et meilleur statut dans leur institution.

Parmi les autres actions à entreprendre, il en est deux dont la réalisation semble particulièrement urgente. La première est l'identification des effets des interventions des musées hors de leurs murs, car on ne possède pas encore de moyen de les apprécier, bien que ces interventions se multiplient depuis deux bonnes décennies dans plusieurs parties du monde. Il y aurait donc lieu de développer un outil permettant d'étudier leurs conséquences au moins sur les institutions ou les endroits qui les accueillent, leurs bénéficiaires et les personnes qui les entourent, mais aussi sur les musées qui les produisent. La seconde action est la publication du présent numéro de ICOM Éducation.

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Publier la production des membres du réseau de chercheurs, mais aussi des autres membres du CECA, est le premier but du présent numéro, car s'il existe un bon nombre de périodiques anglophones qui acceptent des rapports d'investigation sur l'éducation muséale et l'action culturelle, les périodiques francophones ou hispanophones sont rares.

Quarante auteurs ou groupes d'auteurs ont répondu à un appel à rapports de recherche lancé en septembre 2014, et 20 ont donné suite à leur proposition en soumettant des textes en mars 2015. Ceux-ci comprennent des rapports de recherches théoriques, historiques et empiriques, ces derniers étant les plus nombreux. Leurs auteurs résident en Europe, en Amérique latine ou en Amérique du Nord. Ils ont choisi de s'exprimer en anglais, en espagnol ou en français,

c'est-à-dire dans l'une des trois langues officielles de l'ICOM. Toutefois, les résumés de leurs rapports sont disponibles dans ces trois langues.

Stéphanie Wintzerith, membre du Conseil du CECA, s'est jointe à la Déléguée à la recherche pour former l'équipe de rédaction. Cette dernière a d'abord organisé l'évaluation des textes en demandant pour chacun l'avis de deux spécialistes. Puis elle a été confrontée à un problème délicat: elle n'avait à sa disposition que 250 pages, alors que les textes à publier en représentaient plus de 400. Après consultation de la Présidente du CECA, la solution adoptée a été de publier les premiers textes reçus dans ICOM Éducation 26 et les autres, dans le numéro suivant.

L'épineux problème précédent comporte toutefois un aspect positif : beaucoup de membres du CECA semblent avoir une activité de recherche suffisante pour envisager la diffusion de ses résultats. Cette situation, qui sera étudiée lors de la prochaine réunion du Conseil du CECA en septembre prochain à Washington, pourrait bien amener ce dernier à franchir un nouveau palier dans sa façon de stimuler la recherche de ses membres.

C. Dufresne-Tassé et S. Wintzerith,
Rédactrices,
ICOM Éducation 26.

Introducción

Durante la reunión de Río de Janeiro realizada en agosto de 2013, la Junta Directiva del Comité de Educación y Acción Cultural (CECA) del Consejo Internacional de Museos (ICOM), confió a su Delegada de Investigación la dirección editorial de la presente edición de ICOM Educación.

El CECA y la investigación

El CECA siempre ha promovido la difusión de los estudios realizados por sus miembros, ya sea por medio de ponencias presentadas en su conferencia internacional anual, o a través de los textos publicados en ICOM Educación. Desde hace algo más de quince años, la Junta Directiva ha apoyado sistemáticamente la investigación como un principio básico y sus esfuerzos por estimularla se han incrementado de manera gradual.

En 1997 el CECA introdujo en los programas de sus conferencias internacionales sesiones de informes de investigación. Estas sesiones pronto devinieron en costumbre, de manera que después de veinte años, en cada conferencia se presentan alrededor de una docena de estos trabajos.

A partir de 1998, muchos de estos informes han sido revisados, detallados y profundizados con el fin de ser publicados como artículos científicos compilados, cuyos contenidos están ahora disponibles en el sitio web del Comité (ver Dufresne-Tassé, 1998; 2000; 2004; 2006).

Después, en 2010, la Junta Directiva designó una Delegada de Investigación, quien creó una red internacional de miembros dedicados

a la investigación en educación y acción cultural. En 2011, trece de estos miembros tuvieron su primera reunión en Zagreb. A partir de entonces, cada año durante la conferencia internacional, la red se reúne para hacer un reporte de su producción y discutir su orientación. El año pasado en Alejandría la red se constaba de setenta y cinco miembros viniendo de Asia, Latinoamérica, Norteamérica y Europa. La gran mayoría eran profesionales de museos o universitarios íntimamente relacionados con el medio museal.

Otra actividad importante de la Delegada fue la organización de talleres de iniciación a la investigación aplicada. Esta actividad deberá continuar por algunos años y duplicarse, lo más pronto posible, de la formación de pequeños grupos de investigación que estén dispuestos a replicar los talleres en diversas partes del mundo. Esta estrategia permitirá que los profesionales de departamentos de educación que carezcan de formación universitaria en investigación, puedan producir estudios que otorguen un alto nivel de rigor a su trabajo. Esto generará orgullo personal y mejorará su status dentro de la institución.

De las acciones a emprender, hay dos cuya realización es particularmente urgente. La primera es la identificación de los efectos de las intervenciones llevadas a cabo fuera de los muros del museo, ya que no tenemos ninguna forma de valorarlas, aunque éstas se hayan multiplicado en muchas partes del mundo en los últimos 20 años. Debemos desarrollar un instrumento para estudiar sus efectos por lo menos en las instituciones o espacios que las reciben, sus beneficiarios y las personas en su entorno, así como en los museos que producen dichas intervenciones. La segunda acción es la publicación de la presente edición de ICOM Educación.

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El propósito más importante de la presente edición es publicar la producción de los investigadores de la red y de otros miembros del CECA, ya que aunque hay diversos periódicos en inglés que acogen artículos científicos sobre educación y acción cultural en museos, son muy pocos los que lo hacen en francés y español.

Cuarenta autores o grupos de autores respondieron a la convocatoria de informes de investigación que se lanzó en septiembre de 2014, y veinte de ellos entregaron su texto en marzo de 2015. Estos textos incluyen informes de investigación teóricos, históricos y empíricos, siendo estos últimos los más numerosos. Sus autores son de Europa,

Latinoamérica y Norteamérica. Si bien los textos se presentaron en inglés, francés o español, los idiomas oficiales del ICOM, los resúmenes están en las tres lenguas.

Stéphanie Wintzerith, miembro de la Junta Directiva del CECA, se unió a la Delegada de Investigación para formar un equipo editorial, el cual comisionó la evaluación de cada uno de los textos a dos especialistas. El equipo se tuvo que enfrentar a un problema delicado: la presente edición se limitaba a 250 páginas, mientras que los trabajos presentados superaban las 400. Después de realizar una consulta a la Presidente del CECA, se decidió publicar los primeros textos que se recibieron en ICOM Educación 26, y los restantes en la siguiente edición.

Sin embargo, este problema tiene un lado positivo: muchos miembros del CECA parecen tener una actividad investigativa que les permite considerar la difusión de resultados. Esta situación, que será estudiada en la próxima reunión de la Junta Directiva del CECA que se llevará a cabo en Washington en septiembre del presente año, puede conducir a un nuevo nivel de promoción de la investigación entre sus integrantes.

C. Dufresne-Tassé y S. Wintzerith,
Editoras,
ICOM Educación 26.

*Theoretical
research*

*Recherche
théorique*

*Investigación
teórica*

Reflexiones desde la educación contemporánea – el visitante en el centro de la acción museística

Ricardo Rubiales García Jurado

Durante el siglo XX existieron diversas propuestas que marcaron el camino de lo que hoy comprendemos como educación. La reacción de diversos educadores a la propuesta conductista provocó que la conducta dejará de ser el centro de la acción educativa y que otros fenómenos como el lenguaje y las representaciones mentales tomaran un lugar preponderante.

El trabajo de Piaget, Vigotsky, Luria, Chomsky, Bruner, entre otros investigadores, conformaron un paradigma sobre la concepción de la educación y el aprendizaje conocido como la "revolución cognitiva". Ya a finales del siglo, las propuestas de Gardner, Perkins y Papert incluían referencias a investigaciones más enfocadas en la fisiología del cerebro y en los procesos de funcionamiento de la mente. Así, hoy para la educación, aprender es un proceso complejo, con múltiples elementos en interacción.

Ante los cambios inminentes en los proyectos educativos formales, se vuelve fundamental repensar en todo el proyecto que tenga como objetivo la educación.

Las propuestas y reflexiones académicas sobre el mundo contemporáneo y la necesidad de repensar la acción educativa en todos los ámbitos se vuelve una prioridad, especialmente en el contexto museístico.

A pesar de que la educación formal en Latinoamérica dentro de las aulas todavía se mantiene en una estructura muy conservadora, para la última década del siglo XX, la mayoría de los ministerios de educación en diversos países apostaban a propuestas teóricas mucho más vanguardistas que lo que se experimenta en la vida cotidiana de las escuelas. Aún así, la memoria, el manejo de información dura y el adquirir conocimientos prácticos son los elementos prioritarios

en el desarrollo del diseño curricular en la actualidad. En la perspectiva de muchos educadores, el haber continuado con este devenir de la acción educativa confirma, a sus ojos lo correcto de: "Siempre lo hemos hecho así". En un sentido, el trabajo educativo en el museo también se percibe en muchos casos más cercano a la tradición que a la reflexión teórica contemporánea. En contraste, cada día existe más evidencia sobre la necesidad de transformar la educación y la voluntad de diversos actores e instituciones en promover este cambio.

¿Cómo es que la educación en los museos se inserta en estos cambios? ¿Son conscientes los educadores de museos de la realidad de la educación a nivel mundial? ¿Reflexionamos sobre la teoría educativa; buscamos aplicarla? ¿Nos interesa "la educación" y sus retos sociales o preferimos mantenernos al margen?

Reflexiones desde la educación contemporánea

Constructivismo

En la concepción constructivista de la educación, el centro de la acción educativa siempre es la persona que aprende. Además de reconocer el proceso de aprendizaje como parte de una realidad sociocultural donde todo aprendizaje es social y afectivo.

Es necesario subrayar que dicha concepción constructivista reconoce y considera fenómenos de carácter interno: la serie de pensamientos, ideas y funciones que ocurren dentro de las personas en el proceso de aprendizaje (lo cuál proviene del trabajo de Piaget, Tolman y de los psicólogos de la *Gestalt*); el lenguaje como un sistema cognitivo con sus propias representaciones (fundamentalmente a partir del trabajo de Noam Chomsky) y al descubrimiento y la experimentación como elementos clave en el aprendizaje (desde Bruner, Ausebel y Gagné) (Hernández, 2007).

En el caso de Vigotsky, su trabajo subraya la relación entre pensamiento y lenguaje, y lo cultural que participa en el proceso de construcción de sentido. Un elemento clave será la zona de desarrollo próximo y la relación entre las representaciones mentales y la construcción de nuevo conocimiento en la mente de las personas. Esta serie de procesos sobre la adquisición y construcción de nuevos conocimientos que necesariamente implican una deconstrucción y transformación sobre lo ya conocido (Falk and Dierking, 2000).

Bajo esta perspectiva necesitamos reconocer esos procesos cognitivos que en todo momento y ante un nuevo estímulo, ambiente

desconocido, problema o situación, procesan información y nos permiten proyectar relaciones y encontrar sentido ante los nuevos retos (en México estas reflexiones son consideradas en el desarrollo de los nuevos planes y programas para la educación básica desde el 2012). Múltiples investigaciones reportan que las personas aprenden efectivamente “fuera” del contexto escolarizado, a través de periódicos, programas de televisión, viajes o conversaciones en un café. Estos son los resultados del trabajo de investigación de John Falk y Lynn Dierking (2007) que ellos denominan aprendizaje libre (*free choice learning*).

El encuentro con lo no conocido, con nueva información o con expresiones artísticas que no son familiares produce en las personas la búsqueda de significado; encontrarle sentido a tal ambiente, objeto, palabra o situación. Esta construcción de sentido es un proceso de aprendizaje que implica procesos cognitivos y operaciones mentales que van desde la simple observación hasta operaciones de alto nivel como la reflexión o la proyección de relaciones virtuales. Howard Gardner (1996) subraya cómo el aprendizaje del arte requiere la exploración abierta y múltiple. El enfoque del proceso enseñanza-aprendizaje del museo debe enfocarse en el desarrollo de habilidades de pensamiento e incluso a plantearnos más preguntas que respuestas.

No toda situación implica un proceso significativo de aprendizaje. Existen muchos estímulos que simplemente dejamos pasar: objetos, palabras o ambientes que por su complejidad o simpleza pueden ser ilegibles o pasar desapercibidos. No existe entonces ningún tipo de diálogo o relación entre el estímulo y la persona. Existen estudios de público que revelan situaciones como la anterior dentro de la experiencia del museo, por ejemplo cuando los públicos encuentran al espacio museal como frío, ilegible o demasiado complejo, el diálogo termina. Ir al museo no supera la experiencia de caminar en un centro comercial algún fin de semana (hecho que para algunas personas sería más significativo). Para Reuven Feuerstein (1995; 2012), creador de la Teoría de Aprendizaje Mediado, esta problemática es central al aprendizaje, y el diálogo es fundamental, de ahí que el mediador enfoca, regula, selecciona, distingue y refuerza tanto el estímulo como la respuesta.

¿Cuál debe ser la reacción de los profesionales del museo ante tales hechos? Si es verdad que el público es la *raison d'être* del museo, entonces una prioridad en el proceso museístico debe ser la experiencia de los públicos dentro del mismo museo, su contacto con las exposiciones y colecciones inherentes.

Buscar crear espacios que faciliten el diálogo, la interpretación de los públicos y la construcción de sentido se convierten en acciones pertinentes en la labor museística. Incluso brindar herramientas que, una vez asimiladas por los visitantes, puedan utilizarse nuevamente en otro espacio museográfico o al encontrarse con elementos museables.

¿Qué sucede en el encuentro entre la persona y las propuestas museológicas? ¿Qué ocurre en el escenario personal de cada individuo, sus pensamientos, reacciones, lecturas? Cuando este encuentro se califica como significativo, el implica necesariamente elementos afectivos e intelectuales, motiva la exploración y la proyección de relaciones con eventos, información o expresiones vistas anteriormente. Es un proceso de búsqueda y construcción de sentido.

Los visitantes construyen significado dentro de los museos usando un amplio rango de estrategias de pensamiento. Esta construcción de significado es primeramente personal, relacionado a los constructos mentales existentes (la red conceptual) y el patrón de ideas y creencias en las cuales la persona interpreta su experiencia al contacto con su alrededor. Por otro lado, dicha construcción es socialmente moldeada tanto por el contexto cultural como por otras personas.

Explorar la "construcción de sentido" implica una nueva perspectiva del aprendizaje en contraste con la educación que se desarrolló a finales del siglo XIX y principios del XX; aquella que se basaba en la forma y la memorización más que en la significación y la experiencia directa.

Además de la construcción de sentido, el "aprender haciendo" también fue una perspectiva fundamental en la educación en el siglo XX y un paradigma dentro del campo museístico al convertirse en el elemento clave en la concepción de los Museos Interactivos y Centros de Ciencia. Parece fundamental que todo educador en museos considere el método de descubrimiento versus el método expositivo. En este sentido, subrayo especialmente el trabajo de investigadores en la educación en Museos como George Hein, Elaine H. Gurian, Leslie Bedford...

Es así, que comprendemos la interpretación como una serie de procesos tanto cognitivos como afectivos, que ocurren en cada persona al encontrarse dentro el espacio museal. Estos procesos humanos no sólo ocurren en el contexto del museo, sino en un amplio abanico de experiencias durante toda la vida.

Si bien existen investigaciones y proyectos relacionados con el término interpretación en museos; en el caso de Merriman y Brochu

(2002), el enfoque no está en los procesos internos del que interpreta sino de aquél que funge como interprete del patrimonio. La Asociación Nacional de Interpretación (NAI) en los Estados Unidos legitima este concepto con la certificación de estos interpretes del patrimonio cultural y natural.

Esta perspectiva de la interpretación que coloca al "interprete" al centro del proceso se relaciona más al concepto de la "traducción". Los curadores proponen un discurso a partir de las colecciones y el equipo educativo "traduce" esta propuesta académica en un lenguaje más cercano. Así, para Beck y Cable (2002), el éxito del diseño educativo está en los interpretes; en la capacitación del personal del museo. Este diseño educativo depende y se genera a partir de los objetivos curatoriales y no de los públicos.

En el campo de los museos, la reflexión sobre los procesos de construcción de sentido del público requiere más investigación (Smith-Shank, 2004). No hemos investigado de forma suficiente los procesos internos del que interpreta. Nos conformamos con "enviar" el mensaje... sin la plena seguridad que ese mensaje es asimilado e interpretado. Creyendo que nuestro trabajo es simplemente transmitir el mensaje y no preocuparnos si somos escuchados o nuestro mensaje "hace sentido".

Al diseccionar el quehacer museístico, encontramos una claridad absoluta en el equipo de colaboradores con respecto a procesos propios en el desarrollo de una exposición: como el diseño museográfico, la investigación de colecciones y la conformación de ambientes propios para la conservación adecuada de los objetos. Por el contrario, el análisis de las experiencias de los públicos, los cuestionamientos y las respuestas, el impacto de la propuesta museística en los diversos públicos son situaciones "grises", las cuáles todavía necesitamos explorar a mayor profundidad.

Es necesario remirar el museo como un órgano dinámico de dos dimensiones. La primera será el diseño museográfico, la conformación del discurso curatorial y la generación de mensajes; la metamorfosis interna del espacio físico y comunicativo del museo. La segunda dimensión implica la construcción y deconstrucción de sentido por parte de los públicos. La "resignificación" de los mensajes, las aproximaciones sociales y culturales a las propuestas del museo; la digestión de la propuesta museística por parte de los públicos.

No concebimos que la labor museística "termine" al inaugurar una exposición. De hecho será ahí donde comienza la "dimensión pública del museo", las situaciones derivadas de la visita de los diversos

públicos: emociones, reacciones, preguntas y reflexiones que ocurren dentro de la sala de exposición.

Consecuentemente, la interpretación del usuario (en contraste con aquella interpretación-traducción que “nosotros” hacemos del discurso curatorial) es uno de los procesos de mas importancia dentro de la dinámica museística; las reacciones, emociones y sentimientos derivados de las experiencias vividas en el publico marcan y construyen el espacio museal. Es decir: el proceso de lectura por parte de los usuarios es tan importante como el momento de creación. Para que una exhibición sea exitosa, el efecto en el interprete es equivalente al trabajo de diseño curatorial y montaje.

Así, los procesos de interpretación implican niveles de complejidad que señalan fundamentalmente al contexto personal. Desde la concepción de los socioconstructivistas Vigotsky y Luria (Hernández, 2007) y especialmente Bruner (1990), la zona de desarrollo próximo es este espacio donde existe la posibilidad de aprendizaje; de construcción de sentido. Si una persona recibe un estímulo que ya conoce, la información o experiencia presentada será aburrida y seguramente no significativa. Si la experiencia presenta retos demasiado complejos o la información es excesivamente nueva y sin referentes posibles, la construcción de significado puede ser nula, la experiencia será angustiante. El educador trabaja en el espacio entre lo que se conoce y no se conoce; aquello que se sabe, pero no es tan conocido como para ser demasiado fácil, ni demasiado retador para ser ilegible. Esta es la diferencia que hace la diferencia (Busquets, 2005, p. 75) Citando a Feurstein:

“Nuestro concepto del mundo no es, en su mayor parte, producto de nuestra percepción. Más bien nuestra percepción es generalmente producto de nuestro concepto del mundo” (Feurstein, 1995, p. 20).

Nuestro aprendizaje esta determinado por nuestras experiencias previas y por nuestra capacidad de relacionar dichas experiencias con las situaciones “potenciales” de aprendizaje, de donde viene el nuevo conocimiento.

Analicemos las implicaciones de estas reflexiones teóricas en el museo. Si la interpretación se define desde el visitante y no desde el discurso curatorial, entonces ninguna persona es una “tabla rasa” al entrar al museo. Es absurdo pensar que toda persona esta dispuesta a interesarse y “dejarse llevar” por la propuesta de exposición, por el contrario, su acercamiento es moldeado e interrumpido por su conocimiento previo, experiencias e intereses. El diálogo en el espacio

museal es real, en la medida en la que podamos apelar al contexto personal reconociendo los vínculos intelectuales y emocionales de las audiencias con la propuesta museística.

En cuanto al contexto cultural, la suposición de que todo discurso curatorial (o toda propuesta artística) es universal de significado a cada comunidad humana, revela comprensiones cortas con respecto a la lectura de los públicos y los procesos de construcción de sentido.

Las propuestas socioculturales de la educación señalan que los aspectos fundamentales del aprendizaje, incluyendo la percepción, procesamiento y construcción de conocimiento son constructos socioculturales (Hernández, 2007). Por ello, el estudio del aprendizaje no se enfoca exclusivamente en el individuo, sino incorpora a la investigación las comunidades humanas a las que pertenece dicho individuo.

¿Es verdad que una exposición es leída y comprendida (en las lecturas y significados atribuidos por los públicos) de la misma forma en un espacio universitario urbano, que en un museo comunitario de la sierra o del contexto rural? En realidad, la experiencia en el museo es tanto individual como grupal. Lo que una persona aprende está intrínsecamente ligado al contexto histórico y cultural en el cual ocurre.

¿Es suficiente leer la ficha técnica al lado de una obra para "comprenderla"? ¿Es clave conocer la fecha de producción y los estudios académicos de un artista contemporáneo para acercar a los públicos a su propuesta? ¿En qué nos enfocamos? La educación constructivista proclama un diseño "centrado en el estudiante" ¿Estamos en los museos desarrollando un diseño "centrado en el visitante"?

La responsabilidad del Museo, de todo museo, se refiere al patrimonio y su relación con los públicos; su valoración, apropiación y "resignificación". En el diseño de la exposición debemos incluir vínculos que promuevan las relaciones entre los contextos locales y la propuesta museológica; señalar significados culturales compartidos y reconsiderar lecturas o prejuicios desde el primer momento, esto enriquecerá de manera significativa la experiencia de los públicos.

La idea del museo como un espacio inmaculado, donde sólo se encuentran el visitante solitario y la obra "pura" es una falacia; toda persona trae a su experiencia un bagaje (intelectual y artístico), aún más, un contexto socio-cultural que define lecturas y acercamientos. Sin olvidar que este "diálogo" no sólo comprende una carga de significados desde el público, sino que también el museo a través de

la curaduría contribuye con una importante carga de significados, lecturas e intenciones.

Reconocer los procesos de interpretación como parte fundamental en el diseño de nuestros proyectos implica colocar a los públicos en el centro de la labor museística. El éxito de la difusión, comunicación y exhibición de los bienes tangibles e intangibles depende directamente de nuestra comprensión de los intereses y motivaciones, estilos y preferencias de aprendizaje y expectativas de las audiencias.

Podemos explorar estas ideas a partir del trabajo de educadores en museos en el contexto latinoamericano: Milene Chiovatto en Brasil; Daniel Castro en Colombia; Silvia Alderoqui en Argentina y el trabajo de la Fundación Museos de la Ciudad en Quito, Ecuador, entre otros.

¿Cuáles son algunas de las propuestas teóricas de la educación contemporánea que exploran este proceso de construcción de sentido?

La Teoría de las Inteligencias Múltiples

El trabajo de Howard Gardner desde la década de los 80's se convirtió en un paradigma dentro del campo educativo. Su teoría es una explicación completa de la cognición humana: presenta las inteligencias como una nueva definición de la naturaleza del ser humano desde el punto de vista cognoscitivo. Implica una singularidad personal en las diversas combinaciones de las inteligencias en las personas, lo cuál multiplica el espectro de los estudiantes negando la homogeneidad en el contexto educativo.

Desde la mirada de Gardner (2000) la teoría de las Inteligencias Múltiples subraya que como especie poseemos una serie de potenciales bio-psicológicos o inteligencias entre las que se encuentran las anteriores y también la inteligencia musical, una inteligencia naturalista, intrapersonal (sobre nosotros mismos) interpersonal (sobre otras personas), una inteligencia corporal-cinestésica e incluso una inteligencia existencial. Cada uno de estos potenciales biopsicológicos tiene sus propias formas de representación mental; incluso podemos decir que cada inteligencia es una forma de representación mental (Gardner, 2000).

Gardner (2000) propone que la enseñanza debe segmentarse, individualizarse y personalizar. Posiblemente en el museo desarrollemos proyectos que busquen estandarizar y generalizar en lugar de enfocar y considerar las diferencias y posibilidades que esas diferencias brindan.

Las funciones cognitivas superiores

El pensamiento de alto nivel refiere a las funciones cognitivas superiores como el proceso de descubrimiento, la resolución de problemas, la planificación, la creatividad, la comprensión profunda.

De la investigación de estas funciones resalta la capacidad de pensar de la mente, reflexionar sobre sus mismos procesos: la memoria (capacidad meta-mnemónica) el propio pensamiento (capacidad meta-cognitiva) e incluso las representaciones mentales (capacidad de la meta-representación).

Con excepción de los filósofos, la metacognición o pensar sobre el propio pensamiento puede ser un fenómeno bastante nuevo en las consideraciones de los estudios de la mente. Pero la metacognición nos permite evaluar nuestras formas de pensar; ¿Cuándo? y de ¿qué forma funciona nuestra mente? ¿Qué nos funciona y qué no? ¿Qué estrategias e instrumentos nos ayudan al acercarnos a contenidos complejos?

La sociedad de la información nos brinda elementos tecnológicos que nos permiten enriquecer significativamente las habilidades metacognitivas. Podemos crear representaciones, modificar y experimentar con elementos en 3D e incluso reunir un montón de información de manera ordenada y con resultados concretos.

Al hablar sobre conocimiento, es pertinente mencionar las perspectivas más contemporáneas sobre el conocimiento, así,

“[...] el aprendizaje no avanza de un modo lineal, establecido, ni causal. Tampoco en fases progresivas y previsibles; por el contrario, se construye mediante procesos simultáneos, con pausas y retiradas que apuntan en múltiples direcciones” (Rinaldi, 2002, p. 2).

Esta perspectiva se acerca más a la imagen del conocimiento como un rizoma. Esta metáfora propuesta por los filósofos franceses Gilles Deleuze y Felix Guatari (García Aretio, 2012), era una solución para superar los conceptos de universalidad, modelos de preguntas y respuestas, juicios simples, reconocimiento e ideas correctas. En un rizoma, no existe jerarquía entre raíz, tallo y ramas, nunca es vertical, siempre es horizontal. Desde esta mirada, los pensamientos y conceptos son considerados consecuencia de la estimulación de un encuentro con la diferencia. Así, el rizoma crece en varias dimensiones, sin principio ni final, extendiéndose en un medio abierto hacia múltiples direcciones. Esta multiplicidad que funciona mediante conexiones y heterogeneidad no es prefabricada, sino construida.

Entonces el pensamiento proviene de una experimentación y problematización – una exploración del devenir – en línea con Rinaldi (1995, p. 47): “El proceso del devenir es la base de una auténtica educación”. En este sentido, el papel de los visitantes no puede ser el de recolectores de información, especialmente nombres, técnicas y fechas ¿No será que la experiencia del museo y la exploración del arte, la historia, la arqueología, la ciencia, la etnografía... los patrimonios tangibles e intangibles, nos ofrecen la oportunidad de enriquecer nuestra percepción del mundo en el que vivimos y de quienes somos en el?

Pensamiento complejo

Una serie de proyectos de investigación y propuestas avaladas por la UNESCO en la década de la Educación para el desarrollo sostenible 2005-2014 se proponía repensar la educación del futuro.

Un elemento clave de esta perspectiva fue el *Manual de iniciación pedagógica al pensamiento complejo* editado por la UNESCO (2002) y que proponía señalar retos y posibilidades del contexto actual. Dicha publicación señalaba la incertidumbre y el cambio como características, la innovación y la creatividad como elementos clave del desarrollo en este nuevo milenio.

Como lo señala Morin (2002), el pensamiento complejo es un pensamiento que postula la dialógica, la recursividad, la holoscopia como sus principios más pertinentes. Se trata de un espacio mental en el que no se aporta sino que se revela, se desoculta la incertidumbre.

Así la investigadora del *Proyecto Cero* de la Universidad de Harvard, Tina Grotzer (2011), subraya la complejidad al no pensar de manera lineal y observar los procesos paralelos que suceden ante tal o cual situación. La Incertidumbre una vez más parece como un elemento fundamental para abordar la problemática de la vida cotidiana, que esta llena de incertidumbres.

Al hablar de la educación contemporánea, requerimos reconocer los cambios sociales que inciden directamente tanto en los objetivos de la educación como en los procesos de enseñanza-aprendizaje. Un buen ejemplo sobre estos cambios sociales serán los procesos de democratización de la información y los alcances actuales de la información. Hace no menos de 40 años, en la educación, era fundamental que las personas tuvieran una buena memoria debido a la limitación en la difusión de la información. Hoy día con los motores de búsqueda y la extensa multiplicación de canales de información, no es tan fundamental el desarrollo de la memoria, sino

la capacidad de examinar, discernir y seleccionar sobre grandes bloques de información aquello que es útil.

Disposiciones del pensamiento

El profesor David Perkins (2000), quién colabora dentro de la Escuela de Educación de la Universidad de Harvard, señala la necesidad imperante de la educación con una visión más integral y menos disciplinaria. Este investigador propone la autogestión del estudiante de su propio aprendizaje al brindar las herramientas para que la experiencia del aprendizaje pueda re-mirarse desde el que aprende, no como una imposición (Perkins, 2000).

Un término que utiliza para designar ese proceso será el de disposición; término que también utiliza Shari Tishman (2000) en su trabajo sobre "disposiciones del pensamiento". Y aquí estamos refiriéndonos una vez más a la concepción de la zona de desarrollo próximo de Lev Vigotsky (Hernández, 2007). Las disposiciones implican llevar la complejidad que presenta la vida cotidiana al aula y descubrir los elementos que subyacen a lo más evidente; fomentar el pensamiento y la mirada analítica, analizar entonces el proceso más que el producto final.

Tishman (2000) propone cuatro disposiciones del pensamiento: plantear y explorar problemas; criticar y testar teorías y explicaciones; buscar múltiples perspectivas y posibilidad; ser juicioso y reflexivo.

Educación y futuro

La sociedad del conocimiento es un concepto elaborado a finales del siglo XX por Drucker (1969) y Stern (1994) quienes proponen una reflexión sobre la sociedad contemporánea. El concepto comenzó a tomar relevancia en los estudios sobre la "era de la información", conferencias y cumbres internacionales hasta la actual referencia obligada para la mayoría de los países de la OCDE. La UNESCO presenta en 2005 un informe sobre la sociedad del conocimiento que refleja algunos retos y posibilidades de la educación del futuro considerando el contexto del mundo contemporáneo y los posibles caminos del mañana.

Abdul Waheed Khan, subdirector de la UNESCO para la comunicación e información, propone que

"[...] el concepto de *sociedades del conocimiento* incluye una dimensión de transformación social, cultural, económica, política e institucional, así como

una perspectiva más pluralista y desarrolladora [...] el conocimiento en cuestión no sólo es importante para el crecimiento económico sino también para empoderar y desarrollar todos los sectores de la sociedad” (Khan, 2010, p. 2).

Sin duda, la educación formal durante mucho tiempo se ha enfocado en los contenidos per se. En ese sentido, se percibió que la información inerte de hechos, datos, cifras por lo general construía el pensamiento. Hoy sabemos que la información debe trascender y convertirse en conocimiento. Esa será una de las reflexiones fundamentales del informe de la UNESCO (2005). El enfoque de la educación debe buscar la aplicación de la información, como lo hemos mencionado anteriormente; no sólo conocer, sino saber hacer, saber convivir y saber ser. Son elementos que propone Jacques Delors (1996) como pilares para la educación del siglo XXI y que implican la utilidad y aplicación del conocimiento aprendido en la escuela hasta y hacia la vida diaria de los estudiantes.

En ese sentido, el desarrollo de las habilidades de pensamiento o funciones ejecutivas (Papert, 1996) se vuelven fundamentales en un mundo dirigido por el conocimiento, lo intangible y la innovación. En varios países de la OCDE, la reforma de la educación formal concibe como eje el desarrollo de habilidades de pensamiento. Un enfoque necesario será proponer una educación que fortalezca las estructuras del pensamiento de manera que las herramientas para enfrentar los cambios, trabajar en equipo, negociar, regular el comportamiento permitan a las personas enfrentar los retos de un mundo que cambia continuamente. ¿Cómo respondemos los museos a estas perspectivas?

El acceso a la educación se vuelve un reto importante, especialmente en el contexto de la problemática familiar, la necesidad económica y el dilema de trabajar o seguir estudiando. Seguramente, promover una concepción de la educación como un patrimonio, subraya el valor del conocimiento y propone una mirada más autodidacta. El aprendizaje para toda la vida en la sociedad contemporánea y en la vida adulta se vuelve fundamental. Sin duda, la sociedad del conocimiento es una sociedad de aprendizaje, donde la experiencia educativa no esta restringida ni a un lugar, ni a un momento.

¿Cómo responden los museos a estas premisas? ¿Es posible priorizar los proyectos educativos dirigidos a adultos? ¿Podría ser un eje fundamental en nuestro trabajo el promover el “aprender a aprender”? ¿Somos los museos agentes de cambio social?

En el contexto del mundo contemporáneo, debemos promover espacios de aprendizaje formal e informal. Aprovechar todas las oportunidades, herramientas y estrategias posibles para promover el acercamiento a nuevas reflexiones, perspectivas y miradas. La Comisión Internacional para la Educación en el siglo XXI al presentar su informe a la UNESCO subraya que

“Los sistemas educativos deben responder a los múltiples retos que les lanza la sociedad de la información, en función siempre de un enriquecimiento continuo de conocimientos y del ejercicio de una ciudadanía adaptada a las exigencias de nuestra época” (Delors, 1996, p. 32).

Desde la perspectiva de varios educadores e investigadores (Gardner 2005; Papert, 1996; Perkins, 2010) aprender se relaciona a la curiosidad, la investigación y la vida cotidiana. Podemos aprender en todo momento y todo lugar. Somos seres que tenemos el derecho a la educación y que nacemos con un sentido innato al descubrimiento y la construcción de sentido.

¿Es entonces el aprendizaje un proceso que comienza y termina en nosotros los educadores? Si el aprendizaje es una posibilidad innata, nuestro trabajo debe considerar primeramente el diseño de los contextos y elementos para promover el aprendizaje... ¿Debe estar nuestro enfoque primero en la enseñanza o en el aprendizaje?

Diseño educativo

¿A que responden los objetivos de la educación en museos? ¿Al discurso curatorial? ¿En qué sentido diseñamos nuestros proyectos a partir de las necesidades y características de los públicos? Un elemento fundamental en la educación contemporánea es diseñar desde el visitante.

En este sentido, el trabajo de David Rose (Rose and Meyer, 2006) de la Universidad de Harvard (entre otros investigadores) articula la idea del diseño que pueda incluir todos los tipos de aprendices. Denominada Diseño Universal del Aprendizaje, esta perspectiva implica y señala directamente la accesibilidad no sólo física, sino también intelectual e incluso afectiva.

Esta tendencia responde a la necesidad de volver a una educación más abierta, reconociéndola como un derecho fundamental a todo ser humano; un bien común y la clave para la reducción de la desigualdad y la provisión de oportunidades para todos (UNESCO, 2005, p. 76). Así en las reflexiones de las metas de la educación en

el futuro se presenta como elemento principal el aprendizaje para toda la vida (Agenda de la educación 2015, UNESCO).

En este mismo sentido deberemos reconocer el término "competencia" que, de acuerdo con Zhou (2001), representa un concepto integral distinto al talento o la técnica y que promueve procesos cognoscitivos complejos. Este concepto denota un sistema complejo de acción y habilidades de pensamiento, actitudes y otros componentes no cognitivos.

La UNESCO (2005) propone una revisión del trabajo educativo y señala la necesidad del rediseño de las propuestas en miras hacia el futuro y la responsabilidad actual de las instituciones educativas (entre las cuales se incluyen los museos) en brindar las herramientas posibles para que todas las personas, y especialmente los jóvenes, puedan enfrentar un mundo cambiante como el presente.

En un primer momento, en cuanto al diseño universal de aprendizaje, es necesario incluir múltiples medios de representación, reconocer las diferencias en los estilos y preferencias de aprendizaje (Gardner, 2000) y abordar los contenidos desde diversos canales.

Durante la aplicación y el abordaje de las actividades educativas, siempre será necesario proporcionar diversas oportunidades para la expresión y la exploración. Se requerirán diversas opciones para la interactividad, la utilización y administración de recursos y tiempo, además de la necesidad de proponer opciones para la autoevaluación y la autogestión.

Imaginemos entonces a ciertos grupos de público que en lugar de escuchar y seguir a un guía durante un recorrido de noventa minutos, gestionan personalmente su aprendizaje y sus encuentros con el patrimonio. ¿Es posible que diseñemos espacios, estrategias y herramientas para que esto ocurra?

Es necesario diseñar a partir de la flexibilidad, del cambio, como algo deseable y continuo. Por poner un ejemplo: el Programa sobre la Ignorancia de la Universidad de Arizona refiere a estos conceptos.

Durante el tiempo de estudio, en diversas ocasiones los alumnos crean "los mapas de la ignorancia diseñados para reconocer y articular no lo que sabemos sino lo que no sabemos" (Perkins, 2010 p. 259). El programa propone comprensiones más amplias debido a que el reconocimiento de lo que no sabemos permite acercarnos y reconocerlo. Como lo dice Perkins (2010, p. 259), "no solo educamos para lo conocido sino también para lo desconocido".

Así una clave en la acción educativa del museo será el colocar el proceso de aprendizaje en manos del visitante.

No olvidemos que el aprendizaje es un proceso activo que transforma el pensamiento y donde el aprendiz es participante consciente de este proceso (Hein, 1995), de ahí que en el desarrollo de toda estrategia didáctica la participación sea fundamental.

¿Cuáles serían algunas propuestas de la educación contemporánea que considero pueden ampliar esta reflexión?

La Teoría de la Experiencia de Aprendizaje Mediado

En el trabajo de Reuven Feurstein, encontraremos referencias directas a la construcción de sentido y la importancia del contexto social en el proceso de aprendizaje. Feurstein propuso la Teoría de la Modificabilidad Cognitiva Estructural que define la inteligencia como

“[...] la propensión o tendencia del organismo a ser modificado por su propia estructura, como respuesta a la necesidad de adaptarse a nuevos estímulos” (Feurstein, 1995, p. 76).

Esta teoría ha sido considerada como parte de las nuevas tendencias de las ciencias del comportamiento.

Los aportes del trabajo de Feurstein señalan la complejidad del proceso de aprendizaje y la importancia y potencia del proceso sociocultural. Feurstein propone a los seres humanos como entes totalmente sociales y será tanto el contacto con otras personas como el ambiente determinantes del aprendizaje.

Como lo vimos anteriormente, Feurstein sostiene que la experiencia de aprendizaje resultará efectiva al considerar intervenciones por parte de un mediador que pueda enfocar, seleccionar, retroalimentar... durante el proceso de aprendizaje. La Teoría de la Experiencia de Aprendizaje Mediado será la propuesta teórica que aborda esta perspectiva.

Así, la mediación es un proceso de interacción entre la persona que aprende y la persona con experiencia e intención que selecciona, enfoca, regula y retroalimenta las experiencias ambientales y los hábitos de aprendizaje (León, 2007).

La Teoría de la Experiencia de Aprendizaje Mediado, he podido aplicarla en el desarrollo del equipo de profesionales del museo que tienen contacto con los públicos. Diversos museos alrededor del mundo reflexionan sobre esta teoría como un elemento clave para la interacción con los visitantes.

Algunos elementos claves en la mediación del pensamiento serán, por ejemplo, los tipos de respuesta del mediador. Desde una perspectiva, el mediador siempre trabaja con el paralenguaje, es

decir, pone atención en el lenguaje no verbal de los visitantes. Es fundamental que la escucha en el museo no sólo sea verbal, sino también corporal, y que el mismo mediador escuche todo el tiempo. Es importante subrayar que en el caso de una contradicción entre el lenguaje verbal y no verbal, siempre optamos por el mensaje del lenguaje no verbal.

Por otro lado, comprendemos que al acompañar y preguntar, el mediador es capaz de monitorear constantemente sus palabras y acciones. Una pregunta pertinente aquí sería la cantidad de tiempo y escucha que requiere un espacio educativo. ¿Qué ocurriría si el visitante pudiera hablar un 70% del tiempo en la sala de exposición y el mediador (guía), sólo un 30%? ¿Qué implicaciones tiene que este tiempo lo utilice el mediador en hacer preguntas? ¿Será posible que los educadores de museo puedan reconocer la importancia que tiene el promover conversaciones y reflexiones desde los visitantes ante el tema analizado en la exposición? ¿Tenemos miedo de no poder “transmitir” toda la información necesaria?

En estos casos, el profesional del museo toma un lugar distinto y permite que los visitantes puedan interpretar, solucionar y responder. El silencio, parafrasear o clarificar también serán respuestas que un mediador puede expresar. Cada una de ellas propone diferentes reacciones; en un caso, traducimos lo escuchado preguntándolo al visitante “¿Es esto lo que quiere decir?” Por otro lado, al clarificar pedimos una reflexión desde el visitante “¿Podría decirlo de otra manera?” “¿Podría preguntar eso de otra forma?”

El aprendizaje colaborativo como filosofía

Este aprendizaje colaborativo implica interacción e intercambio; se reconocen fácilmente las habilidades o talentos de cada participante al tiempo de fomentar el respeto y el diálogo en las diferencias y la co-autoría y co-construcción de conocimiento. El grupo es responsable de las decisiones a tomar a partir de consensos.

En el aprendizaje colaborativo, los diversos grupos a conformar pueden apoyar desde el sentido de “aprendizaje entre iguales” al subrayar el sentido de la colaboración hasta el desarrollo de habilidades en la administración del tiempo, la investigación y la búsqueda de soluciones. En el aprendizaje colaborativo, siempre existirá la oportunidad para desarrollar habilidades sociales al fomentar el respeto de la diversidad de opiniones, la discusión y la argumentación. Sin duda, el aprendizaje colaborativo requerirá de una escucha continua y una comunicación efectiva.

La filosofía de las escuelas Reggio Emilia propone esta escucha como una plataforma fundamental en el proceso de enseñanza-aprendizaje. La llaman la pedagogía de la escucha. Esta escucha no sólo debe ser verbal, sino también no verbal, y siempre implica una emoción, un sentimiento, un intercambio (Rinaldi, 2006).

Sin duda, la pedagogía de la escucha en las escuelas Reggianas señala incluso el mismo espacio físico como una herramienta clave para el proceso de aprendizaje (Rinaldi, 2006). Esta pedagogía mide su potencial como espacio educativo en la cantidad y calidad de las relaciones que permite (Rinaldi, 2006). Esto se le llama dentro de la filosofía reggiana: "La Estética de las Relaciones".

Así en el diseño de los espacios, el espacio físico debe promover la conversación, el diálogo y el acto de compartir en lugar de obstaculizarlo. ¿De que forma el espacio físico puede motivar la colaboración y el intercambio? ¿Cómo nuestros proyectos fomentan el intercambio?

El aprendizaje colaborativo necesariamente requiere promover reflexiones desde los educadores sobre las acciones realizadas, las que requieren hacerse y la evaluación de lo hecho. Así la planeación debe resultar de un análisis del camino recorrido; la toma de decisiones esta vinculada con los resultados y nace de esos resultados.

La acción educativa y las nuevas tecnologías

En el contexto del mundo contemporáneo, será muy importante la inclusión de las nuevas tecnologías y de los medios sociales en el museo como una estrategia educativa. Sin duda, las nuevas tecnologías nos permiten fomentar estos diálogos y promover el aprendizaje colaborativo además que al ser elementos cercanos a los visitantes que pueden promover experiencias de aprendizaje que, como señala Diaz Barriga (2005), podrían promover la discusión, el intercambio y la colaboración a niveles virtuales más allá del enfoque en la transmisión de información.

Desde la mirada de Sabelli (2011), no es suficiente sólo introducir las TIC en el contexto del museo, sino re-diseñar la propuesta educativa dónde los dispositivos funcionen tanto como herramientas para el encuentro de información, el discernimiento de dicha información y la proposición de argumentos más complejos, además del uso de dichas tecnologías para la creación de diversos productos/soluciones.

Al ser dispositivos que permiten la conexión entre los alumnos a distancias y en diversos horarios, ellos facilitan el dialogo y serán las herramientas claves en la propuesta de aprendizaje colaborativo.

Por otro lado, como lo menciona Postman (1992) en su libro *Technopoly*, la experiencia de las nuevas tecnologías y la estructura de la misma nos superan. Es decir, los visitantes más jóvenes pasan más tiempo en la red que en el museo, y los procesos de la red no serán los mismos que los del museo.

¿La información que el museo podría darme se podría encontrar también en la red...? Lo cual de una forma muy simple me llevaría a preguntarme como joven visitante ¿Qué es exactamente lo que el museo me brinda? ¿No lo puedo aprender en un video en you tube? ¿No puedo ver la obra en la pantalla de mi computadora?

Y ahí las nuevas tecnologías deben tener una tésitura distinta dentro de los museos. Como lo menciona Dusell (2011), no se trata de la transmisión de información, sino del uso de la información, la pertinencia de la misma, los procesos de colaboración y diálogo. Estas mediaciones de los saberes son parte fundamental de la cultura del museo.

Aún la discusión y el diálogo sobre los medios, el uso de la información y la cultura material y visual permiten el desarrollo del pensamiento crítico.

La experiencia de las nuevas tecnologías en el museo no es la experiencia de las nuevas tecnologías en la casa. Al pasar por el filtro del museo, se convierten en otra experiencia, y desde ahí podemos comprender que hay enormes posibilidades de acción educativa. Así, para los adultos Internet representa una experiencia de alteridad... pero para los jóvenes constituye su alter ego (Winocur, 2009). Existe una clara diferencia en como generacionalmente asumimos las nuevas tecnologías. Se requerirá un importante ejercicio de sensibilización con los profesionales del museo en su relación con las nuevas tecnologías, no necesariamente sobre su uso personal, sino en la concepción positiva y posible como herramientas útiles en el proceso de aprendizaje.

El paradigma de las redes sociales y la WEB 2.0 han marcado las instituciones culturales. La autora Nina Simon (2010) se pregunta en su libro *The Participatory Museum* que ocurriría si un museo fuera una red social, y en lugar de concebirse como un transmisor de información, se convirtiera en una plataforma de comunicación.

Castro (2011) sugiere junto con Lipovetsky (2008) que la era contemporánea vive una "inflación de pantallas" que buscan nuestra mirada y es este sentido de la pantalla la que incluso moldea y ha moldeado las experiencias de miles de personas. Es común ver jóvenes en un concierto, grabando a los artistas en su teléfono inteligente y a través de la pantalla, vivir la experiencia del concierto.

O tener momentos dónde un grupo de jóvenes toma algunos segundos para revisar su teléfono, mensajes o comentarios en el muro de facebook. Estas interrupciones son parte de la vida cotidiana de los jóvenes.

¿Cómo respondemos como museos a estos usos culturales en nuestros espacios? ¿Nos molesta que los jóvenes sólo tomen fotos? ¿Tenemos espacios para esa acción? ¿Podríamos diseñarla para hacerla educativa?

En la WEB 2.0, los lectores se convierten en productores de contenidos. En la red, los expertos tienen la misma voz que el resto de los internautas. Un joven de 15 años puede decir y opinar lo que él piense en twitter al igual que el presidente, el curador o el experto. La censura es inexistente y los diálogos suelen ser abiertos, complejos e incluso viscerales. ¿Cómo podemos reconsiderar esta realidad en nuestros jóvenes visitantes y llevar estas reflexiones a nuestra labor cotidiana en el museo? ¿Somos los museos espacios abiertos al diálogo, a la crítica?

Por último, esta inclusión de las nuevas tecnologías en el museo requiere una postura crítica también sobre el uso de las tecnologías. Recuperar el diálogo y reconocer que posiblemente como lo dice Winocur (2009) seamos nativos de lo global pero extranjeros de lo local. Y así, en el museo, podemos re-valorar la comunicación, el respeto y el intercambio a través del aprendizaje colaborativo utilizando las nuevas tecnologías.

Las mentes del futuro

El trabajo de Howard Gardner (2005) sobre las mentes del futuro puede delinear una serie de intenciones educativas que responden a los retos que nos presenta el futuro y de los que debemos ocuparnos como profesionales de museos ante los nuevos públicos. Generar preguntas, facilitar conversaciones, motivar diálogos internos, provocar curiosidad serán algunas experiencias que nos permitan participar de los procesos de aprendizaje para toda la vida, eje de la sociedad del conocimiento.

Un elemento clave desde la mirada de Gardner para el futuro es el concepto de la disciplina, lo cual implica la perfección en habilidades o aplicación de conocimientos. En diversos estudios, se ha confirmado que poder comprender una disciplina toma diez años. Existe fundamentalmente una diferencia entre tener información sobre una disciplina (como la historia, o el arte) y otra en pensar

desde el marco de tal disciplina. Aquí es necesario subrayar que tanto la gestión como el liderazgo son disciplinas al igual que oficios. Todos necesitamos afinar nuestras capacidades y habilidades relacionadas con el trabajo diario. Convertirse en maestro se relaciona a manejar con maestría un oficio, una destreza o una habilidad.

Las investigaciones de los últimos años sobre el aprendizaje han revelado una serie de descubrimientos sorprendentes y desalentadores. Se ha descubierto que los estudiantes tienen en su memoria: hechos, nombres y fechas de distintas materias, pero no han aprendido a pensar de manera disciplinada. El pensamiento disciplinado, para Gardner (2005) se refiere directamente a la diferencia entre materia y disciplina. El tener información factual no implica necesariamente el pensar en concordancia con alguna disciplina. Esta información factual será "inerte" hasta que pueda incluirse en un contexto que permita abordar tal información desde una o varias perspectivas en relación a otros conceptos.

En otro sentido, la mente disciplinada subraya el tipo de cognición que "caracteriza una disciplina académica, un oficio o una profesión" (Gardner, 2005, p. 33). Su enfoque implica la repetición constante por un largo espacio de tiempo de manera que perfeccione habilidades y destrezas.

Al opinar, argumentar o tomar una postura con respecto a algún tema se requiere pensamiento disciplinado. Incluso en situaciones tan cotidianas como la salud personal, finanzas y expresión artística se requiere discernir el conocimiento previo, relacionar con conocimiento nuevo y enriquecer nuestras perspectivas sobre ciertos conceptos e ideas. En el mundo contemporáneo, es fundamental el poder determinar que fuentes de información son fidedignas, cuál es nuestra postura con respecto a ciertos temas, poder mirar de forma más crítica temas complejos y discernir las cantidades de información que se nos presentan.

Así, con el propósito de fomentar el pensamiento disciplinado en el museo, consideramos que es necesario:

- abordar los temas desde distintas vías de acceso;
- identificar dentro de los temas presentados su importancia en el contexto de la vida cotidiana de los visitantes, el contexto social y las problemáticas propias de la comunidad;
- crear proyectos que fomenten la curiosidad, la exploración y la investigación subrayando las capacidades de aprendizaje autodidacta y brindando herramientas que faciliten el "aprender a aprender".

Desde la perspectiva de Gardner, la mentalidad más apreciada en el siglo XXI será la mente capaz de sintetizar. Es decir,

"[...] dominar varias perspectivas en una amalgama útil, poder seleccionar conocimientos de diversas disciplinas y reunirlos en narraciones, conceptos, taxonomías, metáforas, teorías y metanarraciones" (Gardner, 2005 p. 42-43).

Esta selección y reunión de información desde diversas fuentes resulta en una forma en la que adquiere sentido y puede ser comunicado. Por mencionar un ejemplo, todo esquema de liderazgo o gestión requiere fuertes habilidades de síntesis. Requiere estructurar tareas, aptitudes, objetivos y presentarlos de la mejor manera, brindando incluso una línea consecuente y organizada. Implica revisar lo que ha ocurrido y prever lo nuevo, desarrollar enfoques y comunicarlos. Sin duda, incorporar nuevos hallazgos, nuevos conceptos, nuevas metodologías y principios forma parte de procesos en los que reunimos información externa y aplicamos lo necesario.

Esta forma de pensamiento nos remite directamente al trabajo interdisciplinario, el cuál tiene una importancia fundamental en nuestro mundo contemporáneo. En el contexto escolar, por ejemplo, situaciones para desarrollar la mente sintética se explora en las sesiones sobre teoría del conocimiento del bachillerato internacional.

Bajo esta perspectiva, en el museo, consideramos que será necesario:

- presentar la información desde múltiples perspectivas y medios;
- fomentar las relaciones hipertextuales tanto entre diversos proyectos que se encuentren en el museo como al evidenciar relaciones interesantes con otras disciplinas.

Por otro lado, la creatividad es reconocida en la actualidad como un valor intrínseco de nuestra época. La innovación define en muchos sentidos el devenir de nuestro mundo, no solo en el contexto de las aplicaciones tecnológicas, sino también en la moda, la comida, los medios de comunicación, el ejercicio y propuestas de espiritualidad.

Existe una diferencia básica entre el proceso de síntesis y la creación. Necesariamente la creación no implica algo funcional en un primer término, siempre son experimentaciones y nuevas miradas o perspectivas. No implica la revisión y aplicación de elementos probados, sino una expresión de la prueba, el experimento, la incertidumbre.

El pensamiento creativo se vuelve fundamental y debemos motivar: la resolución de problemas de maneras ingeniosas, las nuevas perspectivas, la exploración abierta y el juego como un espacio para descubrir donde no hay respuestas correctas o incorrectas. Será el motivar a que la información y los contenidos presentados puedan ser transferidos a otras formas nuevas e imprevistas.

En el contexto del museo al diseñar espacios y programas proponemos que:

- se privilegie el juego y la exploración;
- existan niveles de retos que subrayen la búsqueda de posibilidades y respuestas innovadoras;
- se dé un lugar predominante a la imaginación como motor de nuevas ideas y relaciones;
- se conciba a todo el museo como un gran laboratorio e incluso se permitan espacios para investigar y experimentar de forma abierta y libre.

En los últimos años y ante el crecimiento de la violencia entre nuestros jóvenes, muchos planes educativos han considerado la tolerancia, el respeto al otro y la condena a la discriminación como elementales dentro de la curricular escolar.

Según resultados de investigaciones internacionales publicadas (Banco Mundial, 2012), la violencia se constituye en un problema importante para jóvenes de entre 14 y 18 años. ¿Cómo responde el museo ante estas circunstancias? ¿Debemos convertirnos en instituciones sensibles a la sociedad en la que estamos insertos? ¿Podemos mantenernos al margen de las realidades del mundo de hoy?

Así en cuanto a la mente respetuosa y ética, dentro del espacio museal consideramos que debemos:

- incluir la diversidad cultural y étnica de la comunidad en la que se inserta el museo;
- multiplicar las voces y reconocer diversas visiones de vida;
- fomentar el pensamiento ético a través de cuestionamientos sobre decisiones sociales;
- fomentar la tolerancia y el pensamiento respetuoso a los jóvenes.

Cuando hablamos de las sociedades del conocimiento, ¿a qué conocimiento nos referimos? El análisis de las sociedades del conocimiento no puede prescindir de una honda reflexión sobre el futuro de la diversidad lingüística y cultural, y los medios para protegerla frente a los riesgos de estandarización y uniformidad que entraña la revolución de la información. Como lo señala Beiguelman

(2010, p. 139) "las tecnologías móviles se han convertido en el motor del mercado de tecnologías de la información y comunicación (TIC)".

Las sociedades del conocimiento han de orientarse hacia el diálogo, el aprovechamiento compartido del saber y los beneficios derivados de la traducción que permiten crear ámbitos comunes.

¿Consideramos al museo como un espacio multicultural? ¿Apreciamos y subrayamos el diálogo entre la diversidad de grupos humanos? ¿Facilitamos y permitimos la multiplicidad en los lenguajes, lecturas e interpretación?

Es necesario promover una gestión adecuada del conocimiento dentro de nuestras mismas instituciones. La complejidad de la sociedad permea nuestras organizaciones de modo que los cambios estructurales serán necesarios buscando una flexibilidad y movilidad en las instituciones actuales.

La nueva concepción del conocimiento que, lejos de ser un factor de exclusión como lo fue en el pasado, favorece la plena participación de todos. ¿Es el museo un espacio elitista? ¿Existen programas y proyectos que sólo perciben y atienden a comunidades con necesidades específicas? ¿Podemos deconstruir el concepto del gran público? ¿Es verdad que una exposición es para todos los públicos? ¿O será necesario reconsiderar los remitentes y destinatarios que inconscientemente existen en nuestros discursos?

¿De que forma podemos abrir canales para el intercambio con nuestros visitantes? ¿Como podemos incluir sus voces y propuestas?

Al considerar al museo como un ente primeramente social, un espacio construido y deconstruido por los públicos, nos permite explorar la riqueza de eso que llamamos la experiencia del museo. Nuestros enfoques en comunicación no sólo consisten en mostrar, exhibir o transmitir información, sino en facilitar encuentros, diálogos: el intercambio, el compartir.

Analizando nuestro trabajo diario, me pregunto, ¿En que forma somos conscientes del impacto del espacio museal en las audiencias contemporáneas?

En el esquema siguiente presento las relaciones entre la propuesta de Gardner sobre "Las mentes del futuro" y sus posibles aplicaciones en el contexto de la educación en los museos.



Fig. – 1 Reflexiones sobre las cinco mentes del futuro en museos.

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La fonction éducative dans l'histoire des musées québécois (1824-2015)

Michel Allard

Introduction

Aujourd'hui, la grande majorité des institutions muséales inscrites au répertoire des musées québécois poursuivent une mission éducative et offrent une panoplie d'activités (Société des musées québécois, 2013). Démocratisation, accessibilité, implication, toutes ces orientations ont favorisé l'éclosion d'une forme d'éducation à la fois spécifique au musée et complémentaire aux autres institutions culturelles, en particulier à l'école. Or, une question se pose : la fonction éducative a-t-elle toujours fait partie de la mission et du rôle des musées au sein de la société québécoise ? Et si nous répondons affirmativement à cette interrogation, d'autres questions se posent, par exemple : quelle forme l'éducation muséale a-t-elle prise à travers les âges ? L'éducation muséale a-t-elle évolué jusqu'à nos jours ? Et si oui, comment et pourquoi ? C'est à ces questions que la présente recherche tente de trouver réponse ou, à défaut, d'émettre des hypothèses.

La documentation

L'histoire de l'éducation muséale

L'histoire de l'éducation muséale demeure un sujet relativement peu traité. Certes, un certain nombre de travaux ont été réalisés, particulièrement dans les programmes universitaires de muséologie ou ont été menés à terme par les équipes de recherche. Les travaux ont surtout porté sur la place de l'éducation muséale dans la mission des musées, dans leurs politiques et dans leurs structures.

Quelques-uns, plus théoriques, ont eu pour objet des études relatives aux modèles mis en œuvre. Enfin, plusieurs se sont attardés aux techniques de médiation. Bien qu'ils aient presque tous comme dénominateur commun la place qu'occupent les visiteurs dans les musées, la majorité de ces travaux s'appuient sur des sources secondaires et très peu ont recours aux sources premières, c'est-à-dire aux documents et aux témoignages datant des époques antérieures. Bien entendu, dans cette conjoncture, aucune synthèse n'a été réalisée jusqu'à maintenant. Dans ce contexte, les chercheurs doivent se tourner vers l'histoire de deux champs disciplinaires situés en amont, à savoir celui de la muséologie proprement dite ainsi que celui de l'éducation comprise au sens large du terme.

L'histoire des musées

Au Québec, aucune synthèse de l'histoire des musées n'a été complétée à ce jour. Certes, plusieurs monographies ou articles de revues savantes traitent de l'histoire de certains musées, par exemple du Musée McCord (Young, 2001), de groupes de musées, tels les Musées d'histoire naturelle au XIXe siècle (Duchesne et Carle, 1990) ou encore de certaines fonctions propres au musée, comme l'histoire des collections (Lacroix, 2002). Dans plusieurs de ces études, on trouve des informations utiles pour comprendre le rôle et la place de l'éducation muséale. Quant aux sources premières, elles demeurent, à quelques exceptions près, confinées dans des dépôts d'archives. La plupart d'entre elles n'ont pas été répertoriées et encore moins dépouillées et analysées.

L'histoire de l'éducation

Dans le domaine de l'histoire de l'éducation, la quête d'informations s'avère, au Québec, plus fructueuse. Elle a fait l'objet depuis quelques années de plusieurs recherches qui ont conduit à la publication de recueils de sources premières, de plusieurs monographies ainsi qu'à la rédaction de quelques ouvrages de synthèse. On retrouve, dans les monographies consacrées à l'histoire des institutions d'enseignement, plusieurs données se rapportant directement à l'existence et à l'utilisation des musées à des fins d'enseignement et d'apprentissage. Au surplus, il existe des anthologies; l'une d'elles est consacrée à répertorier tous les programmes d'études ayant eu cours dans les écoles francophones du Québec alors que d'autres réunissent des statistiques relatives aux écoles. Ces dernières permettent notamment d'établir le nombre d'institutions scolaires abritant un musée. On trouve, même dans des revues dites

pédagogiques, des conseils, sinon des méthodes d'utilisation des musées dans les classes. Enfin, les archives des communautés religieuses, que des chercheuses ont entrepris de dépouiller, fournissent plusieurs informations relatives à la place des musées dans le système scolaire québécois. Bref, la relative abondance de la documentation consacrée à l'éducation en général offre aux chercheurs des données propres à l'éducation muséale. Ces données, couplées avec celles recueillies dans la documentation relative à l'histoire des musées québécois, s'avèrent suffisantes pour poser quelques jalons de l'histoire de l'éducation muséale au Québec.

Quelques considérations épistémologiques

Une définition de musée

Dès que l'on aborde l'histoire des musées, il apparaît que la définition de musée, telle qu'elle est formulée dans les statuts du Conseil international des musées (ICOM), ne peut pas être considérée comme exclusive et doit être nuancée. C'est particulièrement évident, notamment dans le cas des musées scolaires. Depuis le milieu du XIXe siècle jusque vers 1960, les établissements scolaires québécois de tous les ordres d'enseignement ont possédé des collections à des fins d'enseignement et parfois de recherche. Elles étaient conservées dans un lieu appelé musée qui était parfois un édifice spécialement érigé à cette fin, c'est le cas du musée Redpath de l'université McGill ou de celui du collège Saint-Laurent. Le terme musée pouvait aussi désigner un ou des appartements d'un établissement aménagés pour accueillir les collections. Citons, entre autres, le musée de l'École normale Jacques-Cartier et celui du couvent d'Outremont des sœurs des Saints-Noms-de-Jésus-et-de-Marie (Lavallée, 2011). Il pouvait même, dans le cas de certains établissements, dont le séminaire de Sainte-Thérèse, s'étendre au-delà des pièces qui lui étaient réservées, pour se retrouver sur les murs des corridors de l'institution scolaire (Charon, 2012). Enfin, on donnait souvent, en particulier dans les écoles primaires, le nom de musée à de simples meubles appelés aussi cabinets que l'on retrouvait dans les classes, voire dans les corridors (Allard et Lefebvre, 1998). Par conséquent, il faut comprendre qu'un musée désigne essentiellement un endroit (édifice ou autre) où l'on expose des objets de toutes sortes et/ou des œuvres d'art afin qu'ils soient

accessibles au public (particulier ou général). Les fins visées par ladite exposition pourront varier dans l'espace et dans le temps.

Une définition de l'éducation muséale

Il s'avère aussi nécessaire de préciser la notion d'éducation muséale, d'autant que la mention de l'éducation au titre de l'une des fins dévolues aux musées n'apparaît qu'en 1951. De plus, l'expression « éducation muséale » n'est pas la seule utilisée pour désigner la fonction éducative du musée. Ainsi, l'acronyme CECA, qui désigne un comité international de l'ICOM, relie l'éducation et l'action culturelle. L'expression *Museum Visitor Studies* est couramment utilisée, particulièrement aux États-Unis (Millet, 2014), tandis qu'en France, les expressions médiation muséale et médiation culturelle ont cours. Elles impliquent toutes deux éléments, le musée et le public tissant entre l'un et l'autre des relations par l'intermédiaire d'un agent et/ou d'un objet matériel ou immatériel. Ce sont là des caractéristiques de l'éducation muséale qui peuvent être cernées à toutes les époques de l'histoire de la muséologie québécoise.

Origine et évolution des musées québécois (c.1824-c.1960)

La mise en place

Entre 1534 et 1763, sous ce qu'il est convenu d'appeler le Régime français, quelques hommes de science, dont Michel Sarrazin, médecin du roi à Québec, encouragés par les intendants et les gouverneurs, collectionnent des spécimens de plantes, de bois et de minéraux qu'ils font parvenir à des membres des Académies des Sciences ou de la Marine pour enrichir les collections réunies au Jardin des Plantes ou à la Ménagerie du roi de France. À compter de 1763, des relations similaires s'établissent avec la nouvelle métropole, la Grande-Bretagne. Toutefois, aucun musée n'est établi dans la colonie. Il faut attendre la première moitié du XIXe siècle pour qu'apparaissent les premières institutions muséales appartenant majoritairement à des intérêts privés : particuliers ou sociétés savantes (Duchesne et Carle, 1990). Les premiers musées ouvrent leurs portes au public ou du moins à un certain public. À l'instar de leurs homologues européens et américains, l'une des principales intentions qui prévalent à leur fondation est de faire œuvre d'éducation. Lors des discussions survenues en 1824 devant le Comité d'éducation de la Chambre d'assemblée chargé d'étudier les demandes de subvention déposées par le musée de sciences naturelles

fondé par Pierre Chasseur, on voit nettement, selon les historiens Duchesne et Carle (1990),

« [...] se dessiner dans les propos des députés et de ceux qui sont appelés à témoigner l'intention de faire de la collection de Chasseur le point de départ d'un musée «national» répondant à la fois aux besoins de la science, de l'enseignement et de l'éducation populaire. » (Duchesne et Carle, 1990, p. 14)

Cette intention des députés s'inscrit dans un mouvement plus large ayant pour but de mettre sur pied sur le territoire du Québec un système public d'éducation permettant à la majorité de la population d'acquérir une formation de base. Toutefois, le Musée Chasseur fera long feu, et il faudra attendre pour que des musées nationaux soient fondés. En lieu et place, l'historien Hervé Gagnon (Gagnon, 1999) distingue trois catégories de musée qui vivent aujourd'hui : une première catégorie réunit les musées dits de divertissement, une deuxième englobe les musées dits savants mis sur pied par des sociétés scientifiques, artistiques ou historiques, et une troisième réfère aux musées dits didactiques ou pédagogiques situés surtout dans des établissements scolaires.

Les musées dits de divertissement

Les musées dits de divertissement réunissent et exposent

« [...] des collections dont les éléments sont regroupés en vertu de leur rareté, de leur exotisme, de leur nature exceptionnelle ou de leur capacité potentielle d'amusement sans réelle motivation scientifique ni tentative de classification. » (Gagnon, 1999, p. 11)

Visant des buts de nature commerciale, ces musées exigent des frais d'entrée et cherchent à accueillir le public le plus nombreux possible. Dans ce contexte, ils ne cherchent pas à éduquer le visiteur, mais bien plus à l'étonner, le séduire et le divertir. Entre 1822 et 1892, quelques musées de cette catégorie, dont plusieurs ont pignon sur rue à Montréal, connaissent une existence plus ou moins éphémère.

Les musées dits savants

Les musées qualifiés de savants

« [...] accumulent des collections (essentiellement de sciences naturelles, d'art ou d'histoire) qui se veulent exhaustives, qu'ils classifient ou aspirent

à classer afin d'en extraire des connaissances. » (Gagnon, 1999, p. 11)

En règle générale, ils émanent d'une société scientifique, littéraire ou artistique, financée par ses membres, issus pour la majorité de la bourgeoisie anglophone. Ces musées cherchent par différentes activités à instruire leurs membres et non pas le grand public. À cet égard, ils mettent parfois sur pied une exposition permanente. Nombre d'entre eux, comme d'ailleurs le système d'éducation de l'époque, demeurent des établissements élitistes. On ne trouve guère trace d'efforts visant à « démocratiser » la fréquentation de leurs salles d'exposition. L'attitude des conservateurs de l'époque n'annonce guère un mouvement favorable à l'éducation populaire.

D'autres musées misent parfois sur leur potentiel éducatif, encore qu'ils ne soient pas toujours ouverts au grand public. En voici quelques exemples.

« [...] à partir de 1854, l'Institut canadien de Montréal développe parallèlement à sa bibliothèque une collection de spécimens de sciences naturelles – par exemple, des essences de bois utiles à l'industrie – et d'objets d'art. » (Lacroix, 2002)

De la même façon, le Conseil des arts et manufactures de Montréal inaugure, en 1860, un petit musée dans ses locaux du *Mechanics' Institute*. C'est également dans un but pédagogique que le peintre Joseph Légaré de Québec (1795-1855), met sur pied en 1817 un premier véritable musée consacré, au Canada, aux Beaux-Arts, par l'acquisition de tableaux religieux rassemblés par l'abbé J.-L. Desjardins. Il continue par la suite à accumuler des tableaux et des gravures, et il expose sa collection à l'hôtel Union où se réunit la *Quebec Literary and Historical Society* (Lacroix, 2002). Bref, le public est admis, mais aucune disposition particulière n'est prise dans le dessein de l'instruire. On considère que le simple acte d'exposer suffit en soi pour informer le visiteur et contribuer à sa culture. C'est ainsi que les musées font œuvre d'éducation. Toutefois, peu à peu, ils évolueront. Pour illustrer l'évolution de la fonction éducative de ces musées, nous proposons comme cas de figure le Musée des Beaux-Arts de Montréal.

Un cas de figure : le Musée des Beaux-Arts de Montréal

En 1860, après quelques tentatives infructueuses, un groupe d'amateurs d'art appartenant en grande majorité à la bourgeoisie britannique de Montréal,

« [...] estimant que le temps était venu de faire un geste généreux et de joindre leurs efforts afin d'encourager le goût des beaux-arts parmi la population de la ville » (Musée des Beaux Arts de Montréal, <http://mbam.pc.ca>),

fonde l'*Art Association of Montreal* (AAM). Pour présenter ses expositions, l'AAM erre d'un lieu à l'autre. À ces occasions, elle organise parfois

« [...] dans ces lieux des *conversazione*, des soirées mondaines qu'animait un orchestre de chambre, mais au cours desquelles on ne dansait pas. On causait, on commentait les œuvres exposées, on conversait avec les artistes, on échangeait des opinions avec les collectionneurs. » (Germain, 2007, p. 77)

Le grand public n'était pas admis à ces soirées réservées aux seuls membres et à leurs invités.

En 1877, le marchand Benaiah Gibb, dont le père, tailleur de métier, s'était fait une place au sein de la bourgeoisie montréalaise, lègue à l'AAM un terrain situé rue Sherbrooke, ainsi qu'une somme d'argent pour construire une galerie pour abriter et conserver sa collection de peintures et de bronzes. Le 16 mai 1879, on inaugure au square Phillips l'*Art Gallery of Montreal* considéré comme le premier édifice érigé au Canada dans le but de conserver des collections d'art et d'organiser des expositions (Musée des Beaux-Arts de Montréal, 2013). Il semble que le nouvel édifice ait abrité une école d'art ouverte aux enfants, car quelque temps après son inauguration, des parents se plaignirent que les bâtiments environnants plongeaient les salles de classe dans l'obscurité (Pepall, 1986).

Malgré cet inconvénient, dès le début des années 1880, l'*Art Gallery of Montreal* est très fréquenté

« [...] par les étudiants, les amateurs d'art, les gens épris de culture qui venaient voir les œuvres exposées et entendre les conférenciers, lire, discuter » (Germain, 2007, p. 77).

Ainsi, entre 1883-1889 et 1892-1897, on dénombre une moyenne annuelle de 21 064 visiteurs, pour un total de 273 837, dont 173 387 membres de l'AAM; 43 586 sont des visiteurs admis gratuitement le samedi et 58 864 paient leur entrée, 25 cents en 1879 (Gagnon, 1999). Si on défalque les membres, on ne peut affirmer que la

galerie soit ouverte à l'ensemble de la population. Elle demeure l'affaire d'un groupe de privilégiés. Néanmoins, l'école d'art dirigée de 1886 à 1921 par le peintre William Brymner devient de plus en plus populaire. À preuve, lors de l'agrandissement de la galerie en 1893, et lors de la construction en 1912 d'un nouvel édifice sur la rue Sherbrooke, des salles de cours et des ateliers lui sont réservés (Pepall, 1986).

En 1937, grâce à une subvention obtenue de la *Carnegie Foundation*, de nouveaux programmes éducatifs sont mis sur pied et un comité d'éducation est créé sous la direction du Dr. J. W. Hickson. On organise des cours de dessin, de peinture et de modelage destinés aux enfants.

L'entrée en fonction, en 1941, du peintre Arthur Lismer à titre de directeur des cours de beaux-arts, marque un moment décisif de l'implication de l'*Art Gallery of Montreal* dans l'éducation. Lismer oriente l'École d'art vers la formation professionnelle des artistes et des enseignants. En outre, il ouvre un Centre d'art consacré à l'initiation artistique des enfants et des adultes. L'*Art Gallery of Montreal* accueille aussi pour la première fois des groupes scolaires. Un comité féminin s'implique dans de nombreuses activités éducatives nouvelles, dont des projections de films suivies de discussions, des rencontres d'artistes ou des démonstrations de techniques. Bref, en plus d'élargir le spectre de sa clientèle, l'*Art Gallery of Montreal* est de moins en moins considérée comme un lieu réservé aux artistes et aux connaisseurs d'art; elle évolue vers une véritable école d'éducation à l'art (Lamarche, 1997). D'ailleurs, l'abandon en 1948 de l'appellation *Art Gallery*, réservée aux musées de peinture et de sculpture, au profit de *Montreal Museum of Fine Arts*, témoigne de l'ouverture de l'établissement à d'autres formes d'art. Bref, le Musée s'ouvre à de nouvelles clientèles et éventuellement à d'autres types de collections.

En 1961, la direction du Musée crée un Service éducatif, distinct de l'École et du Centre d'art. Le nouveau service est chargé d'organiser, à l'intention du public et des groupes scolaires, des visites commentées des expositions. Ces visites sont animées par des membres du Comité féminin qui, en 1965, formeront l'Association des guides bénévoles. Cette nouvelle structure administrative consacre l'éducation comme l'une des fonctions des institutions muséales. Elle marque symboliquement le début d'une nouvelle ère, d'autant que depuis 1951, la fonction éducative des musées est incluse dans la définition adoptée par le Conseil international des musées.

Les musées dits scolaires

Depuis le milieu du XIXe siècle jusque vers 1960, les établissements scolaires de tous les ordres d'enseignement réunissent, conservent et exposent des collections à des fins d'enseignement et parfois de recherche (Lacroix, 2002). Ces musées scolaires, appelés aussi musées didactiques ou pédagogiques, connaissent, dès le milieu du XIXe siècle, une période d'expansion sans précédent suivie d'un déclin presque aussi rapide. En développant des méthodes d'enseignement et d'apprentissage fondées sur l'objet et l'induction, les musées scolaires jettent les bases d'une pédagogie muséale. Rappelons, comme nous l'avons déjà souligné, que dans les institutions scolaires, le terme musée désigne spatialement des lieux variés, mais référant conceptuellement à une ou plusieurs collections d'objets regroupés à des fins d'enseignement.

À cette époque, l'étude de l'histoire naturelle devient de plus en plus populaire. Fondée sur l'observation et la description d'écofactes ou d'artefacts, elle nécessite un collectionnement afin d'élaborer ou d'appliquer à des fins d'études, des taxonomies, dont celle de Linné. Cette approche s'applique aussi à d'autres disciplines, en particulier aux arts plastiques et à l'histoire. Bref, l'enseignement basé sur la description et la mémorisation favorise la réunion d'objets. L'explication des phénomènes scientifiques et des événements d'ordre artistique ou historique est laissée à d'autres disciplines, dont la philosophie et la théologie.

Quelque temps après sa fondation en 1852, l'Université Laval de Québec réunit sous son toit plusieurs musées, dont un Cabinet de physique, un Musée de zoologie, un Musée de minéralogie et de géologie, un Musée botanique, un Musée ethnologique, un Musée de peinture et un Musée numismatique (Duchesne et Carle, 1990). Il en est de même de l'Université McGill de Montréal, qui érige en 1882 le musée Redpath, l'un des premiers bâtiments conçus spécifiquement pour recevoir un musée (Pepall, 1986). Ces musées servent essentiellement à des fins de recherche et d'enseignement. Au début du XXe siècle, la méthode expérimentale pénètre le monde scientifique et, dans les universités, le « labo » remplace peu à peu l'« expo ». La vieille histoire naturelle cède la place à l'écologie (Duchesne et Carle, 1990). Les collections de l'université Laval, d'abord transférées au Musée du Séminaire de Québec, sont, par la suite, déposées au Musée de la civilisation. Quant au Musée Redpath, il ferme ses portes en 1971 (Young, 2001) pour les rouvrir en 1985.

Aux ordres primaire et secondaire, les établissements scolaires se

dotent aussi de musées à des fins d'enseignement. Tant et si bien que, dans les années 1930, la grande majorité des collèges classiques et des couvents, c'est-à-dire les institutions privées d'ordre secondaire et collégial, possèdent un musée pour abriter leurs collections. À la même époque, selon le *Dominion Bureau of Statistics of Canada*, au Québec comme ailleurs au Canada, les musées didactiques gérés par l'école publique se comptent par centaines (Teather, 1992). Ceci peut s'expliquer par le fait qu'au début du XXe siècle, le programme des écoles catholiques francophones, en plus d'encourager les enseignants à organiser des sorties éducatives, en particulier dans les musées, suggère dès 1924 la mise sur pied « de petits musées » (Gauthier, 1993). Ceci tient pour beaucoup à l'importance attachée à ce qu'il est convenu d'appeler « la leçon de choses ». Cette activité pédagogique inspirée des théories philosophiques de Francis Bacon s'inscrit, dès la fin du XIXe siècle, dans les premiers programmes d'études des écoles publiques francophones québécoises. Comprise tantôt comme une discipline autonome, tantôt comme la meilleure méthode « pour inculquer les notions premières », la leçon dite de choses propose d'utiliser les sens pour appréhender le monde. Fondée sur l'observation, la description et l'analyse d'objets, elle procède par induction, c'est-à-dire du simple au composé, du régulier à l'irrégulier, du concret à l'abstrait. Bref, pour pallier une approche conceptuelle de l'enseignement, cette méthode s'appuie sur du concret pour ensuite tenter de rationaliser et de conceptualiser.

Pour informer et guider les enseignants dans l'utilisation du musée comme démarche pédagogique, le *Journal de l'instruction publique* (publication officielle du Département de l'instruction publique qui, à cette époque, fait au Québec office de ministère de l'éducation) publie, en 1891, un article intitulé le *Musée scolaire*. C'est le premier véritable exposé que nous ayons pu trouver au Québec d'un embryon de pédagogie muséale. L'auteur propose trois façons de réunir une collection : d'abord laisser les élèves prendre part à sa constitution, car « [...] ils y prendront goût et se feront un vif plaisir de l'accroître ». Il importe, en second lieu, d'organiser des promenades scolaires qui permettent « [...] de mieux comprendre l'harmonie existante entre le milieu et le spécimen » (Jeangirard, 1891, p. 182). Enfin, l'auteur suggère de solliciter des dons afin d'augmenter les collections du musée.

Les élèves doivent non seulement observer les objets, « [...] il faut qu'ils puissent les voir, les toucher, se rendre compte de leur forme, de leur couleur, de leur goût, de leur sonorité, de leur

résistance » (Jeangirard, 1891, p. 182). L'instituteur doit, en conversant avec les élèves, leur faire énumérer les principales caractéristiques de l'écofact ou de l'artefact. Il doit par la suite compléter les observations des élèves et leur communiquer des connaissances utiles sur différents sujets, dont l'agriculture, l'industrie, le commerce ou l'hygiène. Bref, en plus d'approfondir les matières du programme, les objets permettent, selon Jeangirard, d'enseigner l'ordre moral par le biais de l'ordre matériel. L'intégration, jusqu'à la fin des années 1950, de la « leçon de choses » dans les programmes d'études explique pourquoi les écoles organisent des « petits musées » réunissant des collections d'objets (Allard et Lefebvre, 1998). Le mouvement se répand tant et si bien qu'une enquête conduite au Québec en 1951, auprès de 3 000 enseignants et enseignantes œuvrant dans les classes de 3^e à 7^e année, révèle que plus de 1 000 ont accès à des musées scolaires ou, à tout le moins, à des collections d'objets. Le moins que nous puissions affirmer, c'est que les musées scolaires étaient beaucoup plus répandus et utilisés que nous serions portés à le croire (Sœur Sainte Florence-de-Poitiers, c.n.d., 1952).

Certaines institutions de formation des maîtres se dotent aussi d'un musée. Non seulement le musée sert-il à la fois de lieu et de moyen d'enseignement, mais il permet aussi de former les futurs instituteurs à leur utilisation. C'est en quelque sorte l'application concrète de l'axiome *learning by doing*. Fondée en 1857, l'École normale Jacques-Cartier (ÉNJC) apparaît comme un cas de figure. Son premier principal, l'abbé Hospice-Anselme Verrault, se charge lui-même de l'enseignement de la leçon de choses. À cette fin, il met sur pied un musée à partir de collections acquises du Département de l'instruction publique. Elles comptent plus de 6 000 pièces, inégalement réparties entre la minéralogie, la botanique, l'entomologie, les mammifères, les mollusques et les reptiles (Anonyme, 1860). En 1928, le musée est réaménagé pour occuper la pièce centrale de l'édifice occupé par l'ÉNJC. En plus de réunir des collections d'histoire naturelle, il abrite aussi une importante collection d'ouvrages traitant de l'histoire du Québec. Au surplus, on y organise des conférences publiques qui tiennent lieu pour les enseignants de cours de perfectionnement (Desrosiers, 1929). Bref, en plus de jouer un rôle central dans la formation des enseignants, le musée devient un lieu d'animation culturelle.

Toutefois, il ne faut pas croire que les musées scolaires soient ouverts au grand public. L'historien Dominique Laperle, qui a étudié la place des musées dans les écoles dirigées par une communauté

religieuse, souligne que :

« Le musée que l'on retrouve dans un pensionnat des SNJM [sœurs des Saints-Noms-de-Jésus-et-Marie] a ceci de particulier qu'il s'inscrit dans le contexte d'un relatif isolement du monde extérieur, du moins durant l'année scolaire. » (Laperle, 2007, p. 59)

En somme, le musée scolaire est réservé à une clientèle spécifique.

Après le retrait de l'histoire naturelle des programmes universitaires, les musées scolaires commencent à perdre de leur intérêt et disparaissent, à partir de 1964, de la majorité des établissements lors de la réforme du système scolaire québécois. Or, c'est en 1961, rappelons-le, que le Musée des Beaux-Arts de Montréal devient le premier musée québécois à organiser un service éducatif. C'est la conjugaison de ces deux mouvements qui, au Québec, influencera dans les musées autres que les musées scolaires, le développement de l'éducation muséale.

Une nouvelle ère (c.1960-2015)

Évolution des programmes d'études et des programmes éducatifs des musées

En 1964, un ministère de l'éducation est créé au Québec en lieu et place du Conseil de l'instruction publique et de ses deux comités catholique et protestant. On entreprend alors d'élaborer pour chaque matière un programme dit cadre, qui se contente de définir les grandes lignes du contenu, laissant aux enseignants le soin de les préciser. On accorde à ces derniers une grande liberté quant au choix des méthodes et des moyens d'enseignement. La mise sur pied de musées dans les écoles, ainsi que la visite au musée, disparaissent complètement dans l'énoncé des programmes d'études. Néanmoins, quelques écoles continuent de fréquenter les musées. Ces visites s'inscrivent très souvent parmi les sorties dites de récompense organisées à la fin de l'année scolaire. Certains musées ne sont pas lents à comprendre l'intérêt que représente pour eux la clientèle scolaire au double plan de la formation d'un jeune public et de leurs statistiques de fréquentation. C'est dans ce contexte que le Musée des Beaux-Arts de Montréal ferme en 1977 son école d'art et confie à son service éducatif le mandat de

« [...] permettre au public de connaître, de comprendre et d'apprécier les collections et les expositions du Musée, de même que ses ressources. Le personnel qui travaille au Service éducatif est donc un intermédiaire entre le public et le Musée et a pour rôle d'interpréter les collections permanentes et les expositions temporaires, ainsi que de les rendre intelligibles et accessibles. Le Service éducatif doit aussi être un lien entre le Musée et le milieu des enseignants à qui il offre ses ressources pour accompagner ou compléter les programmes d'enseignement et de formation. » (Lamarche, 1997)

En plus de prendre en charge les traditionnelles visites commentées, le Service éducatif doit organiser de nouvelles activités et explorer les possibilités d'introduire dans la présentation des expositions des supports didactiques. Inspirées par la collection du Musée ou les expositions temporaires, ces activités ne s'adressent pas uniquement aux écoliers. Chacun, quel que soit son âge, peut y trouver une occasion unique de s'ouvrir sur le monde de la création. Les activités proposées se fondent essentiellement sur le contact avec l'œuvre d'art telle que présentée en contexte muséal et se démarquent des traditionnels cours d'histoire de l'art. Hélène Lamarche, chef du service éducatif, entreprend alors une réflexion sur la fonction éducative du musée. Elle élabore un modèle éducatif qui tient compte de la nature, de la fonction et de la signification des objets collectionnés et exposés, des structures sociales de la clientèle, mais aussi des caractéristiques de la visite au musée, qui demeure essentiellement libre, autonome, et enfin du champ disciplinaire ou multidisciplinaire spécifique à chaque établissement (Lamarche, 1986). En fait, Hélène Lamarche fait figure de pionnière dans un mouvement qui, à cette époque au Québec et un peu partout à travers le monde, ambitionne de développer une pédagogie propre au musée se démarquant des modèles d'enseignement et d'apprentissage mis en œuvre dans les établissements scolaires. En somme, une éducation dite par l'objet est mise en œuvre.

Entre temps, le Ministère de l'éducation entreprend, à partir de 1981, une réforme complète du programme d'étude des ordres primaire et secondaire. À cette occasion, une étude conduite par des chercheurs du Ministère de l'éducation conclut à la haute valeur pédagogique des musées, et recommande qu'ils soient réintégrés dans les programmes d'études à titre de lieu éducatif susceptible de contribuer à la formation des élèves, et plus particulièrement d'élargir leurs horizons culturels (Pinard et Locas, 1982). La visite au musée réapparaît dans les guides pédagogiques accompagnant en particulier

les programmes de sciences humaines et de sciences naturelles (Allard et Gauthier, 1990). Il faut aussi souligner qu'à la même époque, deux études du Conseil supérieur de l'éducation, portant respectivement sur les nouveaux lieux éducatifs et sur les activités parascolaires, reconnaissent le musée comme un lieu éducatif susceptible de contribuer à l'apprentissage des élèves et à l'augmentation du niveau de culture de l'ensemble de la population (Conseil supérieur de l'éducation, 1986 et 1988). Bref, le musée ne doit plus être considéré comme un lieu réservé à certains groupes sociaux, mais doit s'ouvrir à tous. À cet égard, il doit se démocratiser tant dans sa structure que dans ses activités.

Mise sur pied d'équipes de recherche et diffusion de leurs travaux

L'implication de plus en plus importante du musée dans l'éducation soulevait de nouvelles interrogations ; entre autres questions se posait celle de la nature des relations qui pouvaient se tisser entre le musée et l'école, tout comme celle de la place de la fonction éducative par rapport aux autres fonctions traditionnellement dévolues au musée. À cet égard, vers les années 1970-1980, des équipes de chercheurs se forment dans plusieurs pays, notamment en France, en Belgique, en Grande-Bretagne, au Brésil et en Australie afin de mieux cerner les fondements de l'éducation muséale. Au Québec, des conservateurs et des directeurs de musée voulurent en connaître plus long sur la qualité des activités éducatives et sur le comportement des visiteurs. C'est dans cette conjoncture que Guy Vadeboncoeur, conservateur du musée d'histoire David M. Stewart de Montréal, fait appel, en 1980, à des professeurs du Département des sciences de l'éducation de l'Université du Québec à Montréal (UQÀM) afin d'élaborer un programme d'activités destinées aux élèves de la Commission des écoles catholiques de Montréal. Vadeboncoeur désire rattacher la visite au musée au programme d'études dans l'esprit d'un véritable partenariat entre le musée et l'école (Allard et Vadeboncoeur, 1993).

C'est dans ce contexte qu'en 1981, une première étude conduite auprès d'un millier d'élèves du primaire se déroula au Musée Stewart. On arriva à la conclusion qu'au plan cognitif, les élèves retiraient peu de bénéfices d'une visite guidée (Allard et Vadeboncoeur, 1993). Cette étude fit boule de neige et donna naissance au Groupe de recherche sur l'éducation et les musées (GREM). L'exemple du Musée David M. Stewart fut suivi par plusieurs autres institutions muséales qui, au cours de la période 1980-1985,

créèrent un service éducatif ou du moins, particulièrement dans les musées de petite et de moyenne taille, désignèrent un membre de leur personnel responsable des programmes éducatifs.

Toutefois, plusieurs interrogations demeuraient. Les musées, dans l'élaboration de leurs programmes éducatifs destinés aux écoles, devaient-ils tenir compte des programmes d'études prescrits par le Ministère de l'éducation, ou devaient-ils les créer en fonction seulement de leur propre collection? Pouvait-on concevoir une pédagogie propre au musée qui la différencierait des modèles d'enseignement et d'apprentissage mis en œuvre à l'école? Le musée comptait-il parmi les institutions éducatives formelles ou informelles? La visite au musée était-elle seulement d'ordre ludique? Des réponses satisfaisantes ne pouvaient découler que d'un dialogue entre les membres du personnel des musées et ceux du personnel des écoles. Pour faciliter ce dialogue, le GREM, en collaboration avec le Musée David M. Stewart et la Commission des écoles catholiques de Montréal, offrit à l'automne 1985 le premier colloque organisé au Québec sur l'éducation muséale. Plus de 100 personnes y participèrent. À court terme, ce colloque favorisa l'échange d'idées entre les éducateurs de musée, les conservateurs, les enseignants, les conseillers pédagogiques et les universitaires. À moyen terme, il orienta les travaux du GREM dans la conduite de travaux de recherche ayant pour objet l'élaboration, la mise en œuvre et l'évaluation de modèles théoriques et pratiques d'utilisation des musées à des fins éducatives (Allard et Boucher, 1991; Paquin, 1998).

Les études supérieures en Muséologie et la recherche

L'ouverture en 1987 d'un programme de Maîtrise en muséologie, administré conjointement par l'Université de Montréal et l'Université du Québec à Montréal, contribua au développement des recherches en éducation muséale, d'autant que le programme comportait deux séminaires portant sur cette facette de la muséologie. Bientôt, les recherches débordèrent le cadre étroit des relations entre l'école et le musée pour s'étendre à l'étude de l'implication sociale du musée et à l'influence de la fonction éducative sur les autres fonctions du musée (Allard, Landry et Meunier, 2006). Aussi ne faut-il pas s'étonner que les musées se sensibilisèrent si bien à l'importance de leur mission éducative qu'en 1989, la Société des musées québécois forma un Groupe d'intérêt spécialisé (GIS) en éducation et action culturelle.

En 1986, Colette Dufresne-Tassé, professeure au Département d'andragogie de la Faculté des sciences de l'éducation de l'Université de Montréal, s'intéressa au comportement du visiteur adulte et fonda le Groupe de recherche sur les musées et l'éducation des adultes. Là encore, la collaboration entre les universitaires et les muséologues a permis la réalisation de plusieurs études qui analysèrent le fonctionnement psychologique du visiteur adulte, firent état des bénéfices d'ordre cognitif, émotif, social, voire sensoriel, qu'il pouvait retirer de sa visite au musée, et influencèrent l'organisation spatiale et conceptuelle des expositions (Allard et Dufresne-Tassé, 1999).

À partir du printemps de 1986, les membres des deux équipes de recherche dont il vient d'être question se rencontrèrent lors du Congrès annuel de la Société canadienne pour l'étude de l'éducation afin de discuter de leurs projets respectifs. En 1993, ils accueillirent d'autres chercheurs, en particulier ceux de l'Université Concordia et formèrent le Groupe d'intérêt sur l'éducation muséale (GISEM). Depuis, lors du congrès annuel des Sociétés dites Savantes, les chercheurs universitaires et les muséologues canadiens, auxquels se joignent régulièrement des chercheurs en provenance d'autres pays, peuvent faire part de leurs recherches. Ils ont l'occasion de soumettre leurs travaux à la critique de leurs pairs. Ils obtiennent des rétroactions qui leur permettent de corriger leur tir ou laissent entrevoir des avenues de recherche jusque-là insoupçonnées. Les résultats ne mirent pas longtemps à apparaître et à s'accumuler. Une compilation des publications du GISEM révéla que, sur un total de 143 études réalisées entre 1993 et 2002, 33% portaient sur des questions d'ordre théorique, et que 67% s'appuyaient sur des données empiriques (Allard, Landry et Meunier, 2006).

En outre, une enquête conduite en 2000 auprès des musées québécois indiqua que 60% des répondants avaient créé un service éducatif et que 38%, à défaut de service, comptaient dans leur personnel au moins un(e) employé(e) responsable de l'éducation et/ou de l'action culturelle (Allard, Naurais et Cadieux, 2000). Aujourd'hui, la grande majorité des institutions muséales inscrites au répertoire des musées québécois poursuivent une mission éducative et offrent une panoplie d'activités (Société des musées québécois, 2013). Démocratisation, accessibilité, implication, toutes ces orientations ont favorisé l'éclosion d'une forme d'éducation à la fois spécifique au musée et complémentaire à celles qu'offrent d'autres institutions culturelles, en particulier l'école.

L'avenir de l'éducation muséale au Québec et ailleurs

Quelques dérives risquent de détourner l'éducation muséale à des fins autres que celles d'études, d'éducation et de délectation dévolues aux institutions muséales. Elles sont d'ordre sociopolitique, économique et pédagogique.

La société

Plusieurs musées se définissent comme des agents de mutation sociale et s'engagent politiquement dans des débats de société. On s'oriente ainsi, d'après Mathilde Bellaigue, ancienne secrétaire et vice-présidente d'ICOFOM, « vers une « mission sociale » et une dimension politique – au meilleur sens du terme » (Bellaigue, 2000, p. 4).

Or, les œuvres, les objets et les artefacts méritent d'être admirés et analysés pour leur sens intrinsèque et leur valeur propre. Vouloir les utiliser à des fins secondes risque de les dénaturer (Arendt, 1972). Dans ces circonstances, la frontière séparant l'appropriation et la propagande devient très difficile à tracer. Grand est le risque que l'éducation muséale, au lieu de contribuer au développement de l'autonomie et de la pensée critique du visiteur en général et de l'enfant en particulier, participe à son endoctrinement pour une cause, aussi noble soit-elle.

L'économie

L'implantation dans les musées d'une approche utilitariste tenant du mercantilisme tenaille plusieurs administrateurs de musée. Il s'agit en quelque sorte de faire du musée une institution économiquement rentable. L'articulation autour du concept du beau dans le cas des musées d'art, et du vrai dans celui des musées d'histoire et de sciences, risque d'être plus ou moins laissée pour compte au profit d'une approche axée sur le clinquant et l'artificiel pour augmenter l'affluence des visiteurs. Or, dans tout processus d'apprentissage, le progrès est relativement lent. Au surplus, il est nécessaire d'adapter les approches et les stratégies à chaque groupe, voire à chaque visiteur. On comprend alors qu'une approche axée sur le rendement à court terme ne puisse qu'entraver le développement de l'éducation muséale.

La pédagogie

Au Québec, les programmes d'études mis en œuvre dans les écoles ne s'articulent plus autour de l'acquisition du savoir, mais bien autour

du développement des compétences. Ils procèdent non plus d'un paradigme culturel, mais d'un paradigme strictement utilitariste. On peut se demander comment l'éducation muséale peut contribuer à développer des compétences sans au préalable faire appel à un savoir? Comment peut-on apprécier une œuvre d'art ou analyser et comprendre un objet ou un artefact sans en connaître l'origine et l'usage? Une éducation muséale fondée sur des compétences ne peut que conduire à masquer la nécessité de connaître avant d'agir.

Conclusion

Au terme de cet exposé historique, nous sommes en mesure de répondre aux questions ayant déclenché et orienté notre recherche. À la première question, à savoir : la fonction éducative a-t-elle toujours fait partie de la mission et du rôle des musées au sein de la société québécoise, nous pouvons répondre affirmativement, mais avec nuances.

Rappelons qu'au XIXe siècle, on retrouve au Québec deux principaux types de musées : les musées dits savants, mis sur pied par des sociétés scientifiques, artistiques ou historiques, et des musées dits scolaires, organisés par des institutions d'enseignement tant de l'ordre universitaire que des ordres secondaire et primaire. Par conséquent, les musées sont fréquentés par une clientèle spécifique, les membres dans le cas des premiers, les élèves et étudiants dans le cas des seconds. On ne peut donc pas conclure qu'à cette époque les musées font une œuvre d'éducation destinée à tous. Ce n'est qu'au XXe siècle que les musées ouvrent peu à peu leurs portes au grand public.

À la deuxième, troisième et quatrième question, nous répondons que l'éducation muséale a pris différentes formes à travers les âges et qu'elle a évolué jusqu'à nos jours. Dans les musées dits savants, on prenait pour acquis que les membres étaient tous des connaisseurs. Par conséquent, on présumait que le simple fait d'exposer les écofacts et les artefacts suffisait à leur éducation. Toutefois, pour parfaire leurs connaissances on organisait à leur intention des activités culturelles, dont des démonstrations et des conférences. À la fin du XIXe siècle, on commença même à rédiger des cartels descriptifs et à organiser des visites commentées. On favorisait ainsi une éducation à l'objet.

Dans les musées scolaires, les écofacts et les artefacts étaient exposés pour illustrer les enseignements théoriques et favoriser les

apprentissages, particulièrement lors de ce qu'on appelait les leçons de choses. Il s'agissait en quelque sorte de fonder la connaissance sur l'expérience, afin de pouvoir par la suite accéder à des notions plus abstraites. C'était ce que nous désignons sous le nom de l'éducation par l'objet.

Par conséquent, les écofacts et les artefacts sont devenus, par leur simple exposition, des agents d'éducation portant en eux-mêmes une valeur qui s'inscrit dans une dimension implicite de la fonction éducative des musées, indépendamment de la volonté des conservateurs et des concepteurs d'exposition.

Au XXe siècle, rappelons-le, les musées dits savants s'ouvrent progressivement au grand public. Il devient alors essentiel d'organiser des activités éducatives à son intention. On met alors sur pied des services éducatifs ou, à tout le moins on confie à un membre du personnel la tâche de prendre en charge ces activités. Ce mouvement s'intensifie, mais à partir de 1964, alors que le système scolaire québécois est réformé et que les musées disparaissent pratiquement des établissements scolaires, les musées publics doivent à la fois contribuer à l'éducation à l'objet et par l'objet. La fonction éducative des musées devient alors très explicite.

C'est à partir de cette époque que des universitaires, des muséologues et des éducateurs de musée entreprennent des recherches sur la fonction éducative des musées. En plus de proposer des modèles d'intervention, ils mettent l'accent non pas uniquement sur le contenu des expositions, mais aussi sur les relations que les visiteurs tissent avec ces dernières (Allard et Boucher, 1998). Ces relations ne se limitent pas au plan cognitif; elles peuvent aussi être émotives, imaginaires, sensorielles, voire sociales, comme l'ont montré la professeure Colette Dufresne-Tassé et son équipe (Dufresne-Tassé et Lefebvre, 1996). Par conséquent, l'œuvre et l'objet, par leur simple exposition, deviennent des agents d'éducation que les visiteurs s'approprient. On peut ainsi parler d'éducation avec l'objet.

Bref, l'éducation muséale possède encore un important potentiel de développement, pourvu que tous les intervenants ne cèdent pas aux chants des sirènes. Ils doivent mettre l'accent sur la qualité de leurs interventions. Le musée doit refuser de s'engager dans des sentiers marqués du triple sceau du mercantilisme, de l'utilitarisme et du message moralisateur. Il doit poursuivre son œuvre d'éducation à, par et avec l'objet. Il vient en quelque sorte compléter la mission des autres institutions culturelles de la Cité.

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The avant-garde of European museum education in Belgium

Nicole Gesché-Koning

Belgium may be considered as having played a pioneering role in the field of European museum education (Gesché-Koning, 2014b). However, a history of Belgian museum education has not yet been written. With many new museums having been built and/or developed at the end of the 20th and beginning of the 21st century, this short essay is just an introduction to a deeper study to be completed. How has museum education evolved since the creation of the first museum education department in 1922? What do this service and the ones created until the end of the 1970s have in common? To what extent can Belgium be considered as having played a pioneering role in the field of museum education?

The pioneers of Belgian museum education

Samuel Quiccheberg – the oldest museum educator?

Only at the beginning of this century was the first treatise on museology, published in 1565 in Munich by Samuel Quiccheberg (Antwerp, 1529 – Munich, 1567) in Latin, widely disseminated thanks to the German (Roth, 2000), French (Brout, 2003) and recently English (Meadow and Robertson, 2013, Kuwakino, 2013) translations. The French version came to light on the occasion of the exhibition *L'extraordinaire jardin de la mémoire*, organised at the Royal Museum of Mariemont, which analysed the role played by images both in the past and the present days and reflected on what a visitor remembered of his/her museum visit (Mairesse, 2003). The purpose of Quiccheberg's treatise as far back as the 16th century was to provide optimal visiting conditions to visitors of cabinets of

curiosity thanks to a well-thought-out presentation. All this was a result of what nowadays can be considered museum education “tools” to accompany the visitors during their visit in order for them to remember what they had seen, i.e. texts, models and illustrations.

Raoul Warocqué

The subsequent theories on which Belgian museum education would develop appeared much later, in the 19th century. In this respect the Warocqué family played a leading role. One can say that Raoul Warocqué (1870-1917) continued Quiccheberg’s wish to develop and enrich the museum collections, thus allowing for a larger diversity of countries and periods represented. The educational role of these rich collections (Mairesse, 2007) was to allow “man’s emancipation”, with the museum, according to Warocqué, serving three main goals: “scientific, educational and patriotic” (Mairesse, 2003). These goals were to remain the same under Paul Faider’s direction and mainly that of his wife Germaine Faider-Feytmans who, in 1946 together with the association of the Friends of the Museum, created within the institution its first education department. In 1960, an important part of the old castle of Mariemont was destroyed by fire and replaced by Roger Bastin’s present building. The new director, Guy Donnay, rearranged the presentation of the collections, organizing the rooms not only chronologically but also geographically and horizontally: on the left, everything concerning the Western world and on the right, what happened at the same time in the East, allowing continuous comparisons for a better knowledge of what was being produced worldwide in the same period. This was much praised by the Education Ministry, which in 1969 was undergoing a full revision of its programs and school curricula on different levels – observation, orientation and determination – favoring thematic learning and abandoning chronology! (Van Haecht, 1985).

The visionary Jean Capart: research and education hand in hand

If Raoul Warocqué had already emphasized the role of education in museums, this role was to be developed at the *Musées Royaux d’art et d’histoire* (Royal Museums of Art and History - MRAH) from the end of the 19th century, as one can glean from the correspondence (18th May 1863) of the director of the *Musée Royal des Antiquités, Armures et Artillerie* (Royal Museum of Antiquities, Armors and Artillery – former name of the MRAH) quoted by Janine Schotsmans:

"The museum is not only meant to satisfy the curiosity of the idle. It trains the archaeologist, it helps the artist in his/her work, and within the industrial class it propagates the idea of beauty" (Schotsmans, 1985, p. 24) (translation mine).

Was this not the ideal spread on the European continent some years earlier by the Victoria & Albert Museum following the London *Great Exhibition of the Works of Industry of all Nations* (1851)?

From 1897 till 1942, the Royal Museums of Art and History underwent an important educational development thanks to the visionary director Jean Capart (1877-1947), who was trained as an Egyptologist. Impressed by what he had discovered in American museums during a trip to the United States, he decided in 1922 to create the first museum education department, considering research, education and communication equally important (Capart, 1932). Jean Capart had initiated the Belgian excavations in Egypt, bringing back one of the masterpieces of the museum: Neferirtenef's mastaba (5th dynasty). Not only praised by his contemporaries, he also counted numerous fans in other spheres. Forty years after his death, he appears in various comics as professor Grossgrabenstein in *Le mystère de la Grande Pyramide* (Jacobs, 1987) or in *Tintin* (Hergé, 1984) as Hippolyte Bergamote. What better media exposure for a curator who was convinced that research and museum education needed to evolve hand in hand? Capart is probably the first museum director in Belgium to have given such high value to museum education and to consider it as important as research. Capart knew what is at stake when dealing with education and was convinced of the educational value of museum collections to awaken among visitors the senses of beauty, curiosity and continuity. In a lecture given at the Young Lawyers' Rostrum in Brussels (16th December 1929), Capart quoted his colleague, the Director and Principal Librarian of the British Museum, Sir Frederic Kenyon (1863-1952). He used the following passage of the free public *Romanes* lecture delivered at the Sheldonian Theatre in Oxford, the 17th of June 1927:

"Museums have ceased to be merely the arsenals of students engaged in research; they are beginning to offer themselves to the public as a means of recreation and an instrument of education and of delight.

They are a part of the response to the need that man has for quality in his life as well as quantity. They appeal to and stimulate three special motive forces in his nature: the sense of beauty, which makes him desire to see

beautiful objects; the sense of curiosity, which makes him desire the widening of his experience and the increase of his knowledge; and the sense which may be called the sense of continuity, which impels him to take interest in his foundations in the past.

The museum is a means of heightening in value and extending in breadth the individual's conception of life. It gives him ideals of beauty and of human achievement, which increase his sense of his own possibilities. Its ultimate purpose is to help the nation to save its soul" (Capart, 1932, p. 90).

Capart's goal was to create a multidisciplinary education department with a wide and varied offering: public lectures, free guided tours for schools, storytelling activities, Sunday guided tours, basic courses in art history, educational movies, a slide library and a shop where pictures of the items were sold. The creation of the image popularization department called *Magasin des Images d'Art* (Art Image Shop) allowed people to buy the numerous art reproductions published by the Boston University Prints, for which Capart had acquired the exclusive selling rights in Europe and Belgian Congo. Once the invested capital Capart had put into this operation had been refunded, the profit was to serve the continuous development of the educational activities of the museum (Mairesse, 1994, p. 44).

To evaluate the impact of the explanations of a museum educator on the younger visitors, Capart had launched one of the first evaluations of visitor behavior, insisting on the complementarities of scientific work and cultural mediation:

"The "scientific" must determine the "educational" while avoiding a mixing of the two functions. A scholar does not necessarily have the qualities of a pedagogue and the educator is not necessarily a qualified researcher" (Capart, 1932, p. 90) (translation mine).

He concluded his lecture by quoting in French George W. Steven's *Manifesto of the Art Museum of Toledo* (Ohio), which was founded in 1901:

"He who understands is wealthy, for all things are his. A community is as rich as its understanding of the use of the riches [...] The busiest city on earth is fast asleep unless it is doing something towards the higher education of its people. Work should be a means to leisure in which to enjoy the sublime creations of science, literature, music and art. No city is great until it rests the eye, feeds the intellect and leads its people out of the bondage of the commonplace.

Hospitals do much; they make sick men well; museums of art do more; they make healthy people better" (Stevens, 1912; Capart, 1932, p. 95).

In this brief historical overview let me quote the main goals of an education department as published on the inner back cover of Jean Capart's *Le Temple des Muses* (Capart, 1932):

"An Education department is above all an altruistic work.

Among all works, which came to light because of the necessity to defend intellectual activities, which had been abandoned in favor of more materialistic preoccupations inherited from the war, the Education Department was created [...] to allow a leading scientific institution to be fully efficient [...]

One must first of all create among the public a general interest in the museum and fight the general opinion which sees the museum as a dumb or speechless catalogue, a temple for hermetic sciences: the Museum is a marvelous working and cultural tool. It is one of the Education Department's goals to show how to make the best use of it. The collections significantly summarize all human art and knowledge gathered throughout the years; to be able to fully grasp them means to attain the proper nature of our civilization [...]

Knowing history is the basis of all the general culture necessary to truly train a man.

The images in a book lead to more expressivity in a text; but which image can better enliven the training of history and make it permanent than the objects of a museum?

[...] One hour spent at the Museum leaves more true impression and valuable concepts in each child's mind than numerous hours of theoretical learning" (Capart, 1932, p. 96) (translation mine).

And finally: "[...] The Education Department serves the public, its culture and its moral values" (Capart, 1932, p. 96) (translation mine).

From the above, one can truly say that

"[...] it is to Jean Capart's credit that the first educational service was planned and set up in a Belgian museum, even before he became director of the latter [...] This new, and indeed revolutionary scheme was an innovation giving the lead to museums throughout the world, even in the United States of America" (De Roo, 1967, p. 272).

Capart remained throughout the years conscious of continually having to adapt to an evolving society: "A museum is a living organism that evolves; if it is not flexible, it risks no longer participating in the momentum of the nation" (Capart, 1932, p. 91) (translation mine).

The Education Departments of the Royal Museums for Art and History over the years

First museum kits

Created in 1922, Capart's Education Department was a very active one. Some hundred years later, it may still be considered a model, always looking for new mediation tools in order to attract new visitors and to adapt to our ever changing and globalized world. The issues that museums face nowadays are not that different from those following World War I and preceding World War II. Already in 1932, with the help of the association *Les Amies de la Dentelle* (The Friends of Lace Work) and a student from the Royal Academy for Fine Arts in Brussels, one of the first Belgian museum kits was launched. It has even been described for its novelty in the German Museum magazine *Museumkunde* (Jacob-Friesen, 1932): containing 26 didactic panels (40 x 60 cm) and 171 models of Belgian lace, this museum kit toured Belgium for many years. Its compactness and handy size made for its success. The Education Department since then has continued developing new museum kits, adapting them according to the demands, the budgets, the material available and the new technologies. Even if a visit to the museum should be the main goal of a museum education department, sometimes bringing the museum to the outside world is a "*pis-aller*", an imperfect substitute, and may attract people to the museum years later. The fact that this kit was made in collaboration with an art institute is also symptomatic that a museum open to all capabilities can prove successful.

Museum directors open to museum education

Capart's social and educational vision remains present nowadays (Delevoy-Otlet, 1985; Deltour-Levie and Gesché-Koning, 1986; Deltour-Levie, 2001), thanks to the various people who followed his work at the head of the Education Department: Jean Lefrancq, Suzanne Delevoy-Otlet, Claudine Deltour-Levie, Anne-Françoise Martin and Anna van Waeg. Their work would not have been possible without the strong support of directors who were convinced of the educational mission of the museum. Pierre Gilbert (1904-1986), who

started his work as educator in 1926 and led the museum from 1963 till 1969 after Count Borchgrave d'Alténa (1951-1963), was in charge of the renovation of the building's right wing that had been damaged by fire in 1946. He decided to include museum educators as part of its scientific team and, on the reopening of the new wing, he once again pinpointed the importance of its educational mission:

"It is the vocation of our age to introduce culture into social groups for whom it has had little place in the home and among whom there is now increased leisure for visiting museums.

Leaders of countries where the educational level is still low regard their museums as a means of making up for lost time and bringing the rudiments of knowledge to the masses" (Gilbert, 1967, p. 295; also quoted in De Herdt, 1986, pp. 291-292).

He also insisted on the museum's role in awakening the mind to the surrounding world:

"The beauty of a work does something better than instruct. It forms us, revealing the world in a truer and clearer light, freed from the petty details, which obscure it. It prevents us from fixing upon the accidental and induces us to recognize in the world an order in which the complementary tensions of the laws of life and living are balanced" (Gilbert, 1967, p. 296).

René De Roo, Head of the Royal Museums for Art and History between 1969 and 1984, managed to increase and develop the Education Department by adapting it to the daily reality:

"There is nothing strange in the fact that a department, which had already planned so many activities at its creation, should then adapt to new circumstances, taking into account the preferences and desires of the public together with the evolution and changes which occur in the present society" (De Roo, 1967, p. 270 ; see also comments by De Roo and Henrion-Giele, 1976, pp. 18-19) (translation mine).

A federal museum in the capital of the country needed two education departments – one French speaking and one Dutch/Flemish speaking. This had already been achieved in 1965 under Pierre Gilbert's direction, but was developed under René De Roo, who also initiated the *Musée des Aveugles* (Museum for visually impaired people) in 1975. Both Education Departments were in charge of directing the museum and organizing yearly temporary exhibitions

that used original works of art and not copies, in partnership with the museum curators and after taking all measures to protect the works. Eventually in 1971, Thérèse Destrée-Heymans (ICOM-CECA secretary 1978-1983 – Committee for Education and Cultural Action of the International Council of Museums) created the museum education workshop *Dynamusée*. In 1979, she was part of the team that planned within the museum a didactic room dedicated to wooden altarpieces. The members of this team were the Belgian artist Philippe de Gobert and museum curators and restorers from the *Institut royal du Patrimoine artistique* (Royal Institute for Cultural Heritage) (Destrée-Heymans, 1979/81).

Also under R. De Roo's direction, the museum educators were encouraged to attend the meetings and work of the *Commission Éducation et Action culturelle* (Education and Cultural Action Commission) of the *Association francophone des Musées de Belgique* (AFMB), the French speaking Association of Belgian Museums, today ICOM-Belgium Wallonia /Brussels (<http://www.icom-wb.museum>).

Last but not least, the Royal Museums of Art and History were the first in the country to give in 1983 a legal status to all museum educators who, up until then, had been working on a freelance basis. They were followed very shortly after by the Royal Museums for Fine Arts of Belgium. Museum educators could from then on rely on a regular income and on having their work split between guided tours and lectures ("standing work"), and research and preparation of museum education guides, leaflets, teachers' packs etc. ("seated work"), which had been developed throughout the International Year of the Child, 1979.

These educators continued to strive for Capart's first goal, i.e. rendering museums accessible to all:

"A museum accessible to the entire public. Accessible in the fullest sense of the word: to encourage contacts, to allow the works to speak, to decipher messages and to teach people to read the signs of the past" (Delevoy-Otlet, 1985, p.283) (translation mine).

New initiatives

Both the Flemish and French speaking departments continue the work launched almost a century ago. During the 1980's they actively participated in programs developed in partnership with various other museums, like *Rallyes Musées* (Museum Rally), *Les musées prennent un coup de jeunes* (Museums turn young, translation mine) or *Les jeunes prennent un coup de musée* (Young people adopt a

museum) and more recently *Tom et Charlotte*. As members of the Brussels Council of Museums (CBM), they take an active part in the *Museum Night Fever* aimed mainly at people aged 18 to 30. Both departments want the younger generation to "look differently" at works of art, thanks to new media and new mediation tools:

"We encourage them to make their own discoveries among the collections. The education team adapts its working methods and creates new tools in order to enable these younger visitors to personally appropriate the works, in order to see in them not only a source of knowledge, but also move them and enhance their imagination" (Martin, 2007, p. 39).

For being a "service to the public so refreshing, so young and so innovative", the museum was awarded the Museum of the Year Award in 2007, an initiative launched in Belgium by the art magazine *Openbaar Kunstbezit* with the support of the lawyers Linklaters (www.prixdesmusees.be).

Among the latest initiatives witnessing this idea of innovation, let us mention *Quand les œuvres du musée se mettent en mouvement!* (When works of art start moving) within the BXLBravo program developed in Brussels (2005, 2007 and 2009), in partnership with the association "Turtle Wings and Wind". The sleeping statues of the museum were asked to "shake the dust" off them and start a new life imagined by the youth visiting the collections and creating for them a new environment and/or display, or planning a special happening (Van Waeg, 2005). Also the reopening of the Islamic room was the opportunity to reflect on multiculturalism and intercultural dialogue. Thanks to their experience with visually impaired people, the museum educators decided to turn towards other disabilities and managed to work with mentally impaired children. Finally, the education department developed a special scenography department within the museum, which works in coordination with planners of temporary exhibitions.

Jean Capart will certainly not turn in his grave: the museum continues to honor him. Pursuing his pioneering museum education ideas, which appear on the museum website (p. 8)

"[...] make the museum collections accessible to ALL: cultural groups, schools, families, but also the more weakened, who for economic or social reasons, or due to a certain disability, hesitate to enter the museum [...]"

it invites all visitors, whatever their origin and cultural, social, economic, physical background, to "Dare to visit the museum!" – "Osez le musée !" (www.kmkg-mrah.be).

Other museum education and cultural departments (1923 - 1945)

Nowadays most Belgian museums have an education department. This is even mandatory if they want to be acknowledged as such and receive public financial support. Their creation has nevertheless been quite slow and only in the years 1970–1980 have they really begun to exist in Flanders, Wallonia and the Brussels region. After the Royal Museums of Art and History, in 1923 the city of Ghent and its alderman of education Jules D'Asseler developed a *Schoolmuseum* in order to give the younger generation a "taste for natural sciences and healthy activities".

The Schoolmuseum Michel Thiery and *De Wereld van Kina* (World of Kina)

This school museum opened officially in 1924. Its collections belonged to various collectors and to Leo Michel Thiery, the new alderman of education. His name was added to the school museum when he took over the leadership of this education and cultural centre dedicated to nature. The garden around the museum was the first genuine public garden ("*heemtuin*") in Holland and Belgium. This museum was very popular in CECA, thanks to the participation of the school radio entertainer Roland Verstraelen (1923-1983), who became the head of the museum in 1960 and the chairperson of the *Vlaamse Museumvereniging* (Flemish Association of Museums). I had the privilege to meet him in the CECA conferences in Rotterdam (1978) and Sesimbra (1979). The CECA participants in the CECA European regional meeting in Brussels (1993) were given the opportunity to visit this new pioneering Flemish education department in Ghent (Gomes and Gansemans, 1983). The museum won the European Museum of the Year Award in 1980. In 2003 the museum and garden changed their name and became *De Wereld van Kina* (Kina's World), for Ki(nd), i.e. "child", and Na(ture) (www.dewereldvankina.be/content.aspx?alias=historiek accessed 19th July 2014).

The Belgian Royal Institute of Natural Sciences

Victor Van Straelen, director of the *Institut royal des Sciences naturelles* (Belgian Royal Institute of Natural Sciences), established an education department in his institution in 1934,

"[...] to acquaint the public with the institute's activities by putting its collections within their reach. [...] According to its first director, Louis Debot, the role of this service could be summed up in one word: to educate" (De Roo, 1967, p. 274).

The factors which had, and still have, to be taken into account are:

"[...] the ignorance of the layman, which inevitably gives rise to an attitude of indifference on his part; failure to make the necessary intellectual effort; and the fact that the public sees things without looking at them, even when the things seen are familiar" (De Roo, 1967, p. 274).

Was this rather pejorative idea of a museum visitor the reason that led Alain Quintart, Head of the education department and active CECA member, to dedicate his life to defending museum education, popularization (Quintart, 1986) and dealing with the media and the world of comics (including Franquin's *Marsupilami*) (Quintart, 1992; Jacquat, 1997)?

New education departments created after WWII (1950-1970)

The war years brought almost all museum activities to a halt – hence the creation of new museum education departments afterwards. Following World War II, some museums such as the *Musée Royal d'Afrique* (Royal Museum of Africa, today Museum of Central Africa in Tervuren) created new education departments. The International Council of Museum's (ICOM) choice of theme for its 1972 general conference – *The Museum in the Service of Man: Today and Tomorrow – The Museum's Educational Role / Le musée au service des hommes aujourd'hui et demain : Le rôle éducatif et culturel du musée* – was the starting point of a new development of museum education departments throughout the country (ICOM, 1972).

The Musée d’Afrique Centrale de Tervuren (Museum of Central Africa in Tervuren)

Created in 1950, the education department of this “colonial” museum is, like the institution, in constant development; after numerous reflections and discussions around the turn of the century concerning the place of such a museum in the present society, its values and the type of display (Wastiau, 2000), the museum went under a complete renovation. The Education and Culture Department continues its work in collaboration with various African communities based in Belgium. The renovation works were launched because of the necessity for the museum to “abandon its colonial skin and to dedicate itself to present-day Africa” (<http://www.africamuseum.be>). I was most indebted to the exhibition curator Anne-Marie Bouttiaux for her choice of various themes for the mask exhibition *Persona*, which I used in my presentation at the CECA conference in Reykjavik, 2009, entitled *This Is Not a Museum Educator. Do Museums Need Museum Educators?* which analyzed the different “faces” and “roles” a museum educator was faced with daily (Gesché-Koning, 2009).

The Royal Museums for Fine Arts of Belgium

Until 1968, the education activities of the *Musées royaux des Beaux-Arts de Belgique* (Royal Museums for Fine Arts of Belgium) were led by the association called *Diffusion artistique* (Artistic Dissemination), which was in charge of guided tours and Sunday morning lectures. The successful 1969 exhibition *Bruegel et son monde* (Bruegel and his time) led the museum director Philippe Roberts-Jones to create an

“[...] education Department, which within the museum would be an active link between the collections and the public who had come to admire them. Guided tours and lectures would go on, but more was to be achieved by welcoming people of all ages, social classes and educational background” (Marlier, 1976, p. 20).

Like the Royal Museums of Art and History, this active museum education department managed to adapt to the 21st century. Now called Educateam, it developed an important sector dedicated to all types of disabilities. *Musée sur mesure* (Tailored Museum, translation mine) welcomes all impaired people in its various programs: *Equinoxe*, *Sésame* and *Comète*. Together with the Royal Museums of Art and History, it took part in the European programs coordinated by the *Université libre de Bruxelles* (1997-1999): *Training of Guides* and *Let Us Protect our Heritage Together* (Périer-D’Ieteren, 1999). In

2005, it collaborated with Amnesty International on the theme of violence against women by choosing and exhibiting a number of relevant paintings from its collections. This political and social involvement led the museum to receive the Belgian Museum of the Year Award.

Further developments (1970 – 1980)

An educational museum: the Museum of Louvain-la-Neuve

The Museum of Louvain-la-Neuve opened in 1979 on the site created to relocate the French speaking part of the oldest Belgian university of Louvain/Leuven, founded in 1425. Due to the splitting of the country into different linguistic communities and regions, the University of Leuven was kept in its original place in Flanders with its Flemish students, and the French *Université catholique de Louvain* (UCL) left for the French speaking Wallonia. The architects Jean Cosse and Emile Verhaegen planned the museum as a place serving university research but also as a public institution in an area lacking museums. The three founders of the museum, Ignace Vandevivere, Bernard Van den Driessche and Jazeps Trizna, were all deeply convinced of the educational role of both the university and the museum. *Dialogue* was to become their motto, as I analysed it at the CECA Rio Conference in 2013 (Gesché-Koning, 2014a). Professor Vandevivere's goal was to invite the visitors to stroll through the collections at their own pace, linking their present reality to the shadows of the men of the past. He also wanted people to learn to "look" at the objects thanks to his "*École du regard*" (School of Looking), which was to eventually awaken in the visitor a desire for more knowledge and curiosity. The conception of the museum, which was meant as totally educational, resulted in genuine teamwork described in *ICOM Education* (Trizna, Vanden Driessche and Vandevivere, 1980), but also as an enterprise, a meeting point of various publics: professors, students, and private visitors of all kinds. The educational value of this museum led me to choose it as one of the museums to visit during the CECA European Regional Meeting held in 1993. Today, the present director Anne Querinjean, a former museum educator who at the Royal Museums for Fine Arts of Belgium had initiated the *Sésame* program, is confronted with a real challenge: moving the museum to its new place, with the first building of the city, the Science Library, also moving to a new building. Heritage issues are at stake here but also a challenging

educational task: Anne Querinjean having been trained by one of the first founders of the museum, Vandevivere, wishes to continue her professor's idea of dialogue and school not only of looking but also as reflection on our present day society.

Conclusion

This short description of some pioneering Belgian museum education departments is far from complete. As mentioned at the beginning of this paper, it is just a starting point of a history of Belgian museum education in the making. The task is not an easy one, as most museum education departments have seldom kept any records, hence the late date of their creation! The splitting of the country does not make the work any easier. Fortunately I happen to know many persons who have worked in the different education departments. Most of them are now retired but are available for an interview. Many museums need to be mentioned for the last quarter of the 20th century and the beginning of the 21st, such as the *Musée de la Vie Wallonne* in Liège and those created and/or renovated after 1980, like the Préhistosite at Ramioul, the In Flanders Field Museum at Ypres, the Musée of Ixelles in Brussels; in Antwerp, the MKHA (Museum of Contemporary Art), the Museum of Fine Arts (*Museum Schone Kunsten*), the Sculpture Park Middelheim and the MAS (*Museum aan de stroom*/Museum Along the Stream); the museums of the city of Ghent (SMAK, City Museum/*Stadmuseum*, Design Museum); the Muzee in Ostend, the Fashion Museum in Hasselt, the Sugar Museum in Tirlemont, the Museum Félicien Rops in Namur, the Grand Curtius in Liège, and in Mons, the Mundaneum and the Museum of Fine Arts – BAM, and in Charleroi (Photography Museum, the mining site Bois du Casier, the BPS22), the *Musée des Arts Contemporains* MAC's at Grand-Hornu, the Tapestry Museum in Tournai – to mention just a few rather new and recent museums among the some 800 museums of the country.

A history thus to be continued...

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Insights into the genealogy of museum education in Greece: early compatible views on the importance of museum education expressed at two international meetings in Athens

Sofia Trouli

Introduction

Since the end of the 20th century, museum education in Greece has progressively developed, mainly through the increase of opportunities for children to learn in museums, mostly in archaeological ones (Lagogianni, Glytsi and Keramidas, 2014; Mouliou, 2008). In the recent years, this process has accelerated (Skaltsa, 2014). Great museums now run special educational programs. These are targeted to meet the needs of both young and adult visitors and may extend even outside the physical limits of the museum. Most of the Greek museums take full advantage of new technologies to cater to the educational needs of their visitors. Also museum-based education courses even train teachers-to-be. Special cultural programs, carried out in collaboration with the museums, are included in the framework of school activities. Many studies have been made on the evaluation of the museum educational experience and on the recent development of museum education since the first programs began in the 1980s (Nikonanou, 2009; Nikonanou and Kasvikis, 2008; Vemi and Nakou, 2010). Even so, until recently, no systematic study on the birth and growth of museum education in Greece had been undertaken: no systematic research into its history before 1980 existed, nor any consideration of its "genealogy", in other words of the succession of persons and deeds which have contributed to the theoretical discourse of Greek museum education.

The study of the "genealogy" (pedigree) of museum education in Greece was attempted within the structure of a doctoral project,

entitled *The Archaeological Museum and the School-child in Greece: A Historical Observation into a Modern Institution in Theory and Practice, through the Case Study of the Educational Program put on by Archaeological Museum of Rethymno, 'Travels and Trade in the Minoan era'* (Trouli, 2012). It was in the course of studying the genealogy of Greek museum education that it became apparent that even before 1980s there were inspirational figures, coming especially from the environment of the archaeological museums and from education, who introduced new ideas and spurred on the educational issues within museums. However, for historical and political reasons, like military conflicts, the National Schism, the calamity of the Asia Minor Venture, the Civil War and the Military Dictatorship, as well as the political choices determining the course of national education and culture, like the emphasis on the testimony of Greek identity and the cultivation of national conscience at schools and at the Archaeological museums until 1970s, these ideas were passed over. As a result, when the benefits of museum education were put forward again, from 1980 on, they appeared as "original" proposals for the renewal and modernization of the educational system and the museums' social role.

The present report investigates two little-known international meetings which took place in Greece in 1905 and 1954. Both are unique because they gave to the participants the opportunity to exchange ideas on the importance, theory and practice of museum education and to explore the interrelationships possible among museums, archaeology, archaeologists, educators, governors, students and visitors to this end. Both meetings raised many issues that even now remain at the top of the agenda of museum education. Thus I chose to present here the first instances of agreement and concurring opinions of both Greek and foreign archaeologists, teachers and other scientists on museum education at the 1st International Archaeology Congress (the *Congrès international d'archéologie*) in 1905, and again at the 2nd UNESCO and ICOM workshop on the subject *Museums' Mission in Education* held in 1954.

The institutional framework of educational practices for students at Greek archaeological museums and generally in Greek museums rather stagnated between 1900 until 1953. The Greek student-oriented trend, as created by Greek educators mainly during the first 30 years of the 20th century, promulgated by international meetings that took place in Greece, did not ultimately triumph. Even an important theoretical base was created mainly by reformist educators through their presentations and their efforts to apply new pedagogical

principles in Greece. Thus, archaeologists and museum directors, together with excavations and the museum establishment, started through the media of international studies and congresses as well as of newspapers to become informed about the need to teach archaeology at school and about the value of museums and monuments as educational *milieux*. At the same time, they began to place greater emphasis on the aesthetic value and the rarity of ancient objects. The main difference from the previous period lay in the definition of the Greek past. Objects of prehistoric archaeology and relics of popular culture were added to the collecting and exhibition practices. Of course, the museums' objects were exhibited in a way that supported the concept of the progression, continuity and development of the Greek civilization, serving the national ideology (Chourmouziadi, 2006, p. 50-51). It was also noticed, in the teachers' training manual, that it was planned to have them trained in archaeology by visiting ancient monuments and museums (Trouli, 2012). However, the interest in excursions that had started to emerge had its focus in cultural tourism, being designed to satisfy the spiritual wants of the urban middle classes. Each excursion included a guided tour.

During the same period, in America and the western European countries, an institutional base on educational practices for museums had been created. However, such thinking and action had not yet taken hold in Greece. Probably the political situation did not favour something like this. Perhaps too, the strict approach of the Archaeological Service did not encourage the presence of students in museums. Nevertheless, a favourable climate had started to burgeon. It was encouraging schools to open themselves up to more child-oriented pedagogical methods. The Proceedings of the First International Archaeology Congress and its impact in Greece, as it will be seen below, illustrates the innovative ideas of the Greek educators and archaeologists of that era.

1st International Archaeology Congress, Athens 1905

The first meeting of the International Congress of Archaeology (Congrès international d'archéologie, 1905) took place in Athens from the 7th to the 13th of April 1905. More than 850 scholars and interested amateurs from 19 countries attended. The Congress was organised by the Greek Archaeological Service, the Archaeological Society of Athens and the University of Athens, in collaboration with

the foreign archaeological schools in Greece. The selection of Athens could be seen as an expression of the triumph of Hellas in classical archaeology (Dyson, 2006; Congrès international d'archéologie, 1905, p. 63). However, it is also true that the organization of an international congress of archaeology that would meet at regular intervals in order to advance the discipline through the discussion of both scientific and practical issues seems to have been an important goal of the Greek Archaeological Service during the late 19th century (NAM, 2015; Congrès international d'archéologie, 1905). As a result in 1901 a Royal Decree established a Congress of Archaeology and appointed a committee that would organize it (NAM, 2015). Among the seven sections of the Congress there was one on works, excavations and museums, and another on the teaching of archaeology (Fowler, 1905; Kokkou, 1977). In the first group, looking at museums' operation, excavations and preservation of finds, Cecile Smith, from the British Museum, proposed an international collaboration between national museums and the creation of a new museum which would gather photographs, casts, objects duplicates, as well as museum and educational material in general (Congrès international d'archéologie, 1905, p. 242). The second team, working on the teaching of archaeology, set as its main question how and at what level the studying of archaeology could be introduced in the educational programs. The efforts being undertaken by certain countries in this direction were presented (Congrès international d'archéologie, 1905, 323-324).

Alexander Conze, Secretary-General of the German Archaeological Institute, spoke on the topic *Archaeology and the High School*, emphasizing the training of the teachers, who needed to learn how to see and experience masterpieces of art whilst at University (Congrès international d'archéologie, 1905, p. 323-324). Excursions to archaeological sites would help them remember better the works of classic antiquity. Jean Csengeri, representative of the Hungarian Ministry of Public Education, expressed the need for teaching art at the secondary level. In the first grades of schooling, this aim could also be achieved through other courses, through comparable classes in the history of art. However, at upper-level grades it would be useful to have it introduced as a self-contained course. George Plunkett, director of the Museum of Dublin in Ireland, talked about the means used by his museum to have Irish archaeology introduced into schools there. More specifically, the Museum of Dublin had prepared six series of photographs illustrating Irish monuments, which were lent out to schools upon request. He observed that the pictures

were framed in order to be easily presented to the students. They were accompanied by an explanatory text, to help the teacher. The lending period of each series was six weeks.

Herbert C. Tolman, professor at Vanderbilt University in the U.S.A., put forward his views on teaching archaeology at the secondary level, proposing the reading and commenting on Homeric texts, with respect to the recent discoveries on the Mycenaean civilization. The president of the conference, A. Conze, criticized his position, stating that Tolman had not explained how such teaching could be carried out in the classroom, which was the main issue of the conference.

Percy Gardner, professor at Oxford University, talked about the use of coins in the study of archaeology, considering them as a medium that could introduce students to several archaeological issues like art, mythology, economic history, lettering, and that could also help training the eye of the student (Congrès international d'archéologie, 1905, p. 325-326). For the teaching process, duplicates, photographs or slides of coins can be used. In conclusion, he suggested a few working themes related to coinage.

George Seure, former member of the French Archaeological School and representative of the French Ministry of Public Education, spoke on the teaching of the Greek language and archaeology at the high school level (Congrès international d'archéologie, 1905, p. 326-327). In connection with ancient Greek texts, professors could use pictures of ancient objects or archaeological sites to highlight their narrative.

Albert Petit, teacher at the *Lycée Janson de Sailly* in Paris, proposed that ancient Greek and archaeology should be taught by specialized teachers of *lycées* (Congrès international d'archéologie, 1905, p. 327-328). However, he observed that the majority of the French teachers were against this idea, as they believed that it was not educationally "correct" for children to be taught by several different teachers.

From Greece, Iakovos Dragatsis, language professor and antiquities curator in Piraeus, and Grigorios Papavasileiou, secondary school director in Athens and archaeologist, made contributions relevant to the teaching of Archaeology. Dragatsis talked about *Teaching Archaeology at Schools* (Congrès international d'archéologie, 1905, p. 332-333). He pointed out its great potential at every educational level and suggested the following ways it should be taught at school. First, children should have experienced their first visual contact by the last grade of the primary school. Second, archaeology should be

incorporated into the Greek schools curriculum, in combination with classical Greek and history courses. Third, archaeology should be taught as a regular course at high school and texts of ancient authors should be explained to the students through ancient monuments. Fourth, the students should organize exhibitions of objects wherever this was possible. Fifth, images of history and art should be assembled in the school and, finally, visits and excursions to museums and archaeological sites should be organized.

George Papavasileiou, as a philologist and amateur archaeologist, focused his intervention on the importance of teaching the life of the ancients, so that children should learn the country's classical history and geography (Congrès international d'archéologie, 1905, p. 332-333). More precisely, he suggested that high school students should compose an easy and clear tour of the Greek regions, which would relate the history of every city and include art objects from the past. For teaching classical history to the lower grades, he proposed no specific manual. However, he encouraged teachers to make use of sightseeing in ancient cities or locations where important events had taken place and to show them the monuments of their ancestors. Thus, children of the high school level would be able to understand what was written in the books and even to write a project based on the texts of ancient dramas and illustrations of statues and the like. For the first grade of high school he suggested projects related to the life of children in antiquity, the games and festivals of the ancient city of Athens; and for the second grade students projects on ancient Sparta. The third grade students could work on projects about the organization of the army and navy, about units of measurement, the function of courts and states, as well as architecture and pottery decoration.

At the conference, the need for high-quality visual material related to ancient monuments, the history and life of the ancient people was pointed out. Arthur Frothingham, professor at Princeton University, talked about the shortfall of such material for the first-grade (Congrès international d'archéologie, 1905, p. 335-336). He suggested a transnational collaboration of archaeological commissions to create the necessary material in the form of little albums (9/13 cm), with postcards that children could buy and collect. Every album would correspond to a particular subject. There could be no text but only a caption in various languages on the object or monument pictured. This would be done so that students would not think of it as some course-work (Neon Asti, 1905b, p. 1-2). Children would buy and study these albums. As a result, they would become familiarized

with ancient monuments, something not happening at that time. The proposal was a clever one, because students could develop the habit of collecting the albums and so learn about history without any particular effort and in a pleasant way.

Stanislas Rzepinski, Principal of the New-Sandez High School in Germany, talked about *The problems of organizing an archaeological collection at German high schools*. He stressed the need for uniformity in the material used, as well as in the means of teaching in the form of books and visual boards (Congrès international d'archéologie, 1905, p. 336-345). Objects of collections, together with their manuals and other visual material, needed to be carefully selected, with high-quality pictures and the correct information on the items pictured, all to be based on the most recent archaeological excavations. He also pointed out the value of having archaeological collections at school to achieve a better comprehension of items in three dimensions.

Alexander Conze, in his recapitulation of the conclusions of the working party, pointed out that the most important issue was the way in which the teachers themselves would be trained. He stressed that they should appreciate the value that archaeology could instill into their classes (Congrès international d'archéologie, 1905, p. 345). Moreover, he felt that there was little need of a large number of visual aids, but that those used, and especially pictures, should be of good quality and large.

Kyprianos Stefanou, mathematician and professor at the University of Athens, expressed his wish to have archaeology taught in high schools, to have young people "cultivate" their taste and develop a better understanding of modern art (Congrès international d'archéologie, 1905, p. 345). He agreed that, above all, it was necessary to introduce special courses in universities to better prepare the teachers-to-be.

A discussion followed on the usefulness of slides shows (Congrès international d'archéologie, 1905, p. 345-346). One group argued that pictures should be accessible to pupils or university students. These pictures could be handled and examined in detail, something that is not possible with slides. The other group believed that slideshows are beneficial when the audience is numerous or when teaching concerns architectural matters.

Georgios Palaiologou suggested the writing of a book on the teaching of archaeology. This book would be used in the same way as a grammar book assists language teaching. He also wished

history teaching to be more focused on cultural issues than on facts. (Congrès international d'archéologie, 1905, p. 345-346).

G. F. Bruck¹ set out three basic questions: What archaeological material would be used in archaeology teaching at high schools? In which way could this be realized? And how could this be developed? (Congrès international d'archéologie 1905, p. 347). Moreover, as he proposed the creation of a committee to look at these questions and report to the following congress, he offered a few responses. First, give students whatever materials that could help them acquire knowledge. Second, have archaeology taught by a range of different courses. Third, get qualified teachers, but not necessarily archeologists, to teach archaeology. Certain participants added that teaching the history of art and drawing could contribute to this, as students practice their hand and eye co-ordination in such exercises.

The suggestions of the Greek archaeologists during this congress constitute the first examples of such professionals – some of them even working as teachers – of explaining how students of primary and secondary education might get in touch with the ancient monuments and museums. The reasons invoked are mainly patriotic. There is a manifest will to develop a love for archaeology as a science and to encourage the understanding of the complex and critical process of project writing, all through the introduction of archaeology at school.

In a contemporary newspaper it was noted that all the speakers acknowledged the need to have "archaeology introduced to students in Middle Education, as a pleasant and highly beneficial course" (Neon Asti, 1905a, p. 1-2). Nikos Episkopopoulos, in one of his articles printed in the newspaper *Asti* entitled *Children at the Parthenon*, declares that the Archaeology Congress was a wake-up call to get people caring for ancient monuments, which had not been the case before (Episkopopoulos, 1905, p. 1). For this reason, he openly expressed his dislike for the way the Greek system worked, writing that it was only after the Archaeology Congress that teachers thought to take their students to visit the Acropolis:

"Of course it is odd and maybe even unpleasant, that an archaeology congress was organized and historians and archaeologists from all over the world participated, in order to learn how to guide our children to the Parthenon and to appreciate the ancient fame. However, let's try – at least

¹ Though I could not identify this person so far, I mention him because of his participation to the discussion about teaching archaeology at school.

now – to go on with the good example and insist on this good habit. Until then, antiquities were dead just like the classic masterpieces that we torture at schools and totally neglect the spirit” (Episkopopoulos, 1905, p. 1).

The article *Teaching Archaeology and Art at Schools of the Middle Education* (Csengeri, 1905) was published in the *Panathinaia* magazine of April 1905. It is composed of extracts from the suggestions that the Hungarian professor, Jean Csengeri, made at the International Archaeology Congress. The introduction of the article referred to the way archaeology teaching is about the contemplation of Beauty and is in line with aesthetic and art teaching.

“It is not right to neglect imagination, which is more important than intelligence for children. On the contrary, it has to be developed. Teach children how to see in depth, develop their aesthetic judgment and their taste; this has to be the most important effort for teachers [...] Nowadays, we cannot consider teaching the Pyramids, the Sphinx, Olympia, the Parthenon [...] without having the monuments or their pictures available for the students [...]” (Csengeri, 1905, p. 16-17).

That this suggestion was translated into Greek is of critical importance, because it is one of the first texts of its sort published in Greece, but also because it goes beyond the political point of view, towards an aesthetic one of teaching archaeology.

It is worth mentioning that neither the next International Archaeological Congress, which was held in Cairo in 1909, nor the third one, held in Rome in 1912, ran a section related to museums or the teaching of archaeology. In the following years, in Greece, there were political frictions such as the Balkan Wars, the First World War, the hopes and aspirations of the Great Idea of Hellenism and the National Schism, which all led to the traumatic experiences and consequences of the Greek-Turkish War and the Calamity of the Asia Minor Venture. These were followed by the Second World War and the Civil War. This string of miseries and catastrophes affected the domain of archaeology and the discourse on the significance of the use of heritage in education, the teaching of history and the use of museums for learning aims (Clogg, 2002). The emphasis on the evidence of the continuity of Greek history from Antiquity to the contemporary folklore culture and on the aesthetic beauty of the objects exhibited in museums, was supported by a few different voices.

Second UNESCO and ICOM workshop on *Museums' mission in Education* (Athens, 1954)

After the Second World War, during the re-exhibition of the collections in the Archaeological Museums made possible by the Marshal Plan, emphasis was given to the development and improvement of the aesthetic quality of these museums in order to attract tourists (Chourmouziad, 2006; Mouliou, 2008). The educational role that archaeological sites and museums could play for students and the general public was not yet mentioned in any official or unofficial constitutional texts. Only from sundry references in the contemporary press, might one understand that the museum didactic role was linked to the students' and public's growing acquaintance with and appreciation of ancient Greek art. Straightforward visits and guided tours to museums, although dependent from the teacher's or the museum curator's disposition, were common practices of the day. Emphasis on art was also observed, due to the scientific methods used in archaeology. Until the 1960s, a cultural and historical approach held sway.

Trying to raise awareness among museum and school employees about the educational role of the museums, UNESCO and ICOM organized an international campaign in 1951 that was called *Crusade of the Museums* (McCann Morley, 1952). This concept was the brain-child of the founder of the *Palais de la Découverte*. In 1949 André Léveillé wrote an article published in the *Museum* magazine, entitled *The museums at our service. A crusade for the Museums*. This call-to-arms marked the start of a wider international acceptance and saw the establishment of the museums educational role and specialized source of learning.

In this campaign, travelling exhibitions as well as special seminars were organized. The first seminar took place in Brooklyn (New York) in 1952 (UNESCO, 1952). Its subject matter was the analysis of experiences realized during the past few years promoting education in museums in the United States, Canada, England and France. Greece did not participate (Museum, vol. V, no 4, p. 226). However, the second seminar held in 1954 took place in Athens, with the theme *The educational mission of museums* (Hatzinikolaou, 2002; McCann Morley, 1955; Museum International, 1955). It was organized at the initiative of the Director of the Byzantine Museum, Georgiou Sotiriou, who was also President of its Organizing Committee (Hatzinikolaou, 2002). The seminar took place over almost one whole month (McCann Morley, 1955, p. 27-29). The

participants were museum professionals, supervisors of education and teachers from an wide range of countries across the globe: Austria, Brazil, Canada, Cyprus, Egypt, England, Denmark, France, Germany, Greece, Holland, Irak, Italy, Japan, Jordan, Lebanon, Malta, Norway, Pakistan, Sweden, Switzerland, Syria, Tunisia, Turkey, United States and Yugoslavia (*Empros*, February 10, 1954, p. 16).

In her address, Grace McCann Morley (1955, p. 1-2), president of the Seminar, pointed out the essential difference between the Athens seminar and the first one, that had taken place in Brooklyn (New York). Museums in America had already had the significant experience of 20 years of educational activity through the creation of educational classes, staffed by professionals specialized in education. At the same time in Greece, even though important archaeological sites and museums were more numerous, an emphasis on an educational dimension had started later. Although reports on the teaching dimension of museum exhibitions had existed ever since their beginning in Greece (Trouli, 2012). But McCann Morley was referring rather to the lack of organized action in terms of museum education departments or programs.

The National Archaeological Museum acted as the immediate case study for investigating the global situation of the relation between an archaeological museum and education in Greece (McCann Morley, 1955, p. 8). The main issue raised was how a visitor could understand – by simply walking around the place – the methods employed in archaeological research and the ways of studying the past. Discussions on these issues mainly concerned the manner of displaying items, the museum environment in general and its contribution to museum education. To this end, Georges-Henri Rivière suggested that together with the careful choice of items, curators had to focus on the functional presentation of the exhibition items according to the type of museum. Any presentation should be staged in a dramatic and aesthetic way, with taste and discretion. The correct arrangement of information on the objects, as well as its presentation in a way accessible to the public, would be necessary in the organization of a museum. Originals should be separated from copies (McCann Morley, 1955, p. 12-15). Furthermore, the impact of the items' interpretation through signs, graphics and photographs was assessed.

Christos Karouzos, director of the National Archaeological Museum, led the participants of the seminar on a tour around the museum. During his presentation, he referred to the pedagogical role of museums in general (Karouzos, 1972). However, he still was in

sympathy with the traditional view of the "art" museum: namely that a museum's role was mainly to contribute to the aesthetical education of the visitors (Karouzos, 1972).

Among various teachers who participated to the seminar, was Cleio Pavlides, who spoke on *Archaeological museums and sites at Greek schools*. During her presentation, she noted that the basic objective of archaeological sites and museums was to initiate students to the beauties of art and explain its evolution and mysteries (Pavlides, 1955). It was pointed out how effective the preparation of the students on general archaeological issues before the visit was in order for them, once in the museum, to focus on the objects and not "waste" their time. Finally, to complete a visit, she suggested an evaluation of the knowledge gained from a museum or an archaeological site.

In the magazine *Education and Life*, three articles closely linked to the Seminar of 1954 were published. The first, written by archaeologist Anna Hatzinikolaou in the same year, was entitled *The museums' mission in education*. In this article, the work of the Athens UNESCO seminar in was briefly presented:

"Each representative had prepared a report on museums and on how the problem of using them for educational purposes was encountered in their countries [...] The topics examined by the teams and also discussed by the assembly, on the occasion of the representatives' reports, were the following: 1) Why are museums called to play progressively a bigger role in education; 2) What does the teacher request from the museologist? 3) Distinguishing responsibilities between museologists and teachers; 4) Educational contribution of the museums at places where there are no schools; 5) Adult education" (Hatzinikolaou, 1954, p. 266).

More precisely, the opportunity for education should be for everyone, with museums offering opportunities of high quality. In museums, one can follow the evolution of human creative expression, explore oneself and discover the beauty needed in order to cultivate ones own aesthetic sense. In education, according to Hatzinikolaou, museums play

"[...] a significant role, because nowadays teaching methods have changed. A child's mind is not considered an empty vase anymore, which has to be filled with teaching and book reading. Teaching becomes alive. Students take active part in it and have the pleasure of discovering knowledge by themselves. Museums are the holders of original and wonderful documents

which can contribute to knowledge acquisition and the improvement of education" (Hatzinikolaou, 1954, p. 267).

On the second topic, concerning the role of the "museologist" and the teacher's requests, Hatzinikolaou mentioned that

"[...] museologists used to be researchers and guardians of art and culture monuments. Now, they are asked to play a more social role; to help teachers and make museums more accessible to the public" (Hatzinikolaou, 1954, p. 267).

From the discussions, it appeared that the tools "museologists" had at their disposal to help teachers were the following: presentation of exhibits, design of catalogues since

"[...] visitors need to find brief and pleasant brochures at the museums, without too many technical terms, with plenty of pictures but not very expensive" (Hatzinikolaou, 1954, p. 267),

explanatory boards "[...] to be placed at the entrance of every room and they would give summarized information on the items displayed" (Hatzinikolaou, 1954, p. 267) and auxiliary rooms, thematic exhibitions and the creation of "Friends of Museum" associations, who would promote the educational purposes.

"From time to time, museums need to organize exhibitions on a specific theme. Apart from these measures applied in museums in our time, [...] the founding of associations of 'Museum Friends', for whom lectures, film projections on pieces of art, drawing classes and many more such activities would be organized in museums" (Hatzinikolaou, 1954, p. 267).

Concerning the presentation of exhibits, Hatzinikolaou observed that:

"In an art museum for instance a chronological order has to be followed or the exhibition needs to be organized in groups of items, so that it shows a certain phase of culture or the works of a certain artist. All this has to be done without sacrificing the piece of art for the sake of education. Besides, the point is to achieve the aesthetical and not only the historical education of the public" (Hatzinikolaou, 1954, p. 267).

In auxiliary rooms, teachers would find the necessary material both to prepare students for the guided tour and to help them consolidate their knowledge after their visit.

The third issue examined by the participants to the seminar was the teachers' role and duties during the visit to the museum. There was uncertainty as to whether the teacher or the "museologist" should take the children around. The response given was that even though

"[...] the ideal solution would be [...] to have extra museum staff qualified for teaching, who would guide students in the museum [...] this competent personnel [...] is busy with the preparation of adults' guided tours, and it is not sufficient for schools, too" (Hatzinikolaou, 1954, p. 267-268).

Accordingly, the participants concluded that "the teacher [...] would guide his class" (Hatzinikolaou, 1954, p. 268) in the museum, after having prepared himself using the material placed at his disposal by the museum and with the "museologist" help.

"The aim was to get the teacher to encourage the greater use of museums within the school curriculum and the authorities to help in this collaboration" (Hatzinikolaou, 1954, p. 268).

During the final session of the Assembly, the following points of view and concerns were expressed: First, have available one or more qualified persons on educational issues. Second, get Museums and the Authorities to collaborate, since education depends on both. Third, during their training, teachers should come to appreciate the educational possibilities that museums have to offer and take part in practical exercises on this purpose. Fourth, have special rooms set aside for educational purposes in each museum. Fifth, museums should be able to organize travelling exhibitions. Sixth, examine the possibility of lending items with educational value to museums abroad. Seventh, schools should have a room capable of holding an exhibition. Eighth, have unnecessary prohibitions abolished, like taking photographs inside museums.

In her conclusions, Hatzinikolaou wondered whether "[...] we can apply these methods to our museums in Greece, since it is well known they contain marvelous treasures" (Hatzinikolaou, 1954, p. 269). However, it was known that visitors often get tired during a visit and so in a sense disappointed, leaving the museum with the thought that such a milieu is not for him/her. This negative response could definitely be changed through guided tours, especially in the case of school-children.

"Many teachers already knew how beneficial and supporting a role museums could play in teaching. They asked for the museums and schools to collaborate, and soon" (Hatzinikolaou, 1954, p. 269).

The article ends with a wish: Greek museums become "[...] centers of education and artistic enjoyment [...]", where people would discover "[...] a pleasant place of refuge and would enjoy the creations of their ancestral heritage [...]"(Hatzinikolaou, 1954, p. 269).

The following year, in 1955, Kostas Lazaridis, who was an educator and Folk Culture specialist, wrote in an article, entitled *The pedagogical value of students' visits to Museums* that:

"Primary Schools have stopped relying totally on books, when it comes to developing the students' knowledge and talents. During the recent past, there has been a significant move, leading students to look beyond the walls of their classroom or even beyond what is written in school books. As a result, teachers, when they teach history, feel the need to guide their students to ancient monuments or to sites where important facts have taken place. Visiting museums is a matchless experience, as it offers a myriad of opportunities to learn so many things; it even satisfies the students' curiosity and completes what children have learnt through their books" (Lazaridis, 1955, p. 14).

However, Lazaridis points out that:

"[...] only a good Museum (National, Archaeological, Natural History or other), which is in a city or an area close to schools, is able to offer the satisfaction [of curiosity] as well as the completion to book-derived knowledge. Such a public museum offers thousands of opportunities to learn various things, to satisfy our curiosity, to complete our knowledge, to develop, revive and sharpen our emotions. Nowadays the school curriculum encourages teachers to offer students spiritual sustenance from beyond the four walls of the classroom and the school textbooks" (Lazaridis, 1955, p. 14).

Morover, he adds that:

"Complementary education - which students could and should take outside the classroom and their school textbooks - is not a matter of chance any more, as it was the case in the past, but it is based on specified work made on scientific pedagogical methods; the museum's contribution to the pedagogical aim of schooling is huge. Museums help schools give children and teenagers plenty of direct experience of reality" (Lazaridis, 1955, p. 14).

More precisely, it is noted that in historical museums, their “content is of great interest to children; collections revive the reality of the past and make objects and matters come to life” (Lazaridis, 1955, p. 17).

As Lazaridis was aware of the progress realized in other countries concerning the value placed on museums by schools, he pointed this out, calling attention to the importance of the role teachers are asked to play during the visit to a museum, since they know their pupils – and their needs and abilities – best:

“[...] we can achieve better results when the classes are accompanied to the museum by their teachers, because they know their pupils, the knowledge they have acquired theoretically in class and they know where they want to enhance their teaching, either in order to verify their research or to see and examine the original elements behind a copy, or even to study the world surrounding them. Every teacher from schools located within reach of a museum has the duty to take advantage of this chance and consider the museum as a necessary means for creative work” (Lazaridis, 1955, p. 17).

Lazaridis also believed that guided tours should not have much of an entertaining character; therefore he suggested that their planning should be done very carefully. Accordingly, he recommended a method proposed by Geneviève Dreyfus-See (Dreyfus-See, 1952) in which a visit requires three stages in its planning. First, the teacher should find a good reason for a tour of his class at the museum. In order to validate a visit to a museum,

“Children have to understand the need for and consider as justified the guided tour in a public museum. They have to understand that they go there in order to see certain things for a certain pre-defined reason. They need to know that certain objects, which are necessary to complete their knowledge, are situated in the museum. When these conditions are not realized, then the profit of the visit to the museum is very little” (Lazaridis, 1955, p. 14).

Second, he should prepare himself – that is to say he first has to go to the museum and to work out how to get there and where the guided tour will take place – and the children for this visit.

“In order to take full advantage of the visit to the museum, they [the children] need to be prepared, by accessing material evidence on what they are going to see” (Lazaridis, 1955, p. 14).

Third, he should organize in advance the practical aspects and details of the visit.

The teacher Stelios Stylianopoulos published a response to the article of Anna Hatzinikolaou in the same issue of the magazine *Education and Life* entitled *Teachers and Museums*. He states that almost all teachers/professors agree that "museums play a significant role in education [...] they make teaching become alive" (Stylianopoulos, 1955, p. 28). Visiting a museum is not just a walk, rather, it is a different or complementary style of instruction. It should be faced that way by all involved.

It is worth noting that the issues seized upon by the writers of all three articles are even today topics of debate, especially the identification of the various roles and the need for collaboration among those concerned. Reading these articles, the magazine readers became familiar with various methods of using museum collections through the educational process. This is likely to have been applied by various teachers and museums' staff, although no written or other form of evidence exists to prove it.

Theoretical concerns, voices at the international level about museum education started to be heard in Greece after the Seminar of 1954 through press publications – mainly those with an instructive slant². Generally these were articles influenced and translated by the publishing activity of foreign agencies, like UNESCO (Hatzinikolaou, 1998). Thus, anyone interested in enriching his knowledge on museum education could be kept informed.

At the same time, archaeologists themselves began to emphasize more constantly that archaeology is a science, which could then be used to confirm the historical narrative and so contribute to the success of the nation. In 1954, Anastasios Orlandos, Secretary-General of the Archaeological Society, noted that the State

"[...] should strengthen archaeological studies and see with affection the archaeological issues, in order to place the nation's upbringing onto a historically correct base" (Posantzis, 2001, p. 8).

After the 1954 Athens ICOM Seminar on museum education, new educational practices concerning pupils started to be adopted by individual archaeological museums, mainly with a view to cultivating the aesthetic sense and the artistic sensitivity. However, the official statements of museums and educationalists commenting the

² We mention as an example the article of Virginia Zanna, published in the magazine *Education and Life*.

usefulness of museums in teaching, stressed the reinforcement of the national awareness as the chief aim. All what was related to the relation between museums and schools continued to be seen as a political act, emphasizing the promotion and protection of the national ideology.

Gradually, especially since 1960, the theoretical dialogue on the use of museums as educational sites, now freed from political overtones in defense of the national ideology, was juxtaposed with the unofficial statements of art critics and some archaeologists. The topic of museum education itself is seldom explicitly stated and references to the museums' pedagogical role remain very scarce. Most of the publications mainly concern aesthetic or artistic education, and only rarely the teaching role of the new style of museums. Even so, the foundations of education and culture had been successfully laid on, and were foreshadowing the changes that were going to take place in Greek museums during the following decades. These compatible views and ideas discussed during the two extremely interesting international meetings held in Athens fell on fertile ground and inspired the participants at that time, but they had no opportunity to grow. So for many years, these ideas and views remained in the obscurity. Later on, comparable theories and practices on museum education were introduced in the country as "new" by young academics studying abroad, so that by the mid 1980s they were being rather systematically applied in the Greek museums. However, we must respectfully remember the existence of the earliest voices and appreciate the longer "genealogy" of Greek museum education – to be inspired by their ideas and practices.

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*Empirical
research*

*Recherche
empirique*

*Investigación
empirica*

The History Museum of the Instituto Butantan: visitors' profile and perception

Fernanda de Lima Souza and Adriana Mortara Almeida

This article aims to describe the Instituto Butantan's History Museum visitors' profile and analyze how they perceive its long term exhibition. The data used for this article was collected by means of interviews with the visitors of the Instituto Butantan Park in 2012 and from observational studies and interviews in the History Museum in 2013.

By describing the applied methodology and results, this article proposes to share the challenges of researching the audience of cultural institutions. Such a research is part of public politics focused on improving museums and other public places.

Introduction

Founded in 1901, the Instituto Butantan established its reputation as a pioneer developer of immunological products such as vaccines and life-saving sera and is now the main producer in Brazil. Vital Brazil, the first director, was responsible for research and development of anti-ophidic serum and a large program of knowledge diffusion.

The Instituto Butantan's History Museum was created in 1981 in what were the stables and the Instituto Butantan's first laboratory. It consisted of two interconnected shingle houses: the first one (168 m²) still has its original floor and the brick walls from the stables where horses were kept, while the second shingle house (112 m²) has a burnished concrete floor (not the same as the original) and reconstructs the laboratory which produced serum against the bubonic plague during the Instituto Butantan's very first years. During more than 30 years, the History Museum added objects to

its exhibition, so it does not offer now a clear representation of the environment where the first works took place in the Instituto¹.

Up to 2005, the visit to the History Museum was free of charge. Since then, tickets purchased at the Instituto's ticket office are also valid for the History Museum, as well as for the Biology Museum, and the Microbiology Museum (these three museums pertaining to the Instituto). Then the History Museum became part of the visiting circuit. This generated the request for a supporting team, which in turn encouraged the hiring of educators.

During the last 10 years, attendance to the History Museum increased. It is, however, lower than the number of sold tickets. In other words, part of the Instituto Butantan's visitors buy a ticket that is valid for the three museums, but they do not visit all of them. Table 1 shows the data for the period between 2011 and 2014.

Year	Number of tickets	Number of visitors: History Museum	%
2011	117,430	70,432	60.0%
2012	143,888	78,844	54.8%
2013	151,756	86,291	56.9%
2014	130,896	72,559	55.4%

Table 1: Number of tickets sold annually and number of visitors to the History Museum (2011-2014). Source: Instituto Butantan's tickets office, and History Museum turnstile record.

Until the beginning of 2011, the History Museum used to display temporary exhibitions in its first room. The content of this room was usually related to relevant dates, such as the Instituto Butantan's anniversary (February, 23rd), the birthday of Vital Brazil (April, 28th), the International Museum Day (May, 18th).

In the second half of 2010, the last temporary exhibition took place in the long term exhibition space. The theme was 'Vaccination and Human Rights'. Formed of panels with texts, vaccination campaign posters and theme related objects, the exhibition covered the history of vaccines and their insertion in public health policies.

An exploratory research was made between December 11th, 2010 and January 13th, 2011 (Almeida, 2011). The purpose was to evaluate the relationship that visitors establish with the theme in question, to record the ways in which they perceive the exhibition and to

¹ Unfortunately, there are no records of which objects were in the first exhibition nor at what time other objects were added.

register their preferences. The methodology was based on the idea that the path followed by the visitor is a determinant of his visiting experience (Veron & Levasseur, 1989) and that its understanding can be obtained, even if only partially, by means of observation and path record (timing and tracking) together with interviews with the visitors (Almeida, 2012; Yalowitz and Bronnenkant, 2009).

Forty four interviews were realized, of which 37 were preceded by an observation of the paths chosen spontaneously by visitors aged 15 years or more. Choice of route, stops (over 30 seconds), time dedicated to reading texts, conversations and other data referring to the visitors' behavior during the visit were registered on a floor plan of the exhibition's space. After recording the path, the researchers interviewed the visitor². Questions were divided in three parts: the first was related to previous experience and knowledge about the History Museum and Instituto Butantan; the second was about the visiting experience (motivation, appreciation and opinions); the third had questions about the interviewees' socio-demographic profile. Most visitors were women (61%), they had come with someone (95%) and were visiting the History Museum for the first time (77%). They took an average of 6 to 10 minutes to see the temporary exhibition. Appraising the exhibition's theme as "interesting", a significant number of visitors mentioned the historic part, with explicit references to the Vaccine Uprising³ as their favorite part. Few suggestions were made, but among them the insertion of areas for children and the creation and distribution of leaflets, along with the insertion of interactive situations prevailed (Almeida, 2011).

This first exploratory research in the History Museum was added to other pieces of research made in Instituto Butantan's Biology and Microbiology Museums (Almeida, 1995; Bizerra, 2009; Bizerra et al., 2007, 2009; Bizerra and Marques, 2006; Sápiras, 2007). Because of the use of different methodologies and samples, these researches could hardly be compared and verified. The desire to test hypothesis which, as suggested by the work done in the History Museum, could also be useful for the Biology and Microbiology Museums, compelled us to make new researches.⁴

² The History Museum educators' team created the records and made the interviews.

³ The "Vaccine Uprising" was a popular movement in Rio de Janeiro that took place in 1904. It was against the compulsory vaccination to prevent smallpox and other government actions regarding the urban space, basic sanitation and public health that interfere in the lives of the city people. There are many publications about this issue, such as Benchimol (1992) and Sevchenko (1993)

⁴ Instituto Butantan is responsible for a fourth museum – Emílio Ribas Public Health Museum – downtown São Paulo.

In 2012, we interviewed 1,150 visitors who were strolling around Butantan Park and who had not necessarily visited the museums nor intended to do so. In 2012 and 2013, we observed and interviewed 100 visitors from each of the three museums of the Butantan Campus. 17 more visitors of the History Museum were interviewed but not observed, making a total of 117 interviewees. We will now present some of the data from this research.

Instituto Butantan Park and museums visitors' profile

Instituto Butantan is located in the western part of São Paulo, on a piece of land of over 700 thousand square meters. It contains: green areas (60% of the surface), dozens of buildings with laboratories, administration centers, serum and vaccine production centers, a snack bar, a food court, scientific collections, a hospital, a house for monkeys, a serpentarium, three museums and a library. Everyday 2,000 employees, plus hundreds of people go to the Instituto to take a walk, practice sports, meet people, visit the museums, go to the hospital, or walk through it merely as a shortcut to their work place or home. The 2012 research had as a purpose the identification of the profile of these people, except for the ones who used it only as a shortcut. The latter and the employees were not interviewed. Aiming to obtain a random representative sample, the interviewers⁵ were placed in different parts of the park and worked at different times and days of the week. 1,150 Portuguese-speaking people of 15 years of age or more answered a questionnaire. The results show that the majority of the visiting public are women (55%) aged between 30 and 44, married (57%), graduated at least from high school (71%), and white (66%).

A path observation (timing and tracking) was also carried out in 2012, followed by interviews with the Biology Museum visitors. In this research, just like in the ones made in 2013 in the History and Microbiology Museums⁶, the visitors' path and behavior were recorded in several different ways (timing the pauses, recording how often the person was taking pictures or notes, chatting or having contact with one of the museum educators), then they were

⁵ Educators, other employees, and interns of the Instituto Butantan's cultural department acted as interviewers. Museologist Thais Mayumi coordinated the field project and grant student (PIBIC Fapesp) Yuri Sugano worked on the interviews, as well as on registering and systematizing the collected data.

⁶ Yuri Sugano, Adriana Mezini, Eunice Okuyama, Fernanda de Lima Souza and Ângela Cerqueira Sousa realized the records and interviews in the museums.

interviewed. The questionnaire contained questions related to the exhibition they were visiting and their socio-demographic profile.⁷

We will now examine the data from this research, and sometimes compare it with the data from *Pesquisa Perfil Opinião* (Opinion Profile Research) from *Observatório de Museus e Centros Culturais* (OMCC – Museums and Cultural Centres Observatory), which took place in 13 museums located in São Paulo between 2006 and 2007 (OMCC, 2008). The OMCC research involved randomly selected spontaneous visitors aged 15 or more, who answered the questionnaire they received from a researcher. Questions from this questionnaire were repeated or adapted to Instituto Butantan's research, especially the ones concerning the socio-demographic profile and cultural habits, thus making it possible to compare some data from the two researches.

Comparing socio-demographic profile data

Gender

Genderwise, the majority of the Butantan Park visitors were women (55%). The History Museum received an equal percentage of male and female visitors (50% each). The Biology and the Microbiology Museums had a higher percentage of female visitors (51% and 61% respectively). The higher percentage of women in the Microbiology Museum may be related to the fact that there is an area for children in the exhibition. Children are generally accompanied by their mothers or another responsible adult (female).

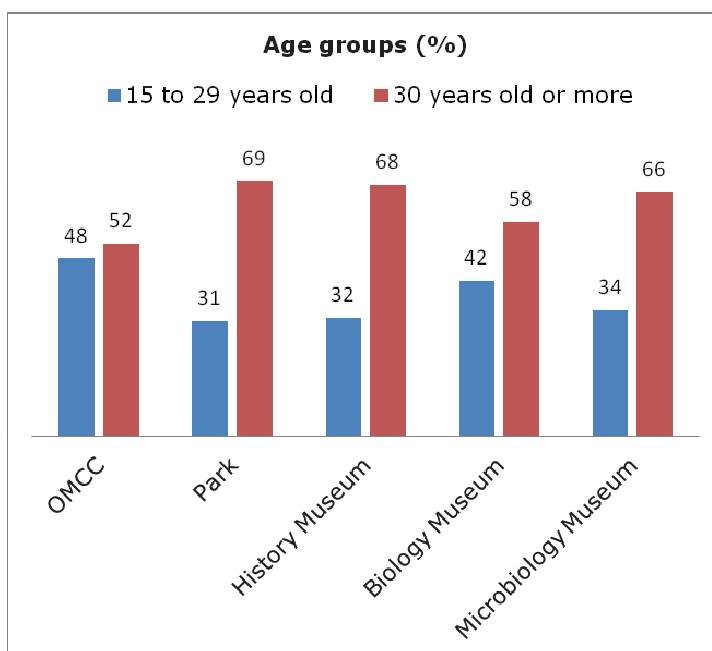
Results from *Pesquisa Perfil Opinião*, conducted by the OMCC in São Paulo in 2006 and 2007 are similar to those from the Microbiology Museum (61%), the Biology Museum (56%) and the Park (55%): São Paulo museums in general receive a greater percentage of female visitors (62%) (OMCC, 2008). Data from the History Museum, however, shows that it doesn't follow this trend, with only 50% of its visitors being female. This difference might mean that women who go to the Instituto Butantan Park and to the Biology and Microbiology Museums aren't interested in visiting the History Museum. It should be noted that, in the exploratory research performed in 2010/2011 in the History Museum (Almeida, 2011), the percentage of female visitors was 61%, similar to the percentage from OMCC and the other Instituto Butantan museums. New research must be undertaken

⁷ Research sponsored by Conselho Nacional de Desenvolvimento Científico e Tecnológico – CNPq (Processo CNPq nº: 401994/2011-2).

to confirm these trends and verify whether there really is a difference (lower percentage of female visitors) in the History Museum⁸.

Age

Our research has also indicated that there is an age difference between the visitors in the three museums. In the History Museum, there is a greater number of people between the ages of 30 and 44 (48% of the interviewed visitors), as well as in the Microbiology Museum (49%). Attendance to the Biology Museum is similar to the attendance to São Paulo museums, as revealed by the OMCC: 26.5% and 31.6% were the rate of young people between the ages of 15 and 24 respectively (OMCC, 2008).



Graph 1 – Visitors’ age group in São Paulo museums (OMCC, 2008), in Instituto Butantan Park and in the History, Biology and Microbiology Museums (%)

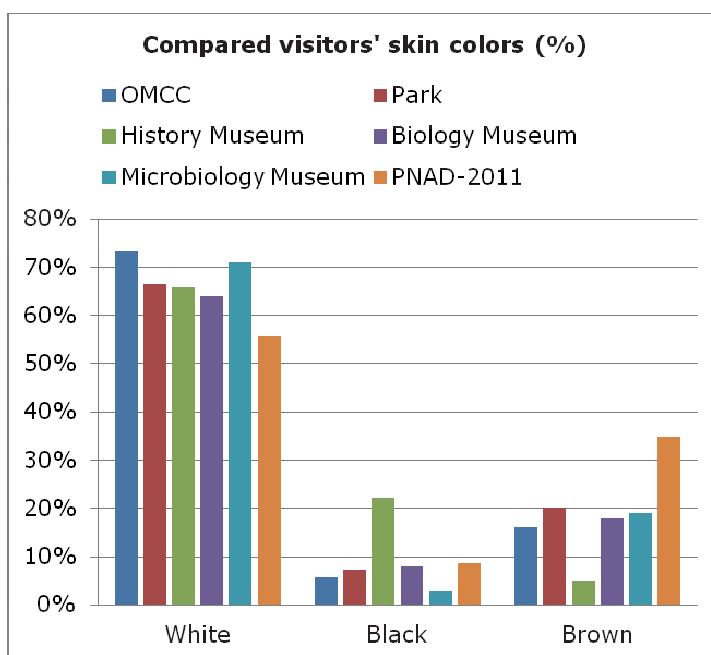
On the other hand, the History Museum and the Microbiology Museum have received visitors of the same age groups as those of the Instituto Butantan Park; respectively 68.4%, 66.4%, and 69.1% of their public is older than 30. The data indicates that the Biology

⁸ In Koptcke et al. (2008) there is an interesting analysis of the data from the OMCC research, performed in 2005 in eleven museums of Rio de Janeiro, especially on the subject matter of visitors’ gender.

Museum proportionally attracts younger people, while in all the other museums, in the Park and in the OMCC research, the public is mainly adult (Graph 1). Yet it should be noted that, in all researches, the people interviewed were aged 15 or more.

Color/Race

When asked about their colour/race⁹, the majority of the visitors claimed to be white in all the museums (64% in the Biology Museum, 67% in the History Museum and 71% in the Microbiology Museum). The same occurred in the Park (67%). The *Pesquisa Perfil Opinião*, conducted by OMCC in 2006/2007, has also shown a majority of 73% of visitors who claimed to be white (OMCC, 2008).



Graph 2 – Comparison between the frequency of white, black and brown visitors and the population in Southeast Brazil (%)

Compared to the other museums, the park and the São Paulo museums, the History Museum has shown a greater number of black people (22.2%) and a smaller number of brown-skinned people (5.1%) (OMCC, 2008).

⁹ The colour/race categories used in the present research followed the pattern applied by IBGE: "Colour or Race – quality declared by people according to the following options: white, black, yellow, brown, or native indian." (<http://www.ibge.gov.br/home/estatistica/populacao/condicaoodevida/indicadoresminimos/conceitos.shtml>)

It is important to compare the data about people in general, gathered by *Instituto Brasileiro de Geografia e Estatística* (IBGE – Brazilian Institute of Geography and Statistics). According to the 2011 *Pesquisa Nacional por Amostra de Domicílios* (PNAD – National Research of Residency Patterns), in the Southeast of Brazil, 55.7% were white, 8.6% black, 35.8% brown, and 0.9% “others” (IBGE, 2012). In other words, the Instituto Butantan museums receive a slightly higher percentage of whites, and a lower percentage of browns in relation to the region’s population.

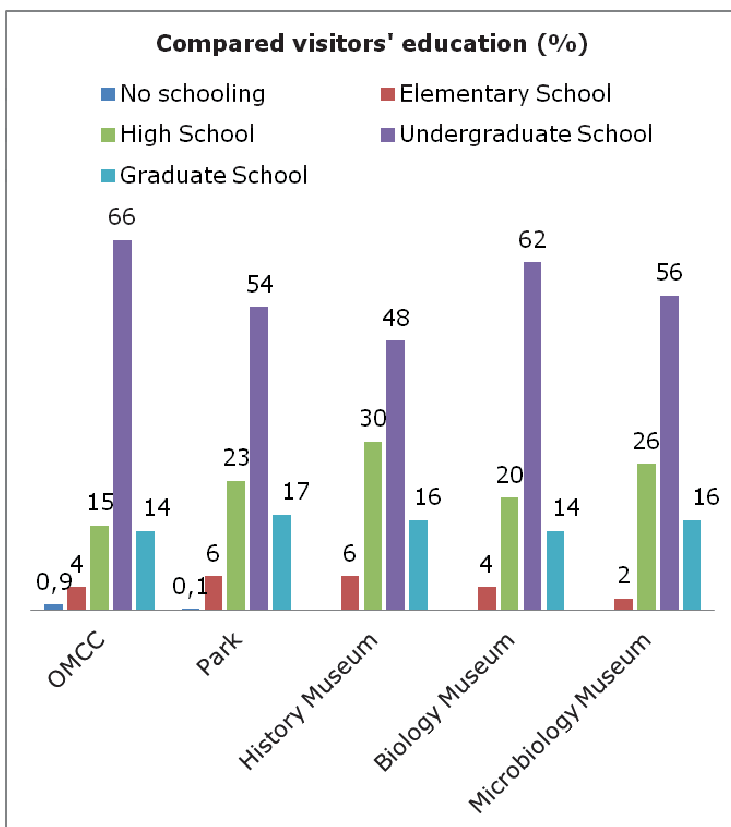
Civic Status

Instituto Butantan Park visitors are mostly married or in a stable union (History Museum 56.4%, Biology Museum 54%, Microbiology Museum 54.5%, Park 56.9%), which may imply that the visit is mainly a family activity. This civic status profile differs from the average gathered in São Paulo museums researched by OMCC, with 35.5% of the visitors being married or in a stable union (OMCC, 2008).

Educational level

Considering the visitors’ level of education, both in the Instituto’s three museums and in the São Paulo museums researched by OMCC, one observes that the majority has an undergraduate degree or is preparing one. This majority, together with the graduate students, contribute for 63% and 80% of the visitors (OMCC, 2008). The History Museum shows the lowest percentage of people with higher education (48%) and a higher percentage of visitors with secondary education completed or in progress (30%) – the Biology Museum had 62% of its visitors with a higher education and 20% of secondary students, while the Microbiology Museum received respectively 56% and 26% of each.

This result contrasts with the numbers found in the *Pesquisa de condições de vida (Research on Life Conditions)*, performed in 2006 by Fundação Seade, which points out that, in the State of São Paulo, only 39% of people aged 15 or more has secondary or higher education, a number similar to the one obtained by PNAD for the average Brazilian aged 25 or more (IBGE, 2012). People who appeared in the Instituto Butantan research with different levels of education, such as the illiterate, those who have finished or at least started elementary school, go from 0 to 4% within Butantan visitors, while according to Seade, in the population of São Paulo they represent 60% (Seade, 2006).



Graph 3 – Visitors' education level in São Paulo museums, Instituto Butantan Park, the History Museum, the Biology Museum and the Microbiology Museum

City of residence

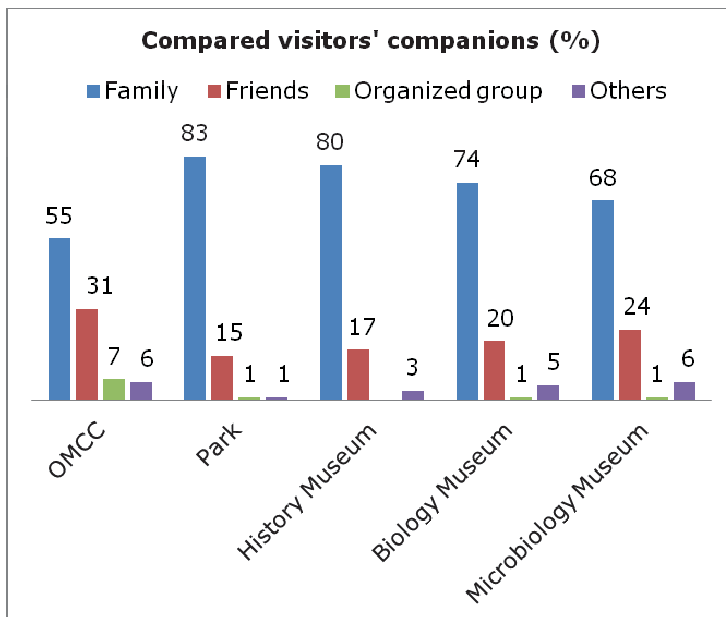
Regarding the three museums and the Instituto Butantan Park, most of their visitors live in municipalities of the *Região Metropolitana de São Paulo* (São Paulo Metropolitan Region¹⁰), including the capital. The Park receives most of its visits (59.4%) from capital residents in relation to the museums, the Microbiology Museum being the one with the smallest number of visits from this category of visitors (46.3%). This museum also stands out for being the one with the largest number of visits from other Brazilian states residents (20.7%). In the other two museums and the Park, the proportion does not

¹⁰ The *Região Metropolitana de São Paulo* (RMSP) is formed by São Paulo and 38 other municipalities around it (check *Lei Complementar nº 1.139, de 16 de junho de 2011*), totalling a population of 19.683.975, according to data from the 2010 IBGE census (around 10% of the Brazilian people).

reach 12.5%. The History Museum has similar results to the Biology Museum, except for the absence of residents from outside Brazil.

Companions

Most visitors went to the Park and the museums with someone else. In the Park, only 9.2% were alone; in the History Museum, only 5.1%; in the Biology Museum, 8.7% and in the Microbiology Museum, 6.4%. So one can say that the visit is a social experience, especially for families, as shown in Graph 4.



Graph 4 – Compared visitors’ companions in São Paulo museums (OMCC, 2008), Instituto Butantan Park and History, Biology and Microbiology Museums (multiple answers accepted)

The visitors who weren’t alone came mostly with their families (spouse, parents, children and other family members). Instituto Butantan Park and museums attract more families, compared to other São Paulo museums (OMCC, 2008). Among the Instituto Butantan museums, the Microbiology Museum is the one that shows the higher percentage of families, followed by the History Museum, and the Biology Museum. The Microbiology Museum is where most people bring their children (45%), followed by the Biology Museum (31%) and the History Museum (28%). Instituto Butantan Park had

the greater percentage of family members accompanying visitors (83%)¹¹.

Summing up, one could say that the History Museum visitor is in equal parts male and female, adult (over 30 years old), white, with or completing a higher level of education, accompanied by family (spouse, children, and/or other relatives).

Instituto Butantan's History Museum visitors' habits

The museum experience is the result of what the museum has to offer – in this case, the long-term exhibition, interaction with educators – what the visitor expects to see and the relationship that he establishes with other people, including other visitors and staff (Falk and Dierking, 2000). To better understand this experience, it is important to know whether the visitor already knew the History Museum and the Instituto Butantan, whether he usually visits museums, cultural centres and exhibitions, and what where the reasons of his visit.

During the research conducted in the History Museum, 46% of the 117 interviewed visitors claimed to be visiting Instituto Butantan for the first time, while 83% were visiting the History Museum for the first time. In the Biology Museum and the Microbiology Museum, these numbers were smaller: in the Microbiology Museum, 58% were first time visitors and 48% in the Biology Museum. The research performed by the OMCC in São Paulo museums showed that 64% were visiting a museum for the first time (OMCC, 2008). These results support the data received from the ticket office and the visitors' counting in the History Museum. In other words, 54% of visitors had already been to the Instituto Butantan, while only 17% had been to the History Museum.

The History Museum's public had a lower attendance to museums compared to the Biology and Microbiology museums. Amongst the interviewed people, 57% answered that they hadn't visited another museum, zoo or cultural centre during the 12 months prior to the research. In the Park, 55% answered in the same manner. In the Biology Museum and the Microbiology Museum, 48% also hadn't visited other museums, zoos, or cultural centres in the previous 12 months. It is noteworthy that, in every case, attendance to museums and cultural centres is significantly high, compared to numbers raised in research with people in general. In 2013, the NGO Serviço

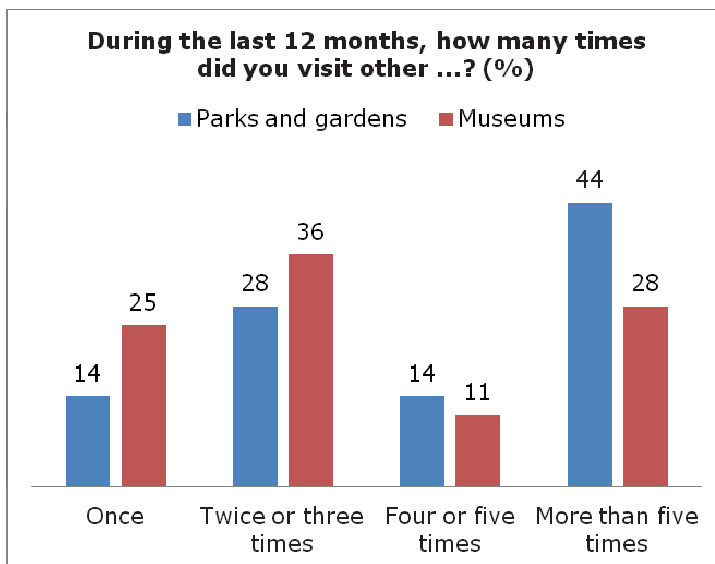
¹¹ Among the 1,150 interviewed, 322 came with husband or spouse, 71 with mother and/or father, 519 with their children and 350 with another member of the family (total of 1,262). The question allowed multiple answers.

Social do Comércio (SESC) and the Fundação Perseu Abramo conducted a nationwide research about *The Cultural Public* and the results showed that

"[...] 71% had never been to a painting, sculpture, or other art exhibition (in museums or other places), and 70% had never been to a photography exhibition" (SESC, 2014).

In 2014, João Leiva Cultura e Esporte and Datafolha made a research on culture in the São Paulo State involving several cities. Only 26% replied that they had visited a museum in the previous year. Another 28% answered that they had never been to a museum. (Goldstein and Silva, 2014, p. 50).

Another relevant piece of information concerning Instituto Butantan Park visitors is that they usually go to other parks and gardens more often than to museums and cultural centres (Graph 5).



Graph 5 – Visitors of Instituto Butantan Park attendance to other parks, gardens and museums in the 12 months prior the research

When asked why they visited Instituto Butantan, both Park visitors and History Museum visitors claimed that the visit was a family experience: firstly "to bring children/family to see it", with 34% and 35% respectively, followed by "to get to know Instituto Butantan" (28% Park visitors, and 33% History Museum visitors) and "have fun/leisure" with 20% and 17% respectively (the question accepted

multiple answers). Nobody said that visiting the History Museum was a reason to visit the Park and for 83% of the History Museum's visitors, this was their first visit to the museum.

The History Museum visiting experience: chosen paths, preferences and opinions

In order to draw the paths taken by the visitors, each exhibition item was photographed and had its information noted down. This record is important since exhibitions may change while the research is taking place, especially in the Biology Museum that has living animals. For example, when an animal dies, the place can either be reshaped, or used for another animal, bringing a change in the exhibition that may or may not influence the visiting experience. Objects distribution in the museum often tends to gather together the ones related to a certain theme or similar function, so forming groups of items that are called elements. When approaching it, the visitor may observe each object separately or the group, seeing the element as a whole.



Pictures 1 and 2 – Examples of groups of objects that compose “elements”: in Picture 1, stoves, a double-boiler, sieves, and porcelain jars compose element 34; in Picture 2, scales on a volcanic lava table top compose element 37.

It is impossible for the researcher to sort out which item/object is being observed. Therefore, in the museum description and observation these groups of objects were considered as one element. This procedure was used in the History Museum's and the Microbiology Museum's description and observation because of their exhibitions' features. In the Biology Museum, the vivariums are well apart from

one another, which makes it possible to know more exactly what the visitor is looking at.

Timing and tracking

Based on a path analysis model from Yallowitz and Bronnenkant (2009) and on previous research (Almeida, 2001 and 2008), 100 visitors' paths were registered on a printed floor plan. The researcher chose a position from where he could watch the visitor and then he took notes of the duration of the visit, the visitor's gender and whether or not he had company. The interviewers followed the timing and tracking procedures by registering the choices made by the visitor during the visit, taking notes of when and for how long he stopped in front of each element.

In order to better understand how the visitors perceived the exhibition, not only the path, but also how the visitors acted inside the exhibition were registered. Actions such as pointing, calling someone or being called to look at something inside the museum, taking notes, taking pictures and seeking guidance from the educator were all registered (in the Microbiology Museum, we also registered when a visitor manipulated one of the exhibition's elements).

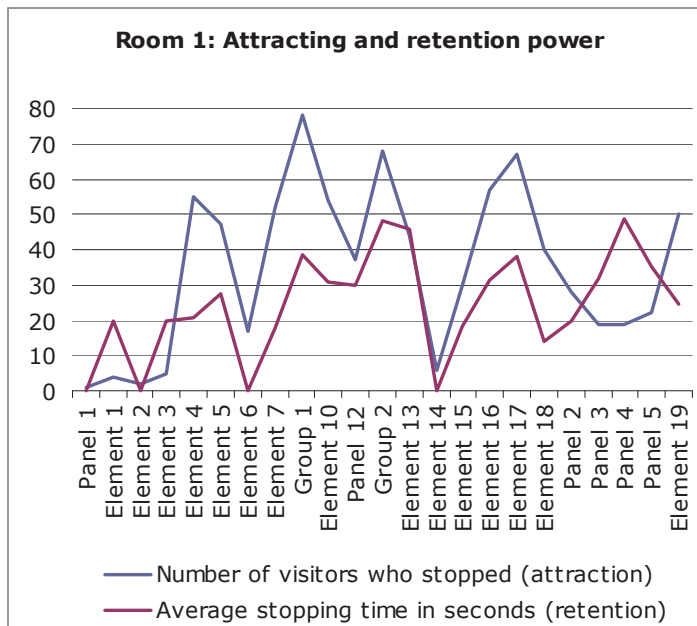
Attraction and retention power: number of stops and time of observation

In the History Museum, the visit was made in an average of 9.5 minutes (maximum time 42, minimum time 1) and with an average of 19.8 stops (maximum of 43). The exact duration of each stop was registered when it exceeded 10 seconds: 100 visitors made 972 stops up to 10 seconds and 938 stops longer than 10 seconds. The longest stop lasted 1,047 seconds (17.45 minutes) in front of the table with pH meters in the second room (element 39), followed by 480 seconds (8 minutes) in front of group 2 – bloodletting tools, sample collection bags and panel 13 with a text about bloodletting (Picture 5). In both cases, the length of time can be explained by interest awakened by the items, which also stimulated the visitors to seek more information interacting with the History Museum educators.

By compiling the data obtained through paths observation, it was possible to estimate each element's "power of attraction" and "power of retention"¹². An element's power of attraction is related to the average number of visitors that feel attracted to it and stop to

¹² These two concepts were first developed in Melton's research (1936); though heavily criticized for their behaviourist character, they were implemented in new research, applied with different methodologies and interpretation (Almeida, 2012; Yallowitz and Bronnenkant, 2009).

better observe it. The power of retention is related to the average time of observation the visitors dedicate to that element (Graph 6). These two variables, together with the answers given to the open questions from the interviews, supply information that allows us to evaluate how the visitors take in the exhibition.



Graph 6 – Number of visitors that have stopped and average time spent in front of elements/groups/panels from the first room in the History Museum

Interviews: analysing visitors opinions and preferences

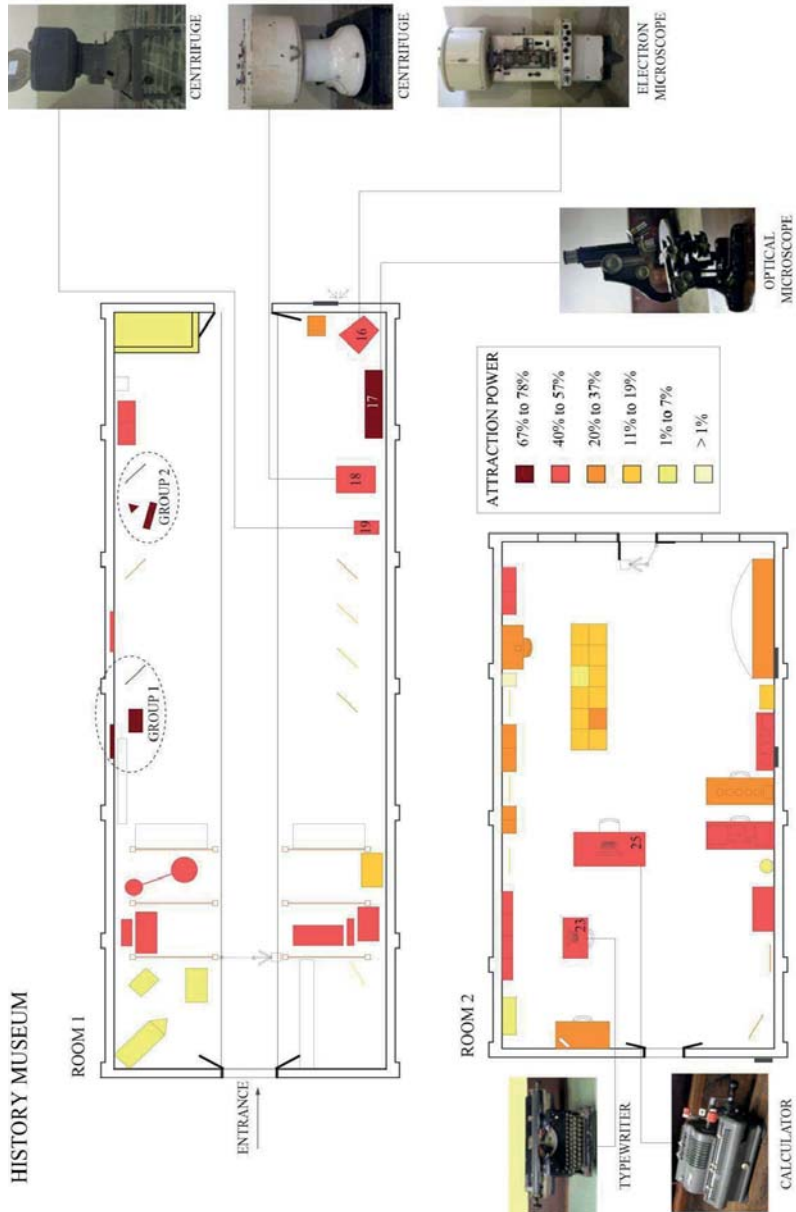
Analysing the answers to the open questions demanded a thorough work process, since the answers differed from one visitor to another. Answers to each question presented specific analysis needs, but the procedure was similar. The categorizing process began with the recording and reading of every answer given to a specific question. The second step was devoted to identify the common ground between the answers. Once identified, this “common ground” was divided into different categories and, if necessary, subcategories. The 117 visitors’ answers to the open questions were quite diverse, and many fit into more than one category. Registering each step of the categorizing process allows us to review the categories and come up with new interpretations.

In the following section, we highlight a few aspects found in the answers to the open questions obtained at the History Museum. These aspects contribute to the understanding of the visiting experience.

Preferences, attraction and retention power: are they related?

The answers to "What did you like best in the History Museum?" were mostly related to the objects in the museum, with special emphasis on the calculator, the typewriter, the microscopes, and the centrifuges. Considering the path patterns – points of greater attraction – we note that the most frequently mentioned objects were where more than 40% stops happened, which points to a relationship between the most attractive and the most appreciated objects (Picture 3). It is interesting to notice that the attraction seems to be determined not only by the visitors' "familiarity", but also by the "strangeness" of the element produced by its exhibition in a museum, for instance everyday tools showed in a showcase such as the calculator and the typewriter. Other objects that were "strange" also had attraction power: centrifuges and the microscopes (optical and electronic), which they, in all probability, had never seen. These objects placement in the first room, and their large size (except for the optical microscopes) might have added to their attraction.

Panels with texts, graphs and photographs had a strong power of retention, but a small power of attraction. With the exception of panel 12, which was located in the first room, beside a picture with all types of snakes, all the others had little power of attraction (no more than 37% of the visitors stopped to look at them) and a strong power of retention (an average of 34 seconds retention power) (Graph 6). These results indicate that the panels' contents awakened interest and held visitors who chose to stop and read them. This kind of behaviour shows that, when there are explanatory texts available, some visitors stop to read them, as confirmed by other pieces of research (Almeida 2001, 2008; McManus, 1989).



Picture 3 – Exhibition floor plan, highlighting some of the items that had appeal and which were also mentioned as favourites in the interviews. In Room 1: microscopes (elements 16 and 17) and centrifuges (elements 18 and 19); in Room 2: calculator (element 25) and typewriter (element 23).

On the other hand, the research has also shown that items with a strong power of attraction don't always have a strong power of

retention, even those pointed out as favourites. A hypothesis is that the lack of aesthetical appeal or the lack of complementary information drives away visitors who are, at first glance, attracted to certain objects: visitors approach them, look at them, and then move on. We could mention as examples the big objects near the entrance of the museum, such as the kymograph (element 4), the distiller (element 7), which attracted more than 50% of the visitors, but that held them for a short period of time: from 18 to 21 seconds, respectively.



Picture 4 – View of Group 1, composed of boxes and loop (on the table), and part of the instructive window on the original wall, which was what attracted most visitors (78% stopped to look at it)

Picture 5 – View of Group 2, composed of bloodletting tools, sample of collecting bags and panel 13, in front of which 68 visitors stood for an average of 48 seconds

It is noteworthy that some of the objects that had great powers of attraction and retention weren't mentioned as favourites. Formed by a box, a loop, an instructive window with a piece of exposed original wall and panel 11, group 1 (Picture 4) tells how people capture snakes and how the snakes are brought to Instituto Butantan. In the whole exhibition, this attracted the largest number of visitors (78%), with an average pause of 39 seconds. In spite of the high power of appeal and retention, only two people cited these objects as their favourites. The same happened with group 2 (Picture 5), also in the first room, with bloodletting tools, sample collecting bags and panel 13: although more than 68 visitors have stopped to look at it for an average of 48 seconds, only four people mentioned it as their favourite. The results related to groups 1 and 2 indicate that

objects that are very attractive and which capture the visitor's attention for a long period of time are not necessarily their favourite. How to explain this? The object's lack of aesthetic appeal (crude, unfinished materials, few colours)? The (lack of) understanding of the object's importance to Instituto Butantan's research and production?

Many of the questions raised by the present research can be answered only by means of new research with the History Museum audience. We present now, in more details, how we dealt with the answers from one of the open questions.

Categories created by the analysis of answers about the museum exhibition message

Analysis of the answers to the question "What message does the History Museum exhibition intend to convey?" created four categories, the first one being divided into four subcategories, as shown in Table 2.

Category	Subcategory	Fre- quency	Answers examples
A – Historical reference	A1 – History as evolution/ a more general development	30	<i>Of how the story happened, of evolution</i> <i>To show the evolution, how it all started, and how they did things when they started</i>
	A2 – Scientific/ Scientific tools and technological/ medical development	24	<i>I think it meant to show us the history of science's progress</i> <i>History itself, the development of tools...</i>
	A3 – Institutional history/ the farm	12	<i>Of knowing how Instituto Butantan was created</i> <i>To show what it was like in the past in Instituto Butantan... The memory, you know?</i>
	A4 – Past/ memory/ old things	20	<i>To keep the memory</i> <i>The old times... to preserve the things</i>

B – Research importance/ research investment	8	<i>That Brazil invests too little in science and ignores History... We could have more scientists</i> <i>It's very important, especially for students... To research, to study</i>
C – About serum and vaccines, how they were prepared or how they are prepared now	13	<i>Vital Brazil's importance to the vaccines</i> <i>To bring back part of our country's history, and give access to more recent information about how the serum and the medicines are made</i>
D – Others	24	<i>I don't know</i> <i>Culture</i> <i>Knowledge</i>

Table 2 – Summary of the categories used in the analysis of answers to: "What message does the History Museum exhibition intend to convey?"

The majority of answers have elements related to history, as though an exhibition of older objects, from different times allowed the visitor to compare today to old times, the past to the present. Few answers were about the institutional history of Butantan, or about the manufacturing of serum and vaccines, though the objects in the museum all came from the Instituto's laboratories, offices, and production line.

The History Museum's exhibition initially created in 1981 to reproduce the Instituto Butantan's first laboratory and first stables gradually grew with more scientific items, furniture and other objects. Throughout this process, the initial message metamorphosed, until it became what it is today.

Differences between the two rooms, missing things, possible learning and changes

As previously mentioned, the History Museum is composed of two rooms, two shingle houses. The first room, with its brick floor, its

“instructive wall” (showing the building’s original bricks) and its stalls, reminds us of the original stables. The second room, with a smooth floor, represents the lab environment. When asked about the differences between the two rooms, which are also part of the exhibition, most visitors gave generic answers, pointing out size, type and quantity of objects in the rooms.

I think in that one there was bigger, cruder equipment.

There’s more material in the second one.

There [in the first room] there are more objects, here [in the second room] there is more furniture.

I saw the difference. I think this one is more complete, the first one has less stuff.

These answers show that a large part of visitors didn’t notice the variations in structure/architecture between the two rooms that form the museum.

When asked whether they thought something was missing in the History Museum, 87 people (74% of the 117 interviewed people) said “they didn’t feel anything was missing”. If, on the one hand, this could indicate satisfaction, on the other, it could mean that people didn’t have enough time to elaborate an answer, maybe due to the fact that they were not familiar with the exhibition’s themes. Of those who felt something was missing, most mentioned objects that the museum doesn’t have, like, for example, chariots, horses, giant snakes and Vital Brazil’s bust¹³. Other answers were about the educators. Visitors wanted educators to intervene, pointing out the need for:

Someone to demonstrate how things work.

To explain why the floor was like that.

Someone to give some sort of lecture... It could be a power point presentation... Some sort of interaction.

Of an educator, not only in here, but also outside.

More texts.

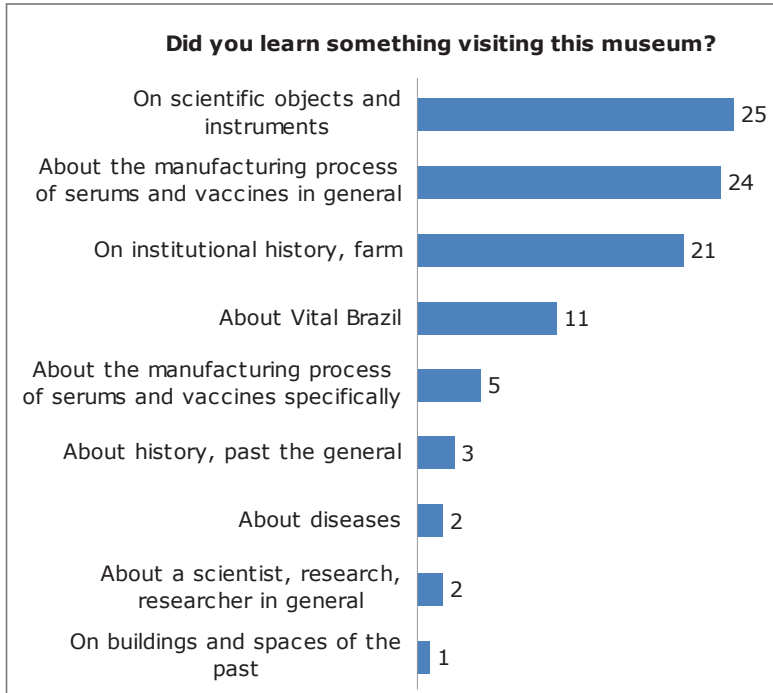
They could have more books... You needed to have something more instructive...

These answers may have originated from the fact that educators opt/are instructed to approach visitors only when asked. Some answers refer to museography, suggesting the insertion of multimedia (videos and interactive) in the exhibition.

When asked if they had learned anything about Instituto Butantan’s history during the visit, most visitors mentioned the knowledge they

¹³ These answers may have been influenced by a visit to the Biology Museum, which has snakes and a bronze bust of Vital Brazil.

acquired about instruments that used to be handled in the laboratories in old times. The manufacturing of serum and vaccines and Instituto Butantan’s institutional history were also mentioned, with details relating to bloodletting for the serum production, the farm where the Instituto began and the rural school that used to exist there.



Graph 7 – Frequency of visitors’ answers to the question “Did you learn something about Instituto Butantan’s history while visiting this museum?” (absolute figures) The question allowed multiple answers. 37 answers were categorized as others/didn’t reply, and are not shown in the graph

The last open question was: “If you could, what would you change in the History Museum’s exhibition?” Though most visitors didn’t reply, many said they didn’t feel anything was missing (77 people). The second most frequent answer was about museography and exhibition elements (24 cases), for example, the lack of interactivity and multimedia resources in the museum, as well as more and better information about the items.

So far, results indicate that the visitors enjoyed the History Museum exhibition, especially the scientific instruments and work tools. The

exhibition design and language are irregular and have gaps, which makes it difficult for visitors to develop a coherent narrative.

The science and technology development and history come up in answers about the exhibition's message. The past and the old have come up in several answers. However, there is no sentence produced by the visitors that indicate that the historical dimension was perceived, or that some elements of the history of sciences or the history of the Instituto Butantan had been learned.

The serum and vaccines manufacturing process appeared in answers as something learned by the visitors during the visit, and used in relation to objects or scientific instruments. But just as in the previous case, the references are fragmented and individualized, without showing the construction of a narrative.

The visitors mentioning objects (or elements) as what they appreciated most indicate that they felt attraction and curiosity towards the material culture presented, but that they can't see or apprehend a historic narrative about Instituto Butantan.

Final comments

The majority of visitors of the History Museum and other Butantan museums have similar socio-demographic profiles as the visitors of others museums of São Paulo. However, it is important to stress that the attendance of families is more frequent in the Butantan museums.

The results of timing and tracking indicate that there are objects in the History Museum exhibition that are very attractive but have low retention power. Maybe this is caused by a lack of information or aesthetic appeal. These results also show that text, graphs and photos presented in panels had low attraction, but high retention power because visitors who decided to stop enjoyed deciphering them and profiting from the information that they were offering.

The answers to the interviews showed the visitors preferences and opinions. The relationship among all exhibition elements and objects are not clear and the visitors weren't able to build a narrative about Butantan history from their visit to the History Museum.

The results from these pieces of research may contribute to the insertion of changes in the History Museum's long term exhibition, as well as to encourage the elaboration of new studies aiming at a better understanding of the museum experience.

These researches ensured a great amount of data coming from different scientific tools such as questionnaires, interviews, timing

and tracking. All that data collected became useful after description, analysis and interpretation. The use of different tools made possible to answer questions that could make the museum better for its audience.

We intend to do similar researches in 2016 in order to begin a historic series and broaden the questions that help to understand how Instituto Butantan is seen by the public, with eyes set on a future project of only one museum for the institution, of which the History Museum would be a part.

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The audience of a science museum and the concept of time

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Introduction

The latest edition of *ICOM News* (December 2014) brings in its “Best Practice” section the theme of visitor research – *Knowing your Audience* (Forbes, 2014) – and a special report on the visitor experience, *What Visitors Want* (O’Flaherty, 2014). These articles alert us to the permanent relevance of this matter. In this sense, nothing more is appropriate than addressing this theme in the present paper.

If raising questions about visitors is no longer a novelty in the context of museums, the same cannot be said about the questions one should ask them: their objectives, their quality and the way they are asked must be renewed all the time, according to the dynamics surrounding the social role of museums in the relationship with their audience. It is not exhaustive to reiterate that the changes in society are processed ever more rapidly. In this context, museums compete with a wide range of stimuli and media available to access knowledge on culture. However, paradoxically, the museums also need to handle large and varied social demands placed by those who lack the resources to expand their cultural horizons.

Amid all the discussions about the museum and its audiences, the latter are, more than ever, considered as a central component of the museum scene. This conformation requires more commitment of different actors involved with the institution in order to establish a dialogical relationship between museum and visitors. In addition to establishing pleasant and attractive connections with audiences, museums should try to develop a relationship that motivates and stimulates curiosity in visitors, arousing significant interest in them,

based on their previous knowledge and what is displayed, which is undoubtedly a rather difficult task.

The museum has increasingly strengthened its socio-educational and cultural democratization role. Knowing how visitors perceive the world and exploring ways to promote the relationship between that perception and the different knowledge conveyed by the museum are the major challenges of educators working in this cultural venue.

This issue falls under the scope of visitor studies, which have advanced in European and American countries since the 1970s, and brought numerous contributions to the museological field. In Brazil, the interest in these studies began in the 1980s and boosted in the following decades. Although they are currently still concentrated in certain regions of the country, visitor studies are conducted in a more systematic way, by organized groups of academic nature. These are founded on the premise that the museum institution is to be concerned with the object, researching it, preserving it and communicating about it with social responsibility. In this context, the education department of the Museum of Astronomy and Related Sciences (MAST) in Rio de Janeiro, in collaboration with the National Natural History Museum (MN), developed a survey that sought to deepen the visitors' interaction with MAST's collection of scientific instruments.

The initiative is greatly inspired by the studies of Marília Xavier Cury (2005; 2009) developed within museum communication and reception research in museum exhibitions. The author proposes a theoretical-methodological approach in which the visitor is seen as one of the components of the museum's communication process; different elements being articulated to produce arrangements to achieve interaction with the audience (Cury, 2009).

The information transmission model, based on the linear chain "sender – medium – receiver – feedback", is replaced by an interactionist perspective. Guided by this model, it is proposed that the medium acts as a contact point, a *rendez-vous*, that conflicts or interchanges between transmitter and receiver. The idea is innovative because it conceives communication as an encounter of poles that are not opposed and considers that the museum and the visitor are both senders and receivers. In this sense, the public is understood as an interpreter, creator and citizen who replaces passive acceptance by argumentation and negotiation.

The present study analyzed the planning, production and evaluation of the exhibition *Faz Tempo*, which is dedicated to time measurement objects from MAST's collection. In this process, we sought to establish an integrated form of communication between

the museum and the public, thereby promoting an interaction between sender and receiver. In the production of the exhibition, we were influenced by the Jesús Martín-Barbero's vision (1995, cited by Cury, 2009) who proposes a shift of attention, from the medium to the mediations, that is, to the museum-audience interactions. This is a movement that takes place in and out of the museum, for it considers such interactions mediated by the audience's daily life, which bring the visitor into the discussion. In short, the reception research approach sees the visitor as a cultural subject and the communication as interaction, considering the visitor's knowledge, experiences and habits.

We seek an approximation to the model proposed by Cury (Cury, 2005; 2009) whereas it confirms our choice to assert that exhibition and education must be understood as the museum's fundamental communication elements and that both are essential for reception research, especially when we consider that it is in the exhibition setting that the visitor is revealed as sender. It should be reminded that exhibition is the main form of communication between museum and audience. According to Cury (Cury, 2009), it should be understood as a language resulting from the articulation between attitudes, values, feelings, reason, emotion, sensibility and affection, as well as the careful and meticulous integration of three-dimensional objects with museum multisensory resources on behalf of the production of meaning by visitors. Based on these assumptions, we believe that exhibitions should work with multiple dimensions – the three dimensions of space and objects, the interactivity (cognitive participation) and the creativity (the public is included as a creative participant) as Cury (Cury, 2009) proposes. In this perspective, it is worth reminding that communication and education move together and, in our view, museum education gives priority to promoting stimulus (Wagensberg, 2005) and intrinsic motivation (Cazelli and Coimbra, 2013). As noted by Cury (Cury, 2009), the museum evaluation (visitor studies included) is a nonlinear process that is supported by a myriad of methodological strategies:

"The areas are blending with each other – that is, they are building transversal knowledge to overcome the same problem – or opening up to multiple and particular views on how the public relates to the museum – reaction – and, in reverse, on understanding how to structure the museum language from a proactive attitude of the museum audience" (Cury, 2009, p.154).

Among the multiple methods to collect and analyze data, and based on the ideas considered here, we decided to interview the people who visited MAST spontaneously (family and friend groups) in two different moments: during the conception-design period of the exhibition *Faz Tempo* and once the exhibition was already on display.

In order to organize the visitors' conceptions and opinions about the nature of time, time measurement, and MAST's historical scientific instruments, we used the Collective Subject Discourse Method – *Discurso do Sujeito Coletivo* – developed by the scholar Fernando Lefèvre (Lefèvre, 2005) from the University of São Paulo. His work focuses on qualitative research in applied social sciences.

Background

Time is a multidisciplinary concept and one of the most fundamental for human life. It has been the subject matter of research in different scientific areas. It has great historic and scientific importance, due to its undeniable physical grandeur. Nevertheless, despite its relevance and the fact that valuable studies have been carried out in recent years, science education still needs more research in this area, especially because the research done tends to focus on the sphere of formal education. Since museums are important educational settings in society, and due to the absence of studies about the conceptions of time among their publics, it is important to carry out research focused on how museums deal with this concept, also taking into account aspects of museum pedagogy.

Our study is based on an interest to identify the limits and potentials of a science museum in promoting discussions about the concept of time. It took into consideration studies carried out in the area of science education, which analyzed the conceptions of different publics about time (Betti, 2007; Martins, 2004; Queiróz and Coimbra, 2009).

The Museum of Astronomy and Related Sciences (MAST), located in Rio de Janeiro, holds a significant collection of scientific instruments, machinery, photographic and communication equipment, furniture and sculptures. It contains more than two thousand objects representing the scientific and technological heritage of Brazil. The majority of the instruments once belonged to the Imperial Observatory of Rio de Janeiro (1827-1889), known today as the National Observatory. Among these instruments, there are those which were used in the determination and dissemination of time

and weather forecasting. This collection was listed by the Brazilian National Heritage Institute in 1986. The listed heritage also comprises 16 buildings, as well as a collection of furniture.

Given the importance of MAST's collection and the need to increasingly study the use of historical scientific instruments in science museums, we sought to investigate the influence of educational activities promoted at MAST to communicate the science and history of time on the public's conception of time.

An important reference for this study is the research carried out by Martins (Martins, 2004), entitled *Students' Conceptions of the Concept of Time: An Epistemological Analysis of Gaston Bachelard*. Its central aim was to understand aspects of the construction of the concept of time by primary and secondary schoolchildren using the epistemology of Gaston Bachelard. Following Bachelard, Martins and Pacca (Martins and Pacca, 2005) traced the concept of time through an interpretative model of knowledge, using the notion of epistemological profile, which represents

"[...] the idea that the overcoming of prior knowledge and epistemological progress do not imply the definitive abandonment of what was overcome" (Martins and Pacca, 2005, p. 301).

Martins (Martins, 2004) observed that although there were significant differences in the conceptions of individuals from different ages, they were less important than expected. The conclusion of the study in question highlighted the need to explore to what extent the formal teaching of science in general and of physics in particular, had a significant influence on the construction of the concept of time by primary and secondary schoolchildren. We therefore emphasize the need for actions in other educational settings and the significant role that can be performed by a science museum in addressing the concept of time with its audiences.

Methodology

This study focuses on the contribution of historical scientific instruments of a science museum to the communication of science concepts, considering approaches that incorporate historical and philosophical dimensions of science. The main goal is to understand what visitors know about the scientific concepts – in this case, time and its measurement – and how they value the display of historical instruments in science museums. Finally our intentions were to plan

and develop educational activities that would favor the engagement of visitors with the theme.

The study was carried out in three phases:

1. understanding what visitors think about the concept of time;
2. designing an exhibition considering the visitor's ideas;
3. evaluating the exhibition.

In the phases 1 and 3 of this investigation we sought to find out visitors' opinions, ideas, thoughts and perceptions, and in order to achieve that we conducted interviews with them. We used the Discourse of the Collective Subject as a qualitative methodology for data analysis. It is a methodological tool for social representation research that seeks to understand the thought of a collectivity through the testimonies of the individuals interviewed. It proposes the use of the collective opinion as an empirical variable of qualitative nature, avoiding to transform the opinion in a quantitative variable to the detriment of its essentially discursive nature (Lefèvre, 2005).

As a data processing technique, a series of operations with testimonies obtained from the interviews were designed and organized. The first step was to register all the answers to the same question in a table. Extracts from the various testimonies ("key expressions") representing the same ideas ("central ideas") were then highlighted and separated from the original text. The final step was blending the extracted key expressions to produce a collective discourse portraying a determined view. The discourses are written in the first person in order to produce the effect of a collective opinion. Therefore one collective discourse is produced for each central idea identified.

Still in phase 3, we used testimonies from a visitor's book placed inside the exhibition, where visitors were encouraged to register their opinions and impressions about the time. To analyze the book's content we used the Content Analysis Method, which is a research tool used to describe and interpret the content of documents and texts (Bardin, 1977). The process of content analysis begins with the statement of the research questions to be studied – in our case: "What are the public's opinions and impressions about the time?" The next step is selecting the coding units, which may be words, phrases or ideas that expose relevant content to answer the research question. Finally the content categories are developed, that is, the classification of the selected elements according to their similarities, with subsequent reunification of elements with common characteristics. Categories can be defined *a priori* or emerge from the content of answers.

In the following subsections we shall summarize the main results

from each phase of the present study.

Results and Discussion

Phase 1 - What do visitors think about time?

Time is something very abstract, this is its enchantment, you can't catch it. It flows. (Visitor, female, 60 years of age)

In order to access the visitors' opinion and impressions regarding the concept of time and time measurement, we interviewed MAST's visitors in family groups during the weekends, from February to May 2010. This kind of visitors is characterized by its autonomy while visiting exhibitions according to its interests (Cazelli and Coimbra, 2012). The interview questions were adapted from Martins (Martins, 2004) and are presented in Table1.

Interview questions (phase 1) – adapted from Martins (2004)

1. How would you define time?
2. How can we notice/know that time is passing?
3. Do you think that time passes independently for each person?
Would you say that the passing of time depends, or varies, from person to person?
4. Do you think it is important to measure the passing of time?
5. How can we mark the passing of time?
6. Do you know any of these instruments: sundial, meridian telescope, pendulum, marine chronometer, atomic clock?
Which one of these do you think is the best to measure time?
Why?
7. If all the clocks broke down, would time still exist? Why?
8. If all the clocks broke down and there were no more days and nights, would time still exist? Why?
9. If no living being existed, would time still exist? Why?
10. Do you think that it is important to measure the passing of time?
11. Do clocks measure time exactly or is it an approximation?
12. How long do you think this interview lasted?
13. Why do you think it lasted more/less time?

Table 1 – List of questions asked in phase 1

Fifty people were interviewed, their age ranging from 15 to 60 years of age and their educational background from high school to post graduation. These visitors came from different neighborhoods of the city of Rio de Janeiro.

In general, the results from phase 1 indicate not only that the presentation of how scientific instruments work should be improved, but also that issues related to time should be addressed in an interdisciplinary manner. Regarding the nature of time, visitors expressed that time and its measurement are social creations resulting from the need to organize society and human action. In this way they established a strong relationship between time and social activities. In what they said, we also identified the feeling of unequal passage of time for each individual, in other words the existence of a "psychological time", which can be associated to realist thinking (naïve realism). However, only a few visitors pointed out that the relativity of time is associated with physical variables, such as mass and velocity of the object, agreeing with the modern physics view. From the ontological point of view, this corresponds to the overcoming of "absolute time" in favor of the idea of "relative time". Through the discourse of the MAST's visitors it was also possible to identify the concept of time as the fourth dimension of universe.

Ontological aspects of time could be identified in the interviewees expressed ideas, such as the irreversibility and infinitude of time, when they said, for instance: *[time passes] it does not return, it only goes forwards*. We also perceived that visitors established relations between time and natural phenomena, these relations resulting from the Earth's motion, such as day and night, or the seasons.

During the interview, we presented the visitors images of the following objects that are present at MAST's settings: a sundial, a marine chronometer, a pendulum clock, a meridian telescope and an atomic clock. We sought to identify their familiarity with such instruments and the possibilities to explore them in educational activities. The analysis of the answers to question 6 revealed that all the objects presented, except for the meridian telescope, were cited as the "best to measure the time".

- The main reasons claimed by the visitors in favor of the atomic clock as the best instrument to measure time were: 1) its higher precision; 2) its practical interface, due to the "apparent" ease of quickly reading time.
- The main reasons quoted by some visitors in favor of the sundial as the best instrument for time measurement were its

ease of use and the fact that natural phenomena were impossible to be altered.

- Precision and efficiency were key aspects for some visitors who chose pendulums as the best instruments to measure the passage of time. The oscillating movement was considered *very systematic*, which indicated its precision. It seemed more familiar and didactic to the public, also due to the sounds it produces: [...] *you are connected to its oscillating movement, it connects you more, then I guide myself better with it, it is very didactic*. The supposed familiarity of the public with this type of clock allowed relations to be established and meanings to be constructed.
- The marine chronometer, on the other hand, was considered as more practical, since *it is portable, old and safe*.

According to Martins and Pacca (Martins and Pacca 2005), a deeper discussion of “how” to measure time, which involves phenomena and mechanisms, would help clarify “what” is measured. The results obtained from the visitors interviews about the (time measurement) instruments presented, revealed the importance of exploring, in science museums, aspects related to the time measurement objects and also of emphasizing “how” time is measured, due to its relevance for the construction of the concept of time. We also point out that a diversity of discussions about the concept of time could be generated through the analysis of objects, a fundamental aspect of museum pedagogy.

Concerning the relevance of time measurement in contemporary society, visitors were unanimous in stating that it is extremely important to the organization of the numerous tasks to be developed, given the troubled life of large cities. It can also be noted that although at certain moments the measurement of time appears to be necessary, it can be seen as negative in some way as it is used to control human actions.

Phase 2 - Designing the exhibition *Faz Tempo*

We developed an exhibition that highlights the historical objects related to time measurement in Brazil, as well as long and short time period phenomena related to the geological and cosmological timescales. The conception of the exhibition considered the opinions and impressions of MAST’s visitors about time and its measurement, which were obtained through the analysis of the data issued from phase 1. This exhibition aims to improve the connection between the historical character of scientific instruments and the educational

practices held in MAST, relating the history of science to the scientific and technical contents from an interdisciplinary approach, as well as to value the scientific and technological heritage held by MAST.

Exhibitions are the main form of museum communication. Exhibition designers should strive to communicate about science and technology in an intelligible way, increasing people's access to scientific knowledge. Scientific concepts can be explained from devices and interactive models that allow a closer relationship with the public. The possibility of producing a more user friendly design and an attractive aesthetic turns the exhibition into an encouraging media. The main goal of the *Faz Tempo* exhibition is to present in an intelligible way different methods of time measurement and their connection with the observation of natural phenomena and the history of science. Considering that the public pointed out the need to address time from an interdisciplinary perspective, we incorporated topics related to physics, astronomy, history of science, geology and paleontology. Therefore, in addition to the objects from MAST's collection, this exhibition featured a meteorite, fossils and replicas from the National Natural History Museum. For this reason, the exhibition was organized in the following thematic areas: scientific instruments, astronomy and geology.

The exhibition was created by a permanent team of professionals from different areas of expertise, such as: History, Museum Education, Architecture, Design, Electronics, Astronomy and Physics. A group of specialists from other institutions also collaborated as consultants during the concept development and design of the exhibition. The *Faz Tempo* exhibition was funded by the Rio de Janeiro State Secretary of Culture and the National Council for Scientific and Technological Development.

The *Faz Tempo* exhibition is mounted in two different sites located on the MAST campus. One of them is an astronomical pavilion where a German refractor telescope from the 1910s is located. In the exhibition entrance, we choose to display panels with phrases that reveal different visions about the nature of time. We present excerpts from speeches of the MAST visitors interviewed in phase 1, along with statements from scientists and poets. Therefore, we emphasize the importance of the audience's knowledge and experiences for the exhibition's concept design. Also in this room, visitors are invited to reflect upon the nature of time. The exhibits therein address the following issues: has time always existed? Is it continuous or discrete? Absolute or relative? Have scientists always agreed about the nature of time? This exhibition area also presents

how mankind has started to observe and measure the passage of time. The various natural phenomena that have been used to this purpose are displayed through images, texts and interactive devices to help visitors locate themselves in the history of the Earth and the Universe. The daily motion of the Sun is simulated by an interactive device. As the public moves through the room, phenomena of longer periods of time are introduced. The Earth's history is presented in details, highlighting the major events that marked the life on our planet. In order to address the concept of geological time and the process of dating the Earth, meteorites and fossils are displayed.



Fig. 1 – Exhibition areas placed inside the German refractor telescope pavillion. (A) Entrance (B) Interactive device about the apparent movement of the Sun (C) Fossils on display (D) View from the entrance showing an almost centenary sundial.

By addressing astronomical phenomena such as the sunrise and sunset – which are easily noticeable – and the changes undergone by the rocks and stars – which are slow and therefore “noticeable” only after a long period of time – this exhibition room shows distinct “natural clocks”. Stepping outside the exhibition area, the public may gaze at a nearly centenary sundial installed at another historical pavilion.

According to the interviewees, human aging and the different stages of human life are also important issues for how we perceive

the passage of time. In the exhibition, this aspect is addressed by presenting the image of a pregnant woman and a sequence of self-portraits of the French-born Polish artist Roman Opalka taken over decades of his life.

A time-lapse video (MAST, 2013) was produced, based on various examples given by visitors about how they could realize that time is passing. Images of everyday life are shown: city traffic, buildings under construction, geological landmarks and images of nature, life cycle of plants and animals, and the changes in the environment due to the seasons. By using this technique, we try to show some alterations that are difficult to perceive by the human eye, such as the apparent movement of the stars in the night sky.



Fig. 2 – Exhibition area placed inside the Meridian Circle telescope (A) Panels featuring the social organization of time (B) Panel and interactive device about the quartz clock (C) Interactive device about the apparent movement of the stars (sideral time) (D) One of the interactive devices offered to explain how the pendulum clock works.

The second part of the exhibition is located in the pavilion of the Gautier Meridian Circle. This instrument was built in 1893 by Ferdinand Paul Gautier, a prominent instrument maker of the late nineteenth century. The meridian circle has been used to determine the position of the stars relative to the vertical direction (zenith) and the data produced by it was used in time determination by the National Observatory. Therefore this area features the scientific instruments from the MAST collection and the determination of time in Brazil.

We also address the transition from “natural clocks” to “mechanical clocks”, its impact on society and the social organization of time.

Based on the visitors’ testimonies, we chose to explain the functioning of the pendulum clock, the quartz and atomic clocks, relating these new forms of time measurement to the determination of the legal Brazilian time and other curiosities about time measurement for social organization. The highlights of this exhibition area are the interactive devices designed to explain the functioning of the pendulum clock and the meridian telescope, which has been used in the legal time determination, but is a rather unfamiliar instrument to most people who visit the museum.

We identified that a significant part of the visitors believed that the measurement of time is only important for metropolitan contemporary society, more specifically for the organization of life in the urban environment. The analysis of visitors’ interviews showed that they think that other cultures are not dependent on time organization. To bridge the gap between these different forms of social organization, we chose to display a Brazilian indigenous calendar.

Phase 3 - Evaluating the exhibition *Faz Tempo*

During phase 3, we intended to evaluate if the strategies developed and implemented were suitable for science communication and to suggest new pathways to the creation of exhibitions at MAST. We sought to learn about the public's connection with the exhibition *Faz Tempo* and its interactive devices in order to improve them. To achieve these goals we analyzed the visitor’s book placed inside the exhibition, where visitors were encouraged to register their opinions and impressions about the time. We also carried out 25 interviews with MAST’s visitors from February to August 2014. Forty-six people were interviewed, their age ranging from 15 to 60 years. The interviews questions are presented in Table 2. Questions 1 to 4 were introduced before the interviewees visited the exhibition, and questions 5 to 17, after they had visited it.

Pre-visit questions
<ol style="list-style-type: none">1. How would you define time?2. Do you think that time had a beginning?3. Which aspects of nature allow us to register the passage of time?4. Name the time measurement instruments that you know.

Post-visit questions

5. Did your visit to the exhibition make you re-evaluate the concept of time?
6. Did you see anything on display dealing with that question about the beginning of time?
7. Which aspects of nature did you see in the exhibition that allow us to register the passage of time?
8. Did you see and interact with the sundial model? What did it represent to you?
9. Why do you think the Uruaçu meteorite and the fossils are on display in the room? What do they have in common?
10. What time measurement instruments did you come to know in the exhibition?
11. What do you consider relevant about the atomic clock?
12. Do you think the analog and digital clocks have the same kind of functioning?
13. Do you think that we can measure the passage of time with other stars than the Sun? Which ones?
14. Have you noticed the great instrument located in the center of the room? Can you tell what it was used for?
15. Have you seen the pendulum clock in the exhibition? Have you realized how it works?
16. Have you seen in the exhibition information where the official time of Brazil is measured?
17. Based on everything you've seen in the exhibition, do you think it is important to measure the passage of time?

Table 2 – List of questions asked in phase 3

The recorded interviews were analyzed according to the Discourse of the Collective Subject (Lefèvre, 2005). In this paper we will focus on the questions about the time measurement, considering natural aspects of time as well as the use of scientific instruments. As far as the pre-visit interviews are concerned, the answers to question 3, related to natural phenomena, showed that the visitors know about the use of different cyclic astronomical phenomena for measuring time. They also quoted the changes in the environment and the life cycle of animals as significant “natural clocks”. It should be noted that only one visitor has mentioned “fossils” as a resource to measure the time, compared to more than half who cited “fossils and rocks” after the visit of the exhibition.

In the exhibition, the possibility to manipulate a real meteorite was valued by visitors (question 9 of the post-visit interview). We noticed that most visitors could not establish a connection between the age of meteorites and the age of the Earth, although this information was offered in a panel next to the meteorite. The ease of access to such an object was much more appealing than texts and graphics. To encourage the visitor to make that connection, we might include in a label next to the meteorite the following question: "Did you know that meteorites can be used to measure the Earth's age? Find out how in the next panel". Even if people do not read the panel, they will read the question and perhaps be puzzled by it, which we believe is a favorable outcome.

Concerning the familiarity with the time measurement instruments, various types of clocks were cited by the visitors when answering question 4 (pre-visit) and question 10 (post-visit). Before the visit, however, no one mentioned an instrument that could measure time by the stars, i.e. the meridian telescope. In comparison, after the interview, six people mentioned the meridian telescope as an instrument for measuring time, even if they had not understood very well its functioning. This shows a change in the visitors' view on time measurement.

Although visitors are familiar with quartz clocks, when they answered question 14, the vast majority believed that analog clocks work differently from the digital ones. There are differences, in fact, in the form they display time, but not in the way they measure it. However, the way the question was asked might have induced visitors to say that they work differently. This shows how careful we must be when formulating questions for visitors' studies. To get a better understanding of the visitors' knowledge about the functioning of quartz clocks, it will be necessary to rephrase question 14. Perhaps a more suitable question would be: "What do analog and digital clocks have in common?"

To enrich our data regarding the visitor's perceptions about time, we analyzed the written testimonies left by the public in the visitors' book. They were typed in a digital file and their ideas about the time were organized into categories according to the Content Analysis method.

From July 2013 to May 2015, we collected three visitor's books with more than 500 entries, which are mostly perceptions about time, but also testimonies about the exhibition and the museum. Some visitors have also drawn objects related to time, as it is depicted in the exhibition, such as clocks, fossils, meteorites and dinosaurs.

According to the Content Analysis method, the visitors' ideas and impressions about time (opinions about the exhibition and the museum are not included) were organized into the following categories:

- Related to the idea that time is "precious":
One lifetime is very little to be lived, felt, understood and fully enjoyed.
Stop and think: every minute is valuable!
Do not waste your time on futilities... The less you expect, it will be over.
Love the people as if there were no tomorrow.
- Related to the idea that time flows endlessly in only one direction:
One cannot recover the time that was lost.
Time does not stop... It flows from present to future.
It only moves forward, never comes back.
The time never returns. It passes at every moment.
- Related to the idea that, as time goes by, it is possible to achieve our goals:
We've got to give it time.
Time is the best medicine.
Give it time, for time will tell you what will happen!
It is time to be happy! There is always time for this.
Time flies, heals, forgives and rescues.
- Related to the wish to manipulate time:
I wish I had more time to do everything I'd like to do with my family.
I wish I had a time machine to visit the past, the future, whatever!
If I had the power to go back in time I'd like to see it all and a little more!
- Related to the exhibition topics:
Time is the period beginning with the existence of space.
Life is a countless second, from birth to death, precious, vital.
We are all bones.
Sometimes I think I'm in the Milky Way.
After all, who are we? Who are we to destroy this beautiful universe?

These testimonies indicate that the exhibition provoked reflections on visitors about the connections between time and their lives:
How much time does time have? Time is not linear. It is an illusion to believe that we can measure it, or imprison it into our human measures. In its beauty, indifferent to our attempts, it flows and

reveals itself. The time, in fact, measures ourselves in its immense wisdom. (Visitor, female, 2014)

There were also opinions about the exhibition, the vast majority congratulating the team work: *We loved the exhibition!*

The interview analysis and visitor's book revealed that visitors enjoyed the exhibition and felt delighted by the topics addressed therein. In the visitor's book we found a variety of testimonies, filled with emotion and aspirations which indicate that the exhibition, through its diverse media, was able to motivate curiosity, to provoke reflection about science and thrill the MAST's audiences. These, we believe, are key aspects of an educational program developed in an informal educational environment.

Concluding the data analysis we sought to relate our results to the objectives of the third phase of this study. We could confirm that regarding the research question on the adequacy of the strategies implemented in the exhibition, we have been successful so far. This, we believe, is due to the initial steps taken for the preparation of the exhibition.

A key aspect of this process was the prior knowledge of the people's profile who mostly visit the institution (MAST). In the particular case of science museums, besides their socio-cultural characteristics, it is important to know the audience's engagement with science in general. When working with a specific theme, it is necessary to investigate the visitor's motivations and interests towards that theme, as well as the features that may facilitate the presentation of ideas.

As outlined in the introduction, we followed the statement that in order to dialogue with the public, it is necessary to know how visitors perceive the world and explore ways to promote the relationship between their different perceptions and the knowledge conveyed by the museum. This idea is strongly connected with the theoretical-methodological approach considered in our study, in which the visitor is seen as one of the components of the museum's communication process (Cury, 2009). Therefore, when developing the exhibition we incorporated the public's interests about the time and the need to address this subject in an interdisciplinary way (result from phase 1), so that the same issues could be seen in various ways, providing knowledge for heterogeneous audiences.

Some results have also shown us that the visitors did not have prior knowledge on a few particular topics, such the use of a meridian telescope to measure the time by the stars. However, some visitors mentioned the meridian telescope in the interview after they had

visited the exhibition, even if they had not understood very well its functioning. This result shows that we should also dare presenting unusual issues.

It should be said that the expositive elements must be well balanced so that connections between the public's interests and the conveyed information take place for expanding the scientific culture. That was a lesson apprehended when we displayed a meteorite and we could not get the audience to make the connection between the object's composition and its importance for the measurement of Earth's age. This happened because the object really caught more attention than the information panel on its side.

Another interesting aspect to be recorded by museum professionals is the fact that the evaluation process should be constantly fueled. It could be noticed that, as visitors participated to the research phases, the affinity between participants – visitors, museum professionals and exhibition team members – narrowed. This required greater involvement of the professionals responsible for communication and museum education. In this case, one should accommodate, if we recognize that the museum has increasingly strengthened its socio-educational and cultural democratization role. Therefore this is a challenge that should be incorporated in a more responsible way by museums.

Perspectives

Given the importance of guided tours in the various educational activities offered by MAST's education department, human mediation strategies for the *Faz Tempo* exhibition are under investigation. Guided tours have great potential to become an attractive and motivating activity, providing the visitors engagement. In a guided tour, the visitors are in direct contact with the guide, who has the opportunity to meet them, their personal interests and curiosities and to adapt the visit according to the context. However, Camhi (2008) observed the prevalence of guided tours as "preplanned didactic presentations", almost always performed in the same way. This indicates that there may be some difficulties in introducing an adaptive style of communication in a guided tour.

Tsybulskaya and Camhi (2009) observed that, when the memories and personal experiences of visitors were taken into account, their engagement during a guided tour increased considerably. In order to do that, the guide began the visit by approaching the visitors, so

that relationships between their knowledge and the topics of the visit could be built. Thus, the audience identifies with this new adapted tour and the activity becomes more than just "dissemination of scientific knowledge". Therefore our data on visitors' conceptions about time and time measurement instruments could act as a starting point to develop communicational strategies favoring public engagement during a guided tour.

Even if we are succeeding to engage the visitors with the scientific issues, we recognize that these approaches do not yet attend the demands of visitors needing special assistance, such as blind people, wheelchair users or people with limited mobility.

A limit of different nature is the production of interactive devices. This is challenging because their production demands many trials, and after they are fully arranged and in use, they still need improvement. Furthermore, in the case of the devices that present the apparent movement of the Sun and the stars, it is a difficult task to represent them so they are correctly interpreted by the public. That is different than representing a mechanical device, such as the pendulum clock.

Regarding the potentials of a science museum in promoting discussions about the concept of time, we emphasize the possibility of using interdisciplinary approaches and interactive devices, which seem appealing to visitors.

This study underlines the positive outcome of researches that seek to understand how visitors are motivated to think about the concept of time and how they represent it. The results of such studies point to more appropriate directions to communicate information about scientific concepts, avoiding the repetition of models that may complicate their understanding.

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Participación y representación de los visitantes en el Museo de las Escuelas

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Presentación

El Museo de las Escuelas es un museo de historia de la educación para el encuentro intergeneracional que representa y discute la memoria social y el patrimonio cultural de las escuelas. A través de sus exposiciones interactivas y participativas abre el diálogo sobre la génesis de las escuelas en Argentina, sus rupturas y continuidades desde el siglo XVII hasta la actualidad.

La propuesta consiste en provocar una experiencia crítica, regenerativa y creativa para que los visitantes perciban, se emocionen, imaginen y reflexionen sobre el pasado, el presente y el futuro de la educación. Considerar a los *visitantes como patrimonio* significa que los visitantes son indispensables para la construcción del relato del Museo de las Escuelas.

En el mes de mayo de 2010, el Museo de las Escuelas recibió el máximo galardón de la primera edición del Premio Iberoamericano de Educación en Museos organizado por el Programa Ibermuseos¹ por el proyecto de investigación empírica que se presenta a continuación.

El proyecto fue iniciado en los años 2008 y 2009 en el marco de la exposición permanente *Lo que el borrador no se llevó*, durante la 5º y 6º ediciones de La Noche de los Museos de la ciudad de Buenos Aires. La pregunta que originó la investigación está basada en las observaciones y análisis de los comentarios, señalamientos, preguntas

¹ El Programa *Ibermuseos* es una iniciativa intergubernamental vinculada a la Secretaría General Iberoamericana que cuenta con el apoyo de la Organización de los Estados Iberoamericanos, el Instituto Brasileño de Museos y la Agencia Española de Cooperación Internacional para el Desarrollo.

y recorridos realizados por los visitantes en contacto con el patrimonio material escolar.

La investigación acerca de las voces de los visitantes surgió casi con el origen del museo hace ya 13 años. Desde un primer momento, el patrimonio del museo generó comentarios de los visitantes de todas las edades acerca de su propia experiencia en la escuela.

Estos relatos personales que confirmaban o ponían en duda el relato histórico comenzaron a formar parte de nuestras reflexiones y trabajo de equipo. La investigación acerca de la recolección de las voces de los visitantes y su representación se convirtió en un eje estructural de la política educativa del Museo. Su objetivo es diseñar y poner en funcionamiento dispositivos y prototipos que promuevan la participación de los visitantes y la recolección de relatos y narrativas que sirven para la construcción del diseño conceptual y museográfico de nuevas exposiciones y nuevos formatos participativos.

Punto de partida: ¿cómo se articulan las voces de los visitantes con el relato del museo?

En el Museo, se cuentan varios relatos a la vez: el relato de los contenidos, el relato del diseño expositivo y el relato de los visitantes. La trama resultante entre estos relatos es la que configura y da forma a la experiencia de cada uno. Cuando los contenidos específicos se encarnan en el formato expositivo, se convierten a su vez en un nuevo relato, el de la experiencia física y sensorial del espacio.

Tener en cuenta las voces de los visitantes sobre lo que las exposiciones les provocan a nivel personal y privado, tanto como sus construcciones y explicaciones acerca de la historia de la educación no es una postura sino un compromiso real del Museo de las Escuelas de compartir el "poder del relato" (Alderoqui y Linares, 2014). Su narrativa se compone de las voces editadas (surgidas de la participación de visitantes anteriores) incorporadas en el relato conceptual de una exposición, tanto como de las conversaciones en vivo de los que la visitan.

Desde esta perspectiva, la intención es fomentar la interacción compleja entre la explicación histórica, las perspectivas de los visitantes y la experiencia de visita en el museo. El desafío consiste

en saber cómo configurar la intersección de las memorias y voces individuales con el conocimiento académico para su enriquecimiento mutuo. A continuación revisaremos los conceptos de historia y memoria a los efectos de comprender el trabajo y las reflexiones que realizamos en este sentido.

Los museos históricos pueden ser vistos como campos en donde se dirimen luchas por el control de los sentidos. No es novedosa la afirmación de que la producción y el control del pasado es uno de los elementos decisivos en la conformación de identidades colectivas, problema que se traduce en un doble intento: transformar el marco simbólico dentro del cual los individuos experimentan la realidad social y a su vez transformar la realidad (Linares, 2012).

La experiencia en un museo histórico, muy particularmente en un museo sobre lo escolar, articula tres dimensiones para abordar el pasado: las miradas históricas, las memorias colectivas y las memorias individuales. Las dos últimas solo pueden separarse analíticamente. Las miradas históricas, como producto de las investigaciones de un campo científico específico, pueden o no considerar las memorias individuales. La memoria individual refiere a una conexión personal y directa entre la persona que recuerda y los hechos recordados. La memoria requiere de una distancia temporal combinada con la imaginación de la presencia personal. Por medio de la memoria una persona recuerda "aquí y ahora" su participación en algún evento sucedido "allá y a lo lejos". Mediante los recuerdos, los "memoriosos" se representan a sí mismos como una figura, actor o personaje en una escena "real": esto pasó de verdad, yo estuve ahí. Generalmente los defensores de la memoria la consideran como si fuera "la hierba que crece en las grietas de un monumento público", como una cierta forma de resistencia que puede recuperar y dar voz a los oprimidos y a los silenciados; es por esto que hace ya varios años "trabajar con la memoria" se volvió fascinante para el mundo académico (Gable y Handler, 2007, p. 48, p. 60).

Sin embargo, para muchos historiadores, no se puede confiar en la memoria tanto por su carácter de ingenuidad como por estar anclada entre el pasado y el presente; se supone necesario desarmarla y trascenderla para crear los contenidos históricos. Gable y Handler, (2007, p. 58) sostienen que los relatos de la historia y los relatos de la memoria son ambos narrativos y están modelados por convenciones genéricas. Esta observación tiene implicaciones que nos permiten fundamentar uno de los eslóganes del museo: "Donde tu relato es parte de cada exposición".

Si bien es necesario mantener distancias entre la memoria y la historia, no lo es en términos de objetividad y subjetividad. La subjetividad participa en la construcción histórica, aunque con resguardos epistemológicos, tanto como en la interpretación del visitante que recuerda. Otra implicación confusa está vinculada con la escritura = historia, y la oralidad = memoria. La transmisión escrita parece ser la legitimada a partir del valor de los documentos. Sin embargo la mayor parte de la transmisión en un museo se da por vía oral a través de diversos formatos de actividad: visitas guiadas, conferencias, debates (Alderoqui y Linares, 2014).

Por otra parte, la experiencia tridimensional sobre la temática de la historia de la educación en el museo es tan fuerte en su apelación a la experiencia personal que puede solo estimular y provocar que los visitantes conviertan la historia pública en memoria privada (Gable y Handler, 2007, p. 48, p. 60, p. 61). Pero los recuerdos personales no son archivos, son una construcción enriquecida por la imaginación, tal como han reflexionado y poetizado entre otros Marcel Proust, Julio Cortázar, Walter Benjamin y Georges Perec. Desciframos como podemos la tipografía y la topografía de nuestras memorias movibles, heterogéneas y discontinuas. Por eso, en el Museo de las Escuelas realizamos un continuo trabajo de edición y análisis de las memorias individuales (Alderoqui y Linares, 2014).

Respecto de la memoria colectiva, Tzvetan Todorov (2000) cuestiona la oposición simple entre memoria y olvido. La dinámica propia de la memoria supone una selección de los hechos ya pasados, estableciendo un compromiso entre la preservación y el borramiento. En este sentido, establece una distinción entre memoria "literal", que refiere a una recuperación de acontecimientos como hechos singulares y que mantienen continuidad sobre el presente, y la memoria "ejemplar", que se sitúa más allá del acontecimiento sin negar su singularidad, pero incluyéndolo en una categoría general. Esta última es la condición de una dimensión pública de la memoria y es la que permitiría convertir el pasado en "lección", es decir, en principio de acción en el presente. Sin embargo, Todorov deja de lado los problemas de la formación de la memoria, "los materiales, las formas y los marcos de la fijación y evocación de representaciones del pasado" (Vezzetti, 2002, p. 32). Entendemos, como Vezzetti, que la memoria colectiva es una práctica social que requiere de materiales, de instrumentos y de soportes tales como ceremonias, libros, filmes, monumentos, lugares, museos, etcétera. La "memoria", ya sea enfocada como individual o social, se "construye" selectivamente y dicha selección es un proceso histórico y contextualizado.

En este sentido, pensamos que el museo es un espacio que ayuda tanto a reproducir como a re-construir memorias colectivas, siempre que relativicemos su alcance y comprendamos sus límites (Alderoqui y Linares, 2014).

Es en ese punto donde se concentran los esfuerzos del Museo de las Escuelas para lograr el enriquecimiento mutuo de la historia de la educación y las historias de los visitantes. Una manera de incorporar las voces de los visitantes es la construcción de un archivo inmaterial, una manera de empoderar a las personas y las comunidades compartiendo la tarea de la construcción de la memoria histórica. El archivo intangible contribuye a complejizar el proceso histórico, poner en cuestión ciertas concepciones cristalizadas sobre la historia de la educación, a complementar los usos y vivencias de los distintos actores con el patrimonio material, ser una base de datos para el desarrollo de nuevas exposiciones. La intención es fortalecer la misión del museo frente a la reducción de la experiencia de visita a cuestiones personales y privadas, y con la visión de contribuir a una cierta memoria colectiva acerca de la historia educativa del país que recupere a la vez ambas narrativas.

Marco de referencia: participación y comunidad

El cambio de paradigma del museo centrado en la colección al museo enfocado en las personas es sutil pero perceptible. Sin embargo la participación de los visitantes es fácil de imaginar y difícil de sostener. En el corazón de la propuesta participativa reaparece la complejidad vinculada con el hecho de compartir el poder del conocimiento acerca del patrimonio lo que genera ciertos temores asociados con la confiabilidad de los contenidos, el saber experto menoscabado y la pérdida de autoridad.

Pero, si reducimos la cuestión de la participación a cuestiones de control y poder, nos perdemos los beneficios de trabajar en conjunto con la comunidad. Plantear la participación de los visitantes en los museos, reclama abordar el concepto de comunidad en toda su complejidad. La comunidad refiere a cualquier grupo de personas que optan por identificarse entre sí. Es un concepto que está en un constante estado de flujo, y con alcances diversos: la zona geográfica, los intereses profesionales, las condiciones económicas, las circunstancias culturales, las necesidades, valores y roles compartidos; además cada persona puede pertenecer a varias comunidades a la vez (Kershaw, 2013, p. 12).

Teniendo esto en cuenta, se trata de poner en el centro de las preocupaciones y las ocupaciones del museo, las necesidades de la comunidad en un sentido amplio, junto con las experiencias que generan los objetos de una colección en todos los participantes: visitantes y profesionales del museo (Alderoqui y Pedersoli, 2011). Para llevar a cabo este cambio de paradigma, es necesario establecer un sentimiento de confianza en el potencial de los proyectos participativos que debe ser asumido por todos los que trabajan en el museo (Simon, 2009). Esto supone grandes cambios en las instituciones museológicas, sobre todo en las relaciones entre la preservación, la investigación y la comunicación del patrimonio, que es donde radican los desacuerdos más fuertes entre la museología tradicional y la participativa (DeCarli, 2004, p. 25).

¿Cómo enfrentar y trabajar con los conflictos que se suscitan cuando se crean oportunidades de aprendizaje compartido y colaboración entre los servicios de los museos y diversas instancias comunitarias? Tal como señalan Lynch y MacDonald (2010), más allá de las buenas intenciones de los museos, en los proyectos comunitarios se suele deslizar "la autoridad coercitiva del museo" que silencia cualquier oposición o resistencia a la forma tradicional de interpretación de la colección. Este tipo de experiencias lleva a la desilusión de los participantes y pueden fracturar la relación de un museo con su comunidad. Si un museo quiere convertirse en una institución participativa en el corazón de la sociedad civil, es necesario trabajar y capacitarse en el trabajo con y a través del conflicto, las situaciones impredecibles, en el buen sentido del término y fuera de la "zona de comodidad". Solo desarrollando una práctica reflexiva conjunta se puede evitar que las sutilezas de las relaciones de poder lleguen a falsos consensos.

También es importante aclarar que la curaduría de la participación no es la abdicación de las responsabilidades curatoriales, educativas y de diseño por parte del museo, sino un tipo de responsabilidad diferente que requiere aún mayores niveles de conocimiento. La participación y la co-creación tienen más beneficios que problemas y como beneficio más importante, se trata de trabajar en conjunto con nuestros públicos para crear algo nuevo. En algunos casos, el proceso de crear exhibiciones y la participación de la comunidad pueden ser mejor que el producto y esta suele ser la cuestión más controversial de estas prácticas y lo que hace que para algunos sean prácticas inaceptables. Las personas suelen apasionarse y es difícil manejar correctamente las expectativas creadas (Swartz y Adair, 2011, p. 112-123).

La exigencia mayor de los proyectos de participación y co-creación con la comunidad es su documentación, y el mayor problema, su generalización y cristalización en el tiempo. Cuando se trabaja con la comunidad, se requiere un trabajo de investigación, archivo, clasificación, análisis del discurso y edición de voces comunitarias que transforme impresiones, presunciones, sensaciones, pareceres, imágenes, borradores y papeles sueltos en hipótesis, premisas, grandes ideas, narrativas, conceptos e imaginarios productivos. En todos los casos hay que sostener un liderazgo capaz de generar confianza frente a los diferentes puntos de vista, tanto hacia los participantes de la comunidad como hacia los diferentes profesionales del museo (Alderoqui, 2014).

Si un museo adopta una estrategia de participación comunitaria, es necesario asegurar que todo lo que se haga esté impulsado por la colección y centrado en los usuarios reales y potenciales. Pero no alcanza con hacer participar a los visitantes y a la comunidad en actividades y propuestas diversas, además hay que trabajar para pasar de la participación a su representación. Esto quiere decir que este compromiso tiene que ser visible y evidente en cada exposición, de modo tal que los conocimientos, voces y experiencias de los visitantes, además de ser consultados, se conviertan en propuestas expositivas novedosas, se adivinen en la reescritura de los rótulos, reaparezcan en la interpretación de la colección, se incluyan en la museografía, la política y documentación del museo, etcétera.

En algunos museos, se utiliza la denominación "curaduría de visitantes" para dar cuenta de la especificidad de la tarea de "ocuparse de los visitantes". De este modo se la pone en valor y se la considera mucho más que una programación cultural y educativa de atención de públicos. Solo cuando la comunidad, los visitantes, el público son tenidos en cuenta – y no solo contados –, los museos, pueden empezar a conmoverse y transformarse.

Desde esta perspectiva, las exposiciones en los museos posibilitan que los visitantes se encuentren y encuentren algo que les pertenece y también sientan que la experiencia en el museo redundará en algún beneficio para su vida (Volkert, 1996). Esto habilita un "trabajo de identidad" concebido como proceso a través del cual se construye, mantiene y adapta el sentido de identidad personal al mismo tiempo que se accede al conocimiento de identidades diversas (Rounds, 2006).

Es preciso, pues, encarar un verdadero diseño de la participación, donde cada formato sea pensado en función de qué clase de participación se solicita y qué implica cada una de ellas para la

institución. Las cualidades relacionales entre los individuos y los espacios son recíprocas, así ambos, la persona y su entorno, son activos y se modifican mutuamente. Esto supone definir el espacio en términos de cantidad y calidad de relaciones entre los visitantes, y entre los visitantes y la exposición. Cada propuesta de co-producción, colaboración, contribución o co-creación, exige un diseño específico: espacios íntimos, de transición o colectivos; consignas abiertas o cerradas; con o sin mediación; propuestas de corto y largo alcance; de alta o baja tecnología; etcétera (Alderoqui, 2014).

Esto requiere de políticas institucionales diseñadas para que esos espacios de conversación sean factibles. Implica al mismo tiempo un desafío acerca de cómo establecer el cruce (muchas veces controversial) entre las memorias individuales o colectivas con los saberes disciplinares y los contenidos académicos (en este caso sobre la historia de la educación) para su enriquecimiento mutuo.

Los instrumentos: dispositivos participativos

En el Museo de las Escuelas se prioriza la participación real del público en todos los procesos de concepción, diseño, montaje y desarrollo de exposiciones. Se concibe la participación real, considerando que los visitantes tienen algo valioso para compartir con relación a la historia social de la educación y el patrimonio cultural escolar y, en consecuencia, se ofrecen los espacios para que las historias y experiencias que se comparten pasen a ser patrimonio y parte de las exposiciones. De este modo, los recuerdos y las utopías acerca de la educación se van construyendo a partir de la producción colectiva y colaborativa de diversos actores.

Los métodos cualitativos que permiten recabar las narrativas de los visitantes son: los registros de observación (presenciales, fílmicos, fotográficos), el libro de visitantes, los cuadernos de registro de actividades y de experiencias personales de los visitantes y los apuntes personales de los educadores del museo, entre otros.

La población destinataria de estos instrumentos han sido los visitantes y participantes de las experiencias del museo. Hemos venido recogiendo asistemáticamente sus voces desde el año 2003 y en forma sistemática desde el año 2006. A partir de 2008, los dispositivos de participación que se venían desarrollando comenzaron a adquirir una mayor definición, lo que nos permitió comenzar a formalizar el proyecto de investigación. En total tenemos registradas 1098 voces de los visitantes sobre diversos temas.

Los dispositivos participativos son formatos museográficos y dinámicas de visita que, por medio de preguntas o situaciones, posibilitan la emergencia de las voces de los visitantes de modo que puedan ser recolectadas para su posterior análisis y puesta en valor. Esto significa no solamente crear dispositivos para recoger los relatos de los visitantes, sino darles respuesta de modos que esas historias sean significativas para futuros visitantes. Es por esto que se transforman las contribuciones de nuestros visitantes en propuestas museográficas evidentes.

Para el diseño de los dispositivos de participación se tienen en cuenta los múltiples, variados, diversos y desiguales estilos, intereses y afinidades de los visitantes. En el proceso de diseño iterativo revisamos cada decisión guiándonos por interrogantes como los siguientes: ¿Incluye a visitantes con conocimientos limitados? ¿Es físicamente accesible? ¿Favorece la comodidad de los visitantes? ¿Es amigable con los visitantes? ¿Incluye a visitantes con diferentes capacidades auditivas y visuales? ¿Tiene en cuenta distintos lenguajes (plástico, musical, corporal) ? ¿Pone en juego lo emotivo, afectivo, sensitivo además de lo intelectual? ¿Apela a experiencias tanto de niños como de adultos?

Una vez puesta en marcha la propuesta, se ponen en juego dos etapas diferentes pero relacionadas entre sí: la recolección y análisis de testimonios y el diseño de nuevos dispositivos museográficos. Aquí se inicia nuevamente el proceso de diseño iterativo. Siguen algunos de los dispositivos participativos que promueven conversaciones y facilitan la emergencia de relatos.

Las llaves de la escuela

El espacio dispone de una mesa y una silla cómoda, un mueble guarda llaves con llaves identificadas con carteles y organizadas en dos secciones diferenciadas, las llaves de *Lugares de la escuela* y las llaves de *Experiencias escolares*. Entre los carteles de lugares se encuentran: Aula, Patio, Escalera, Dirección, etc. y entre los de experiencias: Primer beso, Castigo, Humedad, Diversión, Miedo, Aburrimiento, Travesura, Fracaso, Alegrías, etc. Se invita a los visitantes a dejar su recuerdo registrado en un cuaderno a partir de la consigna: "Combiná un *lugar* y una *experiencia* y contanos tu anécdota escolar". Algunos de los relatos de nuestros visitantes fueron:

- Sala de maestros y prohibido:

Recuerdo que cada vez que íbamos a la sala de maestros, al abrir la puerta el humo de cigarrillos y el olor a café te invadía

al instante. Era un lugar prohibido para nosotros asique al acercarnos la intriga era inmensa. (Catalina)

- Laboratorio y misterio:

El laboratorio del colegio siempre estaba cerrado. Era muy grande y tenía dos grandes hileras de mesada de cerámicos blancos. Cada mesada tenía dos canillas, piletas y mecheros y tubos de ensayo. Había un olor raro, que le daba un aire misterioso. Hacíamos algunos experimentos y era una actividad distinta. Me encantaba. (Luciana)

- Biblioteca y felicidad:

Estaba en cuarto grado de la escuela primaria de la Escuela Nuestra Señora de la Paz; a mí me gustaba mucho leer, iba todos los recreos a sacar un libro y a veces me lo llevaba a casa. Un día la bibliotecaria me preguntó si me quería hacer socia para poder llevarme libros y traerlos al día siguiente. Yo encantadísima le dije que sí. Al otro día al volver fui como siempre a buscar libros o a devolver (no recuerdo) y vi un cartel con mi nombre que decía: socia no.1 rocío coronel 4to. grado. Fue una felicidad inmensa, una sensación extraordinaria. (Rocío)

Amar, temer y partir

Los verbos regulares de la enseñanza de la conjugación se presentan en clave de los amores, terrores y tristezas de la experiencia escolar. Es un pizarrón en el que se invita a escribir a los visitantes a partir de esta consigna: "¿Qué cosas de la escuela amaste, temiste, dejaste al partir?" Algunos ejemplos en Tabla 1.

Amar	Temer	Partir
Recreo, juegos, tecnología, formación, amistad, inocencia, música, compartir, rondas, aprender...	Autoritarismo, fracaso, educación física, geometría, matemática, pruebas, castigos, repetir de año, quedar sin recreo, al director...	Profesores queridos, la inocencia, juegos, amigos, infancia, alegrías, la "seguridad de la infancia"...

Tabla 1 – "¿Qué cosas de la escuela amaste, temiste, dejaste al partir?"
Inscripciones de los visitantes

Útiles poéticos

Con un cartel que estimula la imaginación, se invita a los visitantes a crear su propio poema sobre los útiles escolares y a colgarlo con

broches en una soga de tender la ropa. Consignas: "Dedícale un poema a tu útil preferido o a tu útil más inútil".

Siempre está llena

todo me hace falta:

lápiz, goma, colores.

Siempre está llena

Desborda, completa

Y el cierre se queja

Siempre estás llena,

Gracias, cartuchera. (Claudia)

Formas de pedir silencio en la escuela

Consiste en un pizarrón en el que se invita a los visitantes a escribir sobre los modos en que se pide y pedía silencio en la escuela. Este dispositivo intenta llamar la atención sobre esa práctica de disciplinamiento tan característica de las instituciones educativas.

¡Silencio que no es una cancha de fútbol!

¿Hablo yo o pasa un tren?

¿Quiéren que me calle así pueden hablar más alto?

A ver. Ud. que está hablando, ¡¡¡¿qué dije yo?!!!

El que NO quiere salir al recreo, que hable.

En boca cerrada no entran moscas.

Escriban 100 veces no debo hablar en clase.

Si tenés ganas de charlar, andá a charlar con la Directora.

Silencio o te anoto.

Algunas de estas proposiciones pueden ser comentadas en una visita guiada o transformadas en un cartel que inaugura nuevos diálogos entre memorias y narrativas de los visitantes, la historia de los sistemas disciplinarios a través de los tiempos y la importancia de normas de convivencia para el buen desarrollo de la tarea escolar, la personalización de los útiles escolares, etcétera.

Resultados obtenidos: el diseño de nuevos dispositivos

Siguen algunos de los ejemplos concretos sobre los modos en que hemos incorporado las respuestas de los visitantes en las exposiciones.

La nostalgia en tiempo presente

Generalmente, en los visitantes adultos se escucha un dejo nostálgico y una valoración positiva por los años pasados en la escuela en detrimento del presente y de la misma comprensión de

la complejidad de cada época, incluida la que vivieron cuando eran alumnos. La elaboración de estas frases – que pueden ser parte de la museografía y de los textos de material gráfico – sirven para poner en cuestión y complejizar los sentimientos “nostálgicos”:

- La imaginación suele ser más fuerte que la nostalgia.
- Si te atrapa la nostalgia que el embate sea leve.
- No naufragues en la nostalgia, el mejor tiempo está por venir.
- En este museo conservamos la tradición pero no somos conservadores.
- Si te atrapa la nostalgia no te asustes, ya pasará.
- Dejate llevar por los recuerdos, pero no te olvides de volver.
- Si en el aula te invade la melancolía, es hora de salir al recreo.

Fotografías intervenidas

Decidimos intervenir algunas de las gigantografías del museo, con frases recopiladas de conversaciones, material de observación y la propia experiencia de los educadores del museo. Por ejemplo, en una fotografía de un salón de clases en la cual se observan a los alumnos trabajando en el aula bajo la mirada atenta de su maestra, colocamos junto a la cabeza de cada alumno globos de pensamiento como los siguientes: “¡Me olvidé de calcar el mapa!”; “¡Quiero una cartuchera igual a la de Susana!”; “¡Me duele la panza, me quiero ir!”; “¡Qué bueno que hoy viene a buscarme papá!”; “¿Por qué habrá faltado Luisito?”; “Mmm... quiero ir al baño”; “¡Uy! ¿Iba con C o con S?”.

El juego de las etiquetas

En muchas conversaciones acerca de experiencia escolar de los visitantes y los educadores del museo aparecían imágenes estereotipadas de cómo cada uno había sido “nombrado” en esa etapa de su vida. En algunas ocasiones el relato avanzaba en las consecuencias que “esas etiquetas” habían tenido en su vida posterior. Diseñamos un dispositivo basado en unas tarjetas con forma de etiqueta escolar para cuaderno, en las cuales se escriben cualidades “positivas y negativas”, tanto en género masculino como femenino, del imaginario escolar como las siguientes: aplicado/a, estudioso/a, inteligente, prolijo/a, atento/a; incorregible, vago, inútil, demonio, maleducado, distraído/a; charlatán/a, desprolijo/a, etcétera. El juego consiste en que cada participante selecciona, sin mirar, una de las etiquetas y se conversa acerca de la coincidencia o no de la etiqueta con la historia escolar y de todas las emociones

propias o ajenas que suscita y de cómo influyó o no en su vida como adulto.

Nuevas pistas de investigación: producción colectiva y colaborativa del diseño conceptual de las exposiciones

A continuación nos enfocaremos en un caso particular de la investigación alrededor de la producción de una muestra sobre la temática de la escuela del futuro.

La muestra permanente del Museo de las Escuelas se llama *Lo que el borrador no se llevó*. Hace ya varios años, para incluir la temática del presente-futuro y equilibrar las emociones acerca de la experiencia escolar pasada de los visitantes, diseñamos un dispositivo para poder pensar acerca de la escuela deseada e imaginada que luego fue derivando en pensamientos acerca de la escuela del futuro.

A lo largo de los años se recopilaron y editaron cerca de 600 voces de los visitantes entre textos, diálogos y dibujos. Definimos como voces de los visitantes a los testimonios en primera persona, ya sea en textos, diálogos transcritos o dibujos. Las consignas y dispositivos fueron variando con el tiempo y el formato de cada exposición:

- **2008 Exposición *Lo que el borrador no se llevó*.** Noche de los Museos.
Dispositivo: *Muro para escribir graffiti*. Panel de 2 x 3 metros a modo de muro callejero.
Participación: colectiva
Consigna: "¿La escuela del futuro?"
Voces: 48
- **2009: Exposición *Lo que el borrador no se llevó***
Dispositivo: *La escuela imaginada*. En una mesa con un panel vertical, muchos tacos de post-it de colores y lápices y marcadores. Una serie de grandes cubos con la frase "¿Un aula del futuro?" y objetos escolares del pasado y del presente en cada una de sus caras, enmarcan el espacio. Se invita a los visitantes a dejar sus mensajes por escrito en un cuaderno y en papelitos.
Participación: individual
Consigna: "Escribí un deseo sobre la escuela del futuro."
Voces: 82

- **2011 Exposición *En clave de aula.***
 Dispositivo: *La escuela imaginada.* (véase arriba 2009)
 Participación: individual
 Consigna: "Escribí un deseo sobre la escuela del futuro."
 Voces: 16
- **2012. Exposición *Cuando digo escuela.***
 Dispositivo: *Marcas hacia el futuro.* Un espacio con dos mesas escolares actuales y varios cuadernos con diversas consignas.
 Participación: grupo pequeño
 Consignas:
 "Dejanos tu idea ¿Y si en el futuro no hubiera escuelas?"
 "Escribí tu idea. En la escuela del futuro quiero lugar para..."
 "Imagina las aulas del mañana y dibujalas."
 "¿Cuáles son tus deseos para la escuela del futuro?"
 Voces: 68
- **2012 y continúa. Muestra itinerante *Con P de Patria.***
 Dispositivo: *Cuaderno viajero.* La muestra *Con P de Patria*, que visita algunas escuelas de la ciudad de Buenos Aires, se acompaña con un cuaderno en el que chicos, maestros y padres pueden escribir sus impresiones acerca de la escuela imaginada. La pregunta es abierta, sin más acotaciones. No se define a qué período se hace referencia, si es el futuro inmediato, o un futuro lejano, por lo que cada chico o chica aplica su imaginario según le parezca. También se ofrece la posibilidad de realizar una dinámica, guiada por el maestro, en la que un grupo de chicos puede discutirlo juntos para terminar escribiéndolo o dibujándolo en un papel.
 Participación: colectiva y comunitaria. Participan las familias de los alumnos.
 Consigna: "¿Cómo te imaginas la escuela del futuro?"
 Voces: 122
- **2013 y continúa. Muestra itinerante *Lo que el borrador no se llevó.***
 Dispositivo: *Cuaderno viajero.* La muestra *Lo que el borrador no se llevó* en su versión itinerante visita escuelas de nivel primario de la ciudad de Buenos Aires, se acompaña con un cuaderno a ser completado por la comunidad escolar.
 Participación: colectiva y comunitaria
 Consigna: "Escriban una idea acerca sobre la escuela del futuro."
 Voces: 165

Reflexiones sobre la escuela del futuro

En este apartado analizaremos las voces de los visitantes, en función del diseño conceptual de una muestra sobre la escuela en el futuro. De la lectura y edición del material se desprenden cuatro categorías:

- infraestructura y medios de transporte;
- maestros y alumnos;
- útiles y vestimenta escolar;
- organización del tiempo, contenidos y métodos.

A la vez dentro de cada categoría se dividen, por un lado las voces de niños y adolescentes, y las voces de jóvenes y adultos por otro. Las distintas franjas de tareas muestran diferenciaciones que responden a sus experiencias en el sistema educativo, a los momentos históricos del país que les tocó vivir y a los vínculos con la tecnología.

Infraestructura y medios de transporte

Los chicos se van a sentar en bancos que tienen un control remoto que le tocas un botón y le pedís acolchonado o súper acolchonado. Las maestras se sientan en sofás.

Yo pienso que va a ser en el cielo, con sillas y mesas voladoras.

En todas las voces analizadas aparece una referencia predominante vinculada a la omnipresencia de la tecnología en el futuro.

Respecto de las voces de niños y adolescentes, las imágenes son propias de la ciencia ficción, probablemente construidas o conocidas a partir de videojuegos, la televisión, el cine e Internet.

Si nos enfocamos en los niños y las niñas, hay una idea que se repite: todo vuela o flota. Tanto los edificios como los elementos que contienen (sillas, útiles, *netbook*, pizarrones, puertas y ventanas...) se convierten en voladores o flotantes. Para algunos, las escuelas serán muy altas y grandes, con muchos grados, así que requieren de escaleras mecánicas y ascensores y muebles con ruedas que ayuden en los desplazamientos. Cada aula incluirá un pizarrón digital, táctil e interactivo y otros elementos necesarios para el desarrollo de las actividades, como sillones masajeadores y también camas. Robots y pizarrones que escriben solos y televisores gigantes ayudarán a los chicos en el estudio.

En algunos casos piensan en espacios que sirven para el estudio y para el ocio (biblioteca, salón de actos, jardines, patio, pileta...). Estos espacios ya existen en la actualidad en algunas escuelas.

En definitiva, y por lo general, las escuelas que imaginan los niños y niñas para un futuro son muy similares a los actuales, pero con añadidos tecnológicos que las convertirán en edificios inteligentes,

programados por computadoras que controlan los espacios y la energía y con dispositivos para facilitar los desplazamientos. Podríamos decir que les resulta difícil pensar en una escuela totalmente distinta, en la que se hagan actividades o se enseñen contenidos en áreas diferentes de las aulas.

Sin embargo, algunas voces de niños y niñas se manifiestan a favor de recuperar o incorporar lo que consideran mejoras para la escuela actual, como perspectiva de futuro que contiene a la vez muchos elementos del presente conocido. Estas respuestas son más concretas y visibilizan una disconformidad con el estado actual de los edificios o la escasez de recursos: escuelas lindas, con árboles y jardines, totalmente remodeladas, ubicadas en entornos agradables (calle nueva, con focos). Sus espacios serán limpios, con paredes de colores, y mesas que cambiarán de color; las puertas y ventanas tendrán formas variadas y se cubrirán con cortinas, que tengan mejor comida, libros y bibliotecas, papel higiénico y jabón en los baños.

Por último hay ciertas voces que proyectan edificios seguros en relación a diversos peligros o amenazas:

Nosotros nos imaginamos que la escuela será segura por cada catástrofe (por Ej. para tsunami, terremotos y derrumbes). También que tengan más seguridad, por ejemplo poli en las entradas, los vidrios blindados, revisión de cigarrillos, revisión de las mochilas de cada alumno, y poner papel y jabón. (Trabajo en grupo de 5 alumnos)

Por su parte, los adultos se expresan en un tono más idealista y/o reivindicatorio. Edificios en condiciones dignas sería el lema común. Se interviene para llamar a refundar la escuela pública como espacio de prestigio, valoración social, compromiso y responsabilidad ciudadana. En este marco, se menciona la valoración de la tarea docente, el pago de salarios dignos y la inversión en infraestructura escolar. A la par que se demanda una escuela equipada con diversidad de recursos digitales, se pide formación actualizada y permanente para los docentes:

Que el ministerio, los directivos y docentes trabajen en conjunto por el bienestar común y una mejora en la educación.

Siguiendo con el imaginario planteado por los chicos, en el futuro existirían medios de transporte, voladores o flotantes, para ir y venir de la escuela. Algunos prefieren pensar que cada chico acudiría a la escuela con su propio medio de transporte, que se concretará en bicicletas o patinetas voladoras. El autobús escolar casi no se imagina y, en el caso en que existe, también es volador. Aparecen

también las naves espaciales, lo que extiende la idea del futuro a la esfera de lo extraterrestre:

Clases de idioma extraterrestre, amigos de otros planetas y un ovni que nos pase a buscar para llevarnos al cole.

En cuanto a las voces de jóvenes y adultos, no hay referencias a este tema.

Maestros y alumnos

A pesar de las nuevas tecnologías, el docente siempre será necesario, es necesario formar un vínculo. Espero esto no se pierda. También espero que se forme y ayude a formar alumnos críticos, pensantes y libres de pensamiento.

Los niños y las niñas piensan que los protagonistas de la escuela del futuro serán los mismos que los actuales: maestros y alumnos que acudirán a sus aulas para desempeñar las mismas funciones que hoy en día.

Algunos imaginan que los maestros serán robots y que en cada aula puede haber hasta cuatro. Esto quizá debele que para los estudiantes el maestro es una pieza clave en el aprendizaje escolar y que uno solo no alcanza para poder atender y ayudar a todos los chicos. En algunas de sus voces hay referencias a la preservación del docente, del vínculo afectivo y de contención entre adultos y niños en las escuelas:

Que siempre podamos hacer amigos en la escuela.

Por su parte, los adultos piden por la conservación y/o recuperación de ciertos valores que identifican vinculados a la educación de otra época. El avance de las modalidades a distancia, de educación virtual, genera la preocupación por conservar los vínculos entre docentes y estudiantes como algo fundamental del acto educativo.

Se reitera el deseo de tener una escuela que genere igualdad, promueva valores como la solidaridad, la tolerancia, la unidad, el amor y el respeto a la diversidad. La escuela como constructora de espíritu crítico surge también en varias producciones.

En este sentido hay un llamado a la no violencia con algunas referencias a los hechos conflictivos que se producen entre chicos, padres y docentes. Hay una preocupación por preservar los vínculos afectivos, de reconocimiento y respeto entre las personas que conforman la comunidad educativa.

Que los chicos aprendan a tener un futuro en la escuela. Lo necesitamos porque muchos chicos no pueden ir al colegio.

Una escuela pública para todos.

Útiles y vestimenta escolar

Una escuela donde el alumno sienta la curiosidad por el aprendizaje, que tenga un rol activo respetando al docente, y que los valores no se pierdan, y que el contacto humano no se pierda por la tecnología.

Las voces de los más pequeños mencionan la presencia de todo tipo de objetos voladores y/o automáticos, que trabajan, brindan comodidades y, en algunos casos, hasta piensan por los niños y los docentes.

Las herramientas que usarán en la escuela serán, básicamente, las mismas que se usan hoy en día, salvo que más tecnificadas y con algunas atribuciones fantásticas: libros voladores, digitales, mecánicos o en 3D que se abren solos y leen cuentos, lápices que escriben solos, *notebooks*, computadoras, láminas táctiles... Muchos de los insumos que imaginan los niños se incorporaron recientemente en la escuela.

Nuevamente hay ausencia de elementos distintos que indiquen una forma diferente de trabajar o nuevos contenidos educativos.

La tecnología sufriría una especie de reemplazo "lineal" de lo existente: la *netbook* será el libro, la *tablet* será el cuaderno y/o carpetas, las pizarras táctiles serán los pizarrones y los robots serán las maestras.

Para los más grandes, la atención está puesta en la masificación del acceso a ciertas tecnologías (sobre todo la computadora). Sin embargo, a diferencia de las voces de los chicos en torno a este tema, la preocupación central es la igualdad y la calidad en el acceso. No hay mundos de ciencia ficción, sino una sociedad muy compleja y competitiva que pone de manifiesto la necesidad de un sistema educativo que nos enseñe a usar la tecnología, a todos y por igual.

Se demanda una escuela equipada con diversidad de recursos digitales, capaz de brindar educación tecnológica de calidad para que los jóvenes puedan insertarse en el mundo del trabajo.

Hablan de la inclusión de la tecnología reflexionando en torno a cómo incluirla sin reemplazar prácticas actuales.

En cuanto a la vestimenta escolar de los alumnos del futuro, los comentarios de los niños definen una perspectiva muy reiterada: poder vestirse como quieren, usar guardapolvos de colores y zapatillas de todo tipo. Podemos observar que sus principales demandas como alumnos refieren a la libertad estética corporal. Algunos de los chicos piensan que se seguirá usando el guardapolvo, aunque no necesariamente será blanco sino de colores brillantes y muy nuevos. Otros esperan que los uniformes no sean obligatorios

y piensan que vestirán de forma elegante. Esto incluye los disfraces, particularmente de superhéroes. Zapatillas con ruedas, con motores de cohetes o voladoras complementarán este particular atuendo. Cada niño llevará una mochila y una cartuchera con sus cosas, sin embargo, podrán los útiles tener poderes o atribuciones mágicas para obtener lo que necesitan en cualquier momento.

Organización del tiempo, contenidos y métodos

iClases abiertas, descontracturadas, libres!

Un tema que se repite en los chicos es la necesidad de tener recreos más largos. Por otro lado, en el futuro se proyectan más tiempos para el arte, el deporte, las películas y los viajes. Estas últimas actividades mencionadas son generalmente relacionadas al esparcimiento y no como tema o materia de estudio.

En algunas voces se hace presente la posibilidad de elegir si ir o no a la escuela, reduciendo a veces el tiempo que se pasa en ella.

En las voces de los adultos hay una fuerte crítica a la escuela como espacio de homogeneización social que todos conocieron y que sigue vigente en muchos aspectos. Aparece entonces el deseo de una escuela del futuro que respete a los chicos en sus tiempos, intereses y particularidades, que le brinde propuestas interesantes, significativas, alejadas de la monotonía escolar. Hay referencias al fomento de la curiosidad y la educación para la libertad.

A diferencia de los niños, el arte y el deporte se postulan como los caminos que debe seguir la educación si quiere hacerle lugar a los sujetos contemplando su singularidad, lejos de pretender formatearlos como futuros trabajadores o simples consumidores de la sociedad.

Hemos visto que entre los contenidos en la escuela del futuro sobresalen las actividades físicas (fútbol y gimnasia) y artísticas (música y plástica). Este reclamo quizá se relaciona con demandas incumplidas por parte de la escuela respecto a la expresión/creación de los individuos:

La educación en el futuro no debe perder la escritura, ni tampoco el diálogo. Debe haber mucho más espacio para el arte y la educación física. Y esto es algo más personal, deben enseñar política.

Desarrollar la creatividad.

Respecto de los métodos, en general, para los niños la enseñanza estará siempre mediada por programas de computadora. Muchas ideas reflejan las prácticas de aprendizaje que funcionarían con sólo enchufar un cable en la cabeza, se puede aprender desde chino, artes marciales, hasta cómo volar un helicóptero.

Para evaluar a los alumnos se utilizará un aparato que develará los conocimientos de cada uno. A pesar de los cambios de formato o de ubicación, el modelo educativo no es distinto del llamado tradicional: el maestro es quien transmite el conocimiento y los alumnos lo reciben de una forma pasiva, acrítica. Al cabo de un tiempo se evalúan los conocimientos que cada alumno es capaz de acumular.

Para los adultos, sigue vigente el deseo de tener una educación que genere más igualdad, promueva valores como la solidaridad, la tolerancia, la unidad, el amor y el respeto a la diversidad como contenidos que la escuela debe construir. La escuela como constructora de espíritu crítico surge también en varias producciones: *Será grande si cada persona es capaz de ser crítica, con posibilidades de expresarse libremente y desarrollar sus capacidades y habilidades. Cada persona en esta escuela podrá dirigir su propia vida y será artífice de su propio destino.*

Por otro lado, dentro de las voces adultas que mencionan la omnipresencia de tecnología en el futuro, hay reflexiones respecto de la necesidad de tener una mirada crítica en torno a los nuevos medios de comunicación, de conservar prácticas, modos de vincularse y formas de estar en la escuela que parecen mutar demasiado rápido.

Por último, la educación a distancia aparece en muchas voces tanto de niños como de adultos. En algunos casos la escuela ya no existe como lugar concreto. En este sentido presagian una educación en la que cada uno, desde su casa y por medio de su computadora, accede al conocimiento y transita su proceso de formación:

Es difícil imaginar cómo será el mundo dentro de 100 años. Tanto nuestro hijo, como nosotros pensamos en el futuro y lo primero que imaginamos es el avance tecnológico que crece a grandes pasos. En ese futuro visualizamos un colegio totalmente computarizado, digitalizado, edificios sofisticados, y nos preguntamos ¿existirá dentro 100 años? ¿O la escuela se hará a través de Internet?

Exposición sobre la escuela del mañana, el futuro de la educación, etc.

Primeras reflexiones en base a las voces

Del análisis de las voces de los visitantes se desprende que, a partir de las preguntas formuladas, la mayor parte de las respuestas de los niños y las niñas refieren a los aspectos físicos y materiales de lo escolar.

Entendemos que para los más pequeños es difícil definir la idea de futuro. Su visión está muy condicionada por los tópicos cinematográficos y televisivos de la ciencia ficción, de modo que

cuando piensan en “el futuro” éste es imaginado con aparatos tecnológicos más o menos sofisticados, cosas que vuelan y flotan.

Otra característica es que construyen el futuro imaginado con aspectos de su escolaridad presente y cotidiana. Por un lado, la tecnología (pizarras digitales, computadoras, *netbooks*, Internet), y por el otro, con una serie de respuestas a sus reclamos y demandas por infraestructura y mobiliario en mejor estado. Las modificaciones que se plantean parecieran depender de voluntades individuales más que institucionales o sociales.

Análisis metafórico de las voces para la producción de imágenes expositivas

A continuación mostramos cómo, a partir del análisis de las voces, construimos propuestas museográficas junto a las voces de los visitantes.

Si nos detenemos en las palabras enunciadas, sobre todo por los niños y niñas, en clave metafórica podemos avanzar un poco más y obtener elementos que nos sirvan para el diseño expositivo.

Por ejemplo todo lo referido a la flotación y el vuelo, podría ser comprendido en términos de desear una escuela con una estructura más liviana, no trabada, flexible, que no se hunda.

En cuanto a las voces sobre los traslados, transportes y movimientos, tanto en sentido vertical como en sentido horizontal, reiteran un imaginario donde es fácil llegar a donde uno quiere, sin obstáculos. Esto podría ser mal interpretado en términos de que la escuela no signifique ningún esfuerzo, pero no nos parece que los comentarios tengan ese fundamento.

Nos parece que la idea más interesante que se desprende de este tipo de pensamientos es la de la fluidez en el sentido de lo que Dewey (1967, p. 41-65) define como *experiencia*, y Csikszentmihalye y Robinson (1990) como *experiencia fluida*. Una experiencia está formada por partes organizadas en un flujo que va de un punto al otro en forma integrada entre la anticipación y el proceso con el resultado. Como tal, es percibida en su totalidad y en su unidad. Es una transacción consciente, viva y reflexiva que vive fructífera y creativamente en las experiencias subsiguientes. La experiencia es el modo de aprender y conocer y se transforma en conocimiento cuando es puesta en práctica. Por otra parte, la naturaleza de la experiencia fluida radica en aquellas actividades que las personas realizan por que les provocan un sentimiento de progreso y aprendizaje sin esfuerzo e intenso placer que es muy gratificante

aunque las personas tengan que utilizar una gran cantidad de energía para poder sentirlo.

También podemos rescatar, en función de lo referido al pedido de materias de arte y educación física y la variedad de vestimentas escolares, un imaginario de escuela que tenga más en cuenta al cuerpo en su totalidad y en su diversidad.

Estas imágenes – experiencia fluida, cuerpo y diversidad – se corresponden con innovaciones en los tiempos y espacios escolares que ya vienen siendo desarrollados en el mundo. Por ejemplo, las escuelas Vittra en Suecia donde no hay aulas, tal y como se conocen tradicionalmente, ni pizarras ni pupitres. Los alumnos circulan libremente y cualquier lugar de la escuela es bueno para aprender, con profesores o con otros compañeros. A veces en las escaleras, otras sobre almohadones o en el suelo. Los estudiantes aprenden a su ritmo en un modelo distinto y profundamente innovador, sin clases y sin horarios rígidos. Otro ejemplo reciente son las escuelas jesuitas de Cataluña donde se han derribado las paredes de las aulas y las escuelas se han transformado en grandes espacios para trabajar en equipo, unas ágoras en las que hay sofás, gradas, mucha luz, colores, mesas dispuestas para trabajar en grupo y acceso a las nuevas tecnologías.

Análisis de la información para la producción de imágenes expositivas

Dentro del corpus teórico e informativo sobre la temática del futuro de la educación y la escuela, utilizamos imágenes y desarrollos producidos durante el siglo XX acerca de las escuelas del futuro y los debates de la actualidad.

Una observación importante es la que concierne a la palabra “futuro”. Deberemos trabajar en su formulación para alejarnos de las imágenes de ciencia ficción y transmitir la idea de que estamos preguntándonos por el tiempo futuro de una escuela que puede llegar a ser real en los años venideros y que ya está siendo en muchos sentidos en el presente.

Una segunda decisión fue anclar la muestra en un debate del presente que concierne a la educación del mañana. Para ello elegimos las discusiones actuales acerca de la enseñanza de la letra cursiva en la escuela primaria. ¿Por qué es importante la escritura a mano? Este tema está siendo debatido en la escena internacional a raíz de la decisión de algunos sistemas educativos, como Finlandia, de suprimir la enseñanza de la caligrafía *cursiva* a favor de la escritura

en letra imprenta o, directamente en la computadora. El debate tiene defensores basados en investigaciones para ambos argumentos:

- Escribir a mano es clave en el aprendizaje, la generación de vínculos sociales, la expresión de ideas y la retención de información. La escritura a mano nos da autonomía, fluidez del gesto y rapidez.
- La letra a mano es cosa del pasado. Con los nuevos desafíos de la era digital, no hay tiempo para enseñar la letra cursiva, la motricidad fina se puede enseñar de otros modos. No tiene sentido enseñar dos formas de escribir (molde y cursiva).

Objetivos

Cuando los visitantes salgan de la exposición, esperamos que hayan reflexionado sobre el futuro de la educación a través del debate de un tema de la actualidad como es la enseñanza de la letra cursiva en la escuela primaria. También que comparen herramientas con prácticas, actores de la escena escolar y el concepto de tecnología escolar de diferentes épocas (siglos XIX, XX y XXI) a través de experiencias somáticas en los diversos pupitres del mobiliario escolar.

Propuesta conceptual

Las ideas siguientes tienen que ser consideradas como una herramienta de comunicación más que un programa definitivo:

- *La tecnología que construye el aula*
En la escuela actual conviven el pizarrón, el libro impreso, los cuadernos y las computadoras e Internet. Es necesario reflexionar sobre las tensiones y conflictos que implican las transformaciones tecnológicas y abordar críticamente la idea de los cambios “evolucionistas” en los cuales la escuela cambia y puede hacerlo para todos y por igual.
- *Parecidos y diferentes*
En oposición a la escuela normalizadora y homogénea pensada en el siglo XIX y persistente aún en muchos aspectos en el siglo XXI, hay una fuerte preocupación por el lugar de la heterogeneidad y la inclusión, y su correlato en las prácticas educativas.
- *Experiencias para armar*
Para abandonar las pedagogías autoritarias y asimétricas que aún persisten se debería ir hacia una pedagogía del diálogo, de experiencias fluidas, donde la arquitectura de la “reunión” ocupe un lugar central reemplazando la imagen de las aulas rígidas compuestas por filas de bancos unos detrás de otros.

Concepto de diseño y propuesta museográfica

Se trata de una muestra que estará en proceso de diseño constante con la participación del público. De este modo se espera ofrecer un espacio de experiencias en donde los visitantes comprendan que la escuela es una construcción social y que, como tal, puede ser pensada y modificada.

- Espacio1. Interrogantes: *¿Todo tiempo pasado fue mejor? ¿Qué pasaría si la escuela dejara de existir?*

Tres gigantografías, una de la escuela en la época del sistema de enseñanza mutuo o lancasteriano (siglo XIX); otra del sistema de enseñanza simultáneo o escuela normal (siglos XIX, XX y XXI); ilustraciones y textos sobre la escuela del siglo XXI, imaginados en el siglo XX (Coté, 1899; Asimov, 1951; Komatsuzaki, 1969). En el centro de la sala, un pupitre colectivo con pizarritas; dos pupitres individuales con cuadernos y pluma; dos pupitres contemporáneos con computadoras escolares. Pizarrones de participación con preguntas para públicos de diversas edades: ¿qué cosas te hubiera gustado aprender en la escuela? ¿Qué vas a hacer cuando termines la escuela?

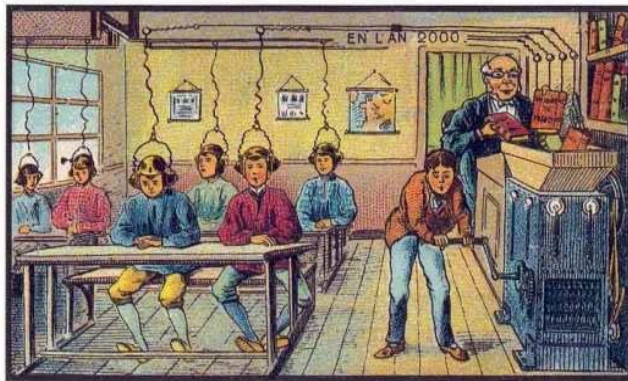


Fig. 1 – Reproducion tomada de Coté (1899)

- Espacio 2. Imaginarios: *Imaginen el futuro de la escuela y la construiremos entre todos.*

En el medio, un círculo formado por sillas escolares, diversas en formatos y tamaños que sugiere la idea de una reunión. En las paredes, textos con gráfica destacada acerca del debate de la enseñanza de la letra cursiva en la escuela. Paneles de participación con notas adhesivas. Puesto de votación: Cursiva si, cursiva no. Textos con argumentos a favor y en contra de la

enseñanza de la cursiva. Invitación a realizar juegos tipo juicio, con jueces, abogados y fiscales. Paredes con filmaciones escolares de clases de escritura y de computación.

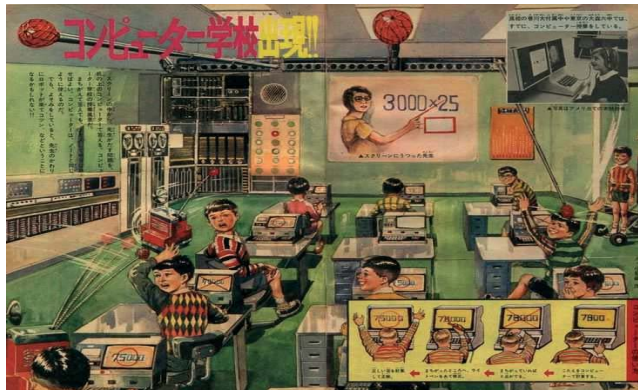


Fig. 2 – Reproducion tomada de Komatsuzaki (1969)

Reflexiones finales

La aventura de la centralidad de los visitantes produce impactos que será necesario evaluar a cada momento. Lo más probable es que surjan conflictos alrededor de la participación de los visitantes y de los procesos de co-creación y colaboración.

Los criterios de verdad, la autoridad del saber, las diferencias entre el saber académico y el saber cotidiano se pondrán en el centro de la escena. Debemos expandir nuestras definiciones de experto y experticia para incluir otros dominios de la experiencia, al mismo tiempo que expandiremos las posibilidades de nuestros visitantes como "autores" con los cuales podamos sostener conversaciones mutuamente interesantes.

Acordamos con que el museo tiene el derecho de hacer la edición final de la multiplicidad de voces teniendo en cuenta, como escribe John Berger en su novela *G*, que nunca más una sola historia será contada como si fuera la única – "*never again will a single story be told as though it were the only one*" (Berger, 2012, p.133). Por eso decimos que el desafío de considerar los visitantes como patrimonio es no solo ponerlos en valor sino encontrar nuevos modos para poner en conversación el conocimiento experto que hay en el museo con el conocimiento de todos y cada uno de los que lo visitan.

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Assimilating the museum experience: Dimensions of the education of potential museum educators, based on the results of a limited survey among students of Preschool Education

Alexandra Tranta

Introduction

Elaborated in the context of my postdoctoral research on the archaeological, museological and educational approach of prehistoric collections in Greece, this paper concerns the goal, method and results of a limited survey carried out among students of the University of Thessaly at the Athanassakeion Archaeological Museum of Volos.

More specifically, as part of the fourth-semester course on "Museums and Educational Programmes" of the Preschool Education Pedagogical Department, the students visited the Athanassakeion Archaeological Museum of Volos' Hourmouziadis Hall, an activity carried out at the end of the semester as a study project for the course. The objective was to approach the process of learning in a museum, and to utilize this experience to conceptualize and realize an educational programme for *kindergarten* children. After the visit, the students, who constituted the survey's subjects, were required to answer a questionnaire composed of open-ended questions about specific parameters of the museum experience, which were in accordance with the relevant bibliography and which are analysed below.

The initial research interrogations were the following two: is the presentation of prehistoric collections in Greece consistent with the contemporary trends in the fields of archaeology, museology and museum education? And under what conditions can the adoption of contemporary trends in these fields – as jointly implicated in the creation of exhibitions – contribute to the promotion of the museums' educational dimension, so as to achieve the best result to the advantage of as many groups of public as possible?

Objective

As the research goal was to explore the archaeological theory used as the basis of the museographic design and the educational dimension of the museums, methodological tools related to the three domains were used. Thus, we studied the criteria for examining museum exhibitions elaborated by Kavanagh (Kavanagh, 1996), Talboys (Talboys, 2006, p. 65-66) and Serrell (Serrell, 2006), which were then modified and further enriched, with a view to answering the initial research interrogations.

We also took into account the corresponding research work carried out in Britain under the direction of Hooper-Greenhill (Hooper-Greenhill, 2007), according to whom the museum's educational mission today should pursue the following generic learning outcomes (GLOs):

- knowledge and understanding (learning, understanding, deepening);
- skills (capacity to manage information, acquisition of new intellectual skills);
- attitudes and values (feelings, perceptions, self-esteem, opinion or attitude towards other people, positive or negative attitude in relation to an experience);
- enjoyment, inspiration, creativity (entertainment, surprise, exploration, experimentation);
- action, behaviour, progression (changes in the way people manage their lives; it should be noted here that in certain cases this change can take place over the very long-term and hence is not immediately identifiable).

Within this theoretical framework, the two initial research interrogations were analysed further with the following sub-interrogations, the majority constituting the basis of the survey's questionnaire:

- Can specific epistemological currents of Archaeology be detected as forming the exhibition's base?
- Are the curators frank regarding the limits of the re-composition of the past in an exhibition? How is this deduced?
- Are the different groups of public treated as a single uniform mass of passive recipients of information, or as thinking citizens belonging to different communities of interpreters?
- In what manner do the exhibitions correspond to the expectations and potential of different groups of public?

- Are there any prerequisites, i.e. knowledge that the visitor needs to have in order to deal with the exhibition and the exhibits?
- In what manner do the exhibitions activate the visitor's interest?
- How does the manner of interpretation help the visitors construct new knowledge?
- Do the exhibitions correspond to the visitors' needs in terms of learning and enjoyment? How?
- Are the visitors inspired to learn more, participating in a process of lifelong learning, as a result of their visit to the museum? In what way?
- Can the exhibition be a source of enjoyment and inspiration? Why?
- Does the exhibition seek to modify stereotypes, i.e. the manner in which visitors apprehend Antiquity in general and Prehistory in particular?

Method

The survey was carried out among the twenty students of the Preschool Education Pedagogical Department who attended the fourth-semester course on "Museums and Educational Programmes". To this end, a visit to the G. Ch. Hourmouziadis Hall, at the Athanassakeion Archaeological Museum of Volos, was arranged with them. The objective of this visit was to approach how one learns in a museum and to utilize this experience to conceptualize and realize an educational programme for *kindergarten* children carried out at the end of the semester as a study project for the course. After the visit, the students answered a questionnaire composed of open-ended questions about specific parameters of the museum experience.

Description of the exhibition and the curator's approach

The choice of the Athanassakeion Archaeological Museum of Volos was made for the following reasons: in the early 1970s, more than 60 years after the excavation of the Neolithic Acropolis of Dimini by Christos Tountas, Georgios Hourmouziadis carried out new excavation research in the same location. He interpreted the findings of his excavations from the Systems Theory angle and presented them at the Athanassakeion Archaeological Museum of Volos, in the hall that

now bears his name. The Systems Theory's central idea is that civilization is composed of subsystems, while social changes are dictated by the living needs and economic production. Accordingly, G. Hourmouziadis maintained that in Neolithic Dimini the households collaborated harmoniously, implementing a system of "pre-capitalist communism", up to the moment when the inhabitant of the central building¹ established the concept of private property (Hourmouziadis, 1979). Immediately below, we shall see how this approach, diametrically different from the usual museological practice in other Greek museums, constituted the substratum of the creation of the first modern exhibition in Greece concerning the Neolithic civilization in the 1970s at the Athanassakeion Archaeological Museum of Volos. This exhibition will leave its indelible mark on the presentation of the Neolithic Age in Greece, as will be discussed more in depth below, and remained as it was, even after the re-exhibition carried out at the Athanassakeion Archaeological Museum of Volos in 2004.

In the Hourmouziadis Hall, the exhibition's main message is that, in accordance with the Systems Theory (Renfrew, 1972), civilization in general, and that of Neolithic Thessaly in particular, can be divided into subcategories, and more specifically, into the following subsystems: architecture, agriculture, livestock farming, home-scale tool-making, pottery crafts (including the making of statuettes) and jewellery making. The existence of thematic modules means that the exhibits are not presented according to their chronological evolution or the exact location of their origin, but classified in groups according to the objects' function in sectors of daily activity. Consequently, the exhibits do not function simply as narrative elements of an archaeological and historical narration, but acquire a meaning as the recipients of a social function, as constituent elements of social evolution and technological change.

As G. Hourmouziadis writes, when describing the archaeological, museological and museographic approach he applied in this particular exhibition:

"The issues that needed to be resolved were not of an aesthetic but of a scientific nature [...] In an auxiliary capacity, photographs, representations or enlargements and artificial lighting were used [...] Lastly, an effort was made so that, by displaying them thus, the exhibits do not constitute a

¹ Christos Tsountas characterized this building as a *megaron* palace (Tsountas, 1908, p. 88), considering it to be a precursor of the Mycenaean palaces, while the terminology he used for its description corresponds to that of the Mycenaean acropolises' buildings.

simple addition of excavatory material, but represent the characteristic elements of an important cultural phase, during whose course the human nomadic anxiety is reshaped into the now durable factors of a new "political" life" (Hourmouziadis, 1968, p. 261).

On a museographic design level, the principles described above are transcribed with the objects' presentation as carriers of the civilization that created them. Apart from the objects' grouping according to thematic modules, their free placement, i.e. without glass showcases, also goes in this direction. G. Hourmouziadis refers to this choice of his as follows:

"Exploring the new manners of our re-exhibition effort, we reached the conclusion that a display case offers neither a unique guaranty of security nor of cleanliness. And also, that in no case whatever can it be considered an infallible guideline of museum organization, nor does it ever succeed in pushing forward correct solutions to the problems of communication between the museum's visitor and the exhibits: understanding of the object, reading of the information, correct interpretation [...]" (Hourmouziadis, 1976, p. 3).

This impression proved to be fully justified, given that "[...] in the 30 years that followed, nothing occurred to prove that this handling of the display put at risk the archaeological artefacts" (Hourmouziadi, 2006, p. 246). The objects' presentation without glass showcases entails, among others, that no single exhibit is highlighted in particular as a "work of art". On the contrary, all of them are subjected to their functional framework, incorporated in the subsystems that compose the Neolithic civilization, as defined by the exhibition's curator.

The hall's background wall features a map with the Neolithic sites of Thessaly (Fig. 1), beneath which earthenware pots are arrayed on a ledge: in this manner, the material is incorporated into space and time, i.e. Neolithic Thessaly.



Fig. 1 – View of the Hourmouziadis Hall at the Athanassakeion Archaeological Museum of Volos. In the background, there is the map featuring the Neolithic sites. Photo: A. Tranta

The first module that visitors see, on the left, as they enter the hall, is the one on housing, where building remains, photographs, representations of houses² and two Neolithic house models are displayed (Fig. 2). In the central part, there is a showcase with a secondary burial from Prodomos, near Karditsa. The exhibition's educational nature is revealed by the existence of a reconstruction of a Neolithic house, based both on the architectural remains brought to light and the house models presented in the exhibition. Also, at another point, visitors are presented with a reconstruction of the stratigraphy (the layering of the soil strata that compose the archaeological deposit), where the corresponding fossils have been placed alongside the different settlement phases, so as to perceive the chronological sequence between periods and how their succession is recorded during the excavation and classification of the artefacts. However, although obviously deriving from its importance for research, the choice of presenting a “typical” stratigraphy without any accompanying text is in no way comprehensible for the visitor, as comments the archaeologist's daughter and collaborator, A. Hourmouziadi (Hourmouziadi, 2006, p. 197).

The next module concerns livestock farming and comprises bones and pictorial representations of animals. The neighbouring display contains sections of tools that have been completed (e.g. axes) and

² A representation of a house, based on the imprints of cane (bamboo) in clay, was presented for the very first time in a book by Ch. Tsountas (1908, fig. 2.2).

distaffs, to which wool, weaving weights and loom weights have been added.



Fig. 2 – View of the module on housing in the Hourmouziadis Hall
Photo: A. Tranta

In the foreground, one can see the secondary burial and, in the background to its left, the reconstruction of a house of the Neolithic Era. Above this are photographs of archaeological digs and pieces of clay with the imprints of bamboo. Further to the right, one can see floor plans of Neolithic houses and, above them the Neolithic house models.

The last module is dedicated to pottery, with the clay pots placed in a large showcase with niches. The display also includes photographs of mid-twentieth century craftsmen, such as of a potter. Below the vases, the representative themes (motifs) of the different periods (Early, Middle and Late³ Neolithic) are rendered with line drawings and presented in the form of small posters.⁴

This exhibition is considered to be pioneering, given that the Systems Theory formed the substratum of the modern museological approach and still constitutes a reference point for Neolithic Era exhibitions in museums throughout Greece. The only element that is “hushed up” in the specific exhibition is what has been characterized as the Systems Theory's “Achilles' heel” (Shanks and Tilley, 1987, p. 52), that is to say the fact that the modules of the

³ At the time when the exhibition was set up, the term Final Neolithic had not yet been coined for the end of the Neolithic Era.

⁴ The tables are reproduced from D. R. Theoharis' book, *Neolithic Greece* (Theoharis, 1973)

Neolithic civilization are determined by the curators. The fact that the objects are incorporated into the context of their time could be considered, among others, as a reinforcing factor of the exhibition's educational dimension. The existence of different hermeneutical media also goes in this direction; beyond the notices of the exhibitory modules and the items' captions, the exhibits are "brought to life" by the use of photographic material with ethnographic parallels. The emphasis has been put not on the exterior likeness of the exhibits' form – as it was in the Ethnographic Museum of Thrace, where certain ethnographic/folkloric tools were characterized as "neolithic" in the introduction of the catalogue because of the objects' exterior form –, but on the similarity of the people of the Neolithic Era to the farmers of post-war Greece. This element is totally consistent with the Systems Theory according to which the items are interpreted interculturally (Hodder, 1986). At this point, it should be noted that in his book *Neolithic Greece*, D. Theoharis has quoted written sources of, naturally, subsequent periods, which refer to processes, such as ploughing, or descriptions of agricultural and livestock-farming scenes, in order to sketch for the reader images of a farming society, as was the case in Neolithic times (Theoharis, 1973, p. 231 *et seq.*). Besides, according to the Systems Theory, all the artefacts – historical, symbolic and utilitarian – are considered as serving the goal of social continuity. This idea refers to the marxist viewpoint on society and material civilization, according to which the subsidiary elements are joined together through an ideology. In the Hourmouziadis Hall's exhibition, the visual material comprises a map of Thessaly, photographs of contemporary people of the time, small posters with linear drawings of the pottery motifs, while during the 2000 decade, an exhibition was hosted in the outdoor area of the Athanassakeion Archaeological Museum of Volos featuring reconstructions of huts of the Neolithic Acropolis of Dimini, from where an important number of the items exhibited in the hall originate, as already mentioned.

In conclusion, the exhibition at the Hourmouziadis Hall, emanating from the Systems Theory, seeks to "initiate" the visitor to the Neolithic civilization. This approach is transubstantiated museographically, on the one hand by abolishing the use of glass showcases, a question we referred to previously (Lidchi, 1997, p. 178) – since the presence of glass showcases and other security measures as well as the supervision of guards make visitors feel ill at ease and simultaneously convey the impression the visitors may be a potential threat for the cultural heritage as opposed to the

archeologists, by definition its custodians (Hourmouziadi, 2006, p. 139) – and, on the other hand, through the use of materials compatible with those Neolithic man had at hand: wood, bamboo, flax. Also, stones have been used at the base of the partitions, an element referring to the region's construction material, which was used at the Neolithic acropolises of Dimini and Sesklon.

Consequently, the specific hall was chosen because the exhibits are presented within the historical and social context of the civilization that produced them: the exhibition's organization on the basis of thematic modules renders it more easily "legible" by a non-specialist public, as it helps visitors to perceive the exhibits' function and, more broadly, to recompose the context in which they were produced. Also, the lack of glass display cases entails a direct contact with the exhibits. Additionally, this exhibition was set up in the 1970s and despite the re-exhibition at the Athanassakeion Archaeological Museum of Volos in 2004, the hall remained the same, possibly not unjustly, as it constituted a milestone in the presentation of Prehistory in Greece's archaeological museums, with a significant impact on the exhibitions of Neolithic collections to this day.⁵

The questionnaire

The questionnaire distributed to the students permitted the collection of data under conditions of speech production that favour the survey's objectivity, as they are identical for all of the participants. The choice of the specific sample was based on the fact that it constitutes a group with a relatively homogeneous substratum, which is called to offer mediation between the museum and its (future) pupils, without having any specialized knowledge of the Neolithic Era, as they are not archeologists. Also, the mediation that nursery school teachers are called to provide, as educators, consists in transmitting to the children the capacity to begin to carefully observe objects as carriers of information, but also of aesthetic enjoyment, and to "learn how to learn" from them, rather than to teach them the specific history curriculum, as is the case of teachers for pupils attending the third grade of primary school.

The questionnaire was as follows:

⁵ For relevant examples, cf. Tranta-Nikoli (2009)

The Neolithic Collection of the
Athanassakeion Archaeological Museum
Limited survey among Preschool Education students

Gender: () Male () Female

Age group: () 18-24

Do you visit museums: () never or almost never

() every 2-3 years

() every year

() twice a year or more

1. Was there something you would have liked to know beforehand, so as to understand better all of what you saw? Which object did you like the most and why?
2. How did the manner of displaying the exhibits strike you?
3. Did you enjoy yourself? Why?
4. What would you change? Why?
5. What didn't you like? Why?
6. What impressed you the most among all what you saw? Why?
7. Select an exhibit that impressed you the most, giving the reasons of your choice.
8. Would you visit the museum again? Why?

Description of the sample

As already mentioned, the pilot survey in question was carried out among the twenty students of the course on "Museums and Educational Programmes" at the Preschool Education Pedagogical Department of the University of Thessaly, all of whom were female. Their socio-economic and cultural background was not disclosed; however, because of the grading system used in Greece to allow access to higher education, and the fact that Preschool Education ranks at the lower range of the faculties' classification in terms of secondary school grades, it can be surmised that they usually come from lower to middle-class families.

The limited size of the sample means that one cannot safely advance that it represents the whole spectrum of the students attending preschool education programmes in Greece and, consequently, that the results of the present investigation cannot be extrapolated to this specific category of students. Lastly, it should

be pointed out that, as illustrated by their response to the questionnaire's corresponding question, the subjects participating in this specific pilot survey can be termed museum non-visitors according to the definition of N. Merriman, who defines the non-visitor as a person who visits museums less frequently than once a year (Merriman, 1991, p. 103).

Results and discussion

Question 1: Was there something you would have liked to know beforehand, so as to understand better all of what you saw?

This question was aimed to detect whether prerequisite knowledge was felt necessary. The opinion formulated in the majority of cases (17 respondents) is that the teachers-to-be feel they should have some knowledge about the civilization being presented before visiting the Museum. This may mean that they do not perceive the Museum as being a learning tool or a space that favours learning, even though previous knowledge facilitates both the understanding of museum exhibitions and the construction of corresponding knowledge. This element is also possibly related to the fact that the particular students do not usually visit museums.

However, the frequent use of indefinite pronouns reveals a confused opinion regarding what exactly they would have liked to know. A typical example of response is the following one:

Some things about the way of life of that period.

Another student answers:

I would have liked to study and read a few things and information about the specific period, so as to have some prior knowledge before seeing the exhibits.

However, there is also the example of the student who makes the most of the visual material, in order to locate the sites where the exhibits were initially unearthed:

[...] at the Athanassakeion Museum there was a large map on the wall, which was quite helpful'.

Also, another student mentions that among the things she would have liked to know is

[...] what criteria were used to select the exhibits.

Consequently, it appears that prerequisite knowledge of the exhibition's object is considered necessary by the survey's participants, as only two out of twenty were able to open up their

minds and make the most of what the exhibition offered. This attitude about the need of a prior familiarization with the exhibition to be visited would point towards an underlying fear of the unknown and the lack of cultural tools to overcome it.

Question 2: How did the manner of displaying the exhibits strike you?

The question was targeted at discovering how the specific manner of display and certain characteristics, which were pioneering at the time of the exhibition's inauguration (e.g. the incorporation of the artefacts into thematic modules and without glass display cases), facilitated their understanding. As revealed by the students' responses, both of these elements were recognized by more than half of them. More specifically, it was clear from most of the answers that the artefacts' presentation according to thematic modules helped them understand their function. As one student wrote:

I really liked the manner in which the findings are presented, that is to say all together, separated into modules. It was easy to understand what they were and what they were used for.

Commenting on the lack of glass showcases, one student noted that [...] *there was a direct visual contact*, while another stressed the possibility thus offered to observe the objects from different optical angles:

[...] most of them were not in glass showcases, which helped me to see them from a different optical angle, as well as the materials used for these exhibits, which were related to the period the exhibits belonged to.

Question 3: Did you enjoy yourself? Why?

In general, three out of four interrogated teachers-to-be evaluate their experience positively, stressing, though, almost exclusively its learning dimension and, on the whole, ignoring its entertainment or social aspect:

I enjoyed myself, because I saw things I had never seen before, such as the carbonized foodstuffs.

Only one student appears to regard the visit as also being fun:

The visit to the museum was interesting, and a good opportunity to think about how we should approach exhibits. Furthermore, it was a pleasant excursion.

Question 4: What would you change? Why?

It is characteristic that only one student out of twenty, whose answers to the questionnaire were also the most detailed, responds saying: *Maybe I would add background music,* an element that could be interpreted as indicating that she seeks a multi-sensorial experience at the museum.

Question 5: What didn't you like? Why?

Although all of the participants answered this question, only three of them showed the capacity to apprehend the exhibition as a whole and express their opinion of it. Thus, the same student who answered that she wanted music says:

I didn't much like the great number of statuettes. We could have seen the most representative ones of that era.

Another student comments negatively on the museographic decision of placing items in niches, located high up on the wall:

Certain objects were high up and it would have been better had they been at a lower level, so as to [have] better access.

Yet another student makes a more general comment about the museum, but without specifying, however what she means exactly:

I didn't like the fact that no particular attention had been paid to certain significant monuments, while it should have been, as they constitute very important elements of our civilization.

In all, the responses to this question seem to point to a difficulty on behalf of the survey's participants to apprehend the exhibition as a whole (or possibly to uphold a negative opinion, fearing that this would reflect adversely on how their answers would be assessed, in a rather childlike manner) given that, with the exception of the three cases mentioned above, they focalized on individual artefacts or stated that everything was to their liking.

Question 6: What impressed you the most among all you saw?

Most of the subjects opted for the human remains (14 respondents). One of the students stated characteristically:

The graves and the findings they unearthed containing human bones.

The choice of the graves and skeletal remains as being the exhibit that impressed them the most is possibly related to the interest in death in a society such as ours, which hastens to shield people from anything relating to it, and thus the museum is, finally, one of the few places where they can satisfy – even if only partially – this interest. Some even say that museums are the place *par excellence*

to provide education on the subject of death, as it is in these that objects relating to death such as grave offerings for example are kept, which offer an opportunity to treat issues such as burial customs, faith and relevant beliefs (Silverman, 2010, p. 84-85). Also, it has been noted that the exhibition of human remains serves the purpose for visitors to realize that the people who lived well before our times truly did exist and are not solely pictures in books (Stone and Molyneaux, 1994, p. 199).

Question 7: Select an exhibit that impressed you the most, giving the reasons of your choice

On the whole, the responses to this question (12 students) focused mainly on the combined effect of the lack of display cases and the existence of thematic modules, which were considered as allowing a better understanding of the exhibition's *raison d'être*. However, the answers of three teachers-to-be stand out and are worth mentioning, as they point to an effort to assimilate the museum experience.

One student selected more than one artefact and said:

The exhibit that impressed me the most was that certain statuettes had traces of colours on them, as well as certain seals that show they may have practised tattooing as of then [...]

and went on mentioning the house models from Kranona (cf. Fig. 2): *Also, the houses, which were painted, as well as the various tools, which show that they carried out various daily chores.*

Another student selects

[...] the jewellery, which symbolized power, strength and wealth, once again proving that the stereotypes visitors are burdened with, the messages they attribute to the exhibition or to the exhibits in certain cases overshadow the exhibition and the messages that the curators wish to convey. In fact, the specific ornaments she refers to are made of raw materials which are abundant in Nature and/or require relatively little elaboration, e.g. clay, shells and certain stones.

The jewellery, the statuettes and the paintings on the vases impress another student, who nevertheless does not offer any explanation as to the reasons of her choice. What impressed yet another student the most was the stratigraphy section, while in her response she also employs the archaeological terminology:

[...] the stratification of the soil with the corresponding fossilized shells.

Question 8: Would you visit the museum again? Why?

All the students answer in the affirmative, but nevertheless cite different reasons for doing so:

So as to better observe each exhibit [...], most of them answer (17 students) while a more “utilitarian” response was offered by a student who focused on an impending paper she had undertaken to write in the context of another course.

Conclusions

Although the sample with which the survey was carried out was small, differences were observed as regards the quality of the written responses. Most of the questionnaires handed in were answered hastily, despite the fact that the number of questions was relatively small. In certain cases, the answers were not substantiated, even though this had been asked for in the question's formulation. Both of these elements reveal an inadequacy of expression and justification of their opinion, which possibly denotes a degree of embarrassment. Sometimes, the hasty completing of the questionnaire leads to syntax errors in the formulation, speech patterns closer to the oral than to the written form, and the use of a meagre vocabulary. However, two students in particular not only observed the exhibits with specific attention to details but also completed the questionnaire assiduously, making an effort to assimilate the archaeological terms they had come across in the exhibits' captions and reproducing them in their answers.

The students characterized the visit to the museum as being a pleasant experience, but focused essentially on the learning benefits resulting from it. On the whole, it appears that they tried to benefit from the visit, possibly taking into consideration the context in which it was realized, i.e. as a visit forming part of the curriculum of a specific university course. The act of treating the visit almost exclusively as a learning process, as outlined in most of the responses of the participants in the present pilot survey, possibly derived from the fact that the public it was addressed to is composed of individuals who jointly attend an establishment of formal education. For this reason, maybe, the visit was imbued with a learning tendency, which seems to have overshadowed the entertainment and social dimensions of the experience. In other words, we assume that, when they visited the museum, the students were unable to divest themselves of their role as members of a formal education group. This resulted in the fact that the majority of them focused on the museum's cognitive/learning dimension, on the whole placing on a secondary level its other, equally important dimensions, such

as the entertainment and social aspects of the visit (Falk and Dierking, 2000) and only one subject underlined the visit's social nature. From their answers, it appeared that the students apprehend the museum as a space of knowledge, as the place where they can draw information about the past. This element resulted in the careful observation of the exhibits, as well as in their effort to understand them with the aid of the visual/supporting material.

However, although they acknowledged that the grouping of the artefacts into modules contributed to understanding their function, and even though they observed them trying to perceive their use with the help of the visual material, in their great majority the students who participated to the survey pointed out that they would have appreciated the exhibition more, had they had some knowledge of the Neolithic civilization before visiting the museum.

Additionally, it is noteworthy that the students did not exploit in the least the national ethnographic parallels, i.e. the photographs of people occupied in traditional crafts, so as to be helped in understanding the exhibits. It appears that the photographs of agricultural Greek people of the 1950s were also considered as "museum pieces" by the specific group of public, probably because they are totally foreign to their own reality. Thus, these photographs did not act as a connective tissue in understanding the parallelism between agricultural life in Greece in the 1950s and the Neolithic agricultural life in the Thessaly plains. Consequently, these photographs, topical almost up to the time of the exhibition's creation in the 1970s, today constitute images of a very distant past, especially for those born in recent decades and brought up in urban centres. Similarly, the participants in the present research had difficulty in perceiving the use of simple, utilitarian objects such as needles, arrows, etc., possibly because education – whether the formal one at school or the informal/non formal one within the family – focuses essentially, if not exclusively, on the acquisition of "academic" knowledge, cut off from reality, ignoring aspects of everyday life and technical civilization. It is this "void" that museum educational programmes aim to fill, especially those treating technical civilization issues, and try to familiarize children with their different aspects.

A common characteristic of the responses to the questionnaire is that all the respondents declare they would like to have some knowledge of the subject matter of the exhibition they are about to visit. In other words, one detects a widespread bias concerning the premises of the museum, according to which the museum is

addressed to the “initiated”. This could be explained by the fact that they rarely visit museums and, as a result, have no confidence in themselves to read and decipher the museum’s language. In other words, the fact that they do not possess the “cultural capital” (Bourdieu and Darbel, 1997), even in the case of a visitor-friendly museum, as they themselves call it, means that they need an “intermediary” between themselves and the exhibits in order to understand what they are viewing. Also, as can be seen from their answers, they can be characterized as museum *non-visitors* (Merriman, 1991, p. 103), therefore they have not conquered the “cultural capital”, whose possession, finally, appears to constitute a necessary prerequisite for the “reading” and the understanding of museum exhibitions in general, and even of modern exhibitions (such as the one in question), which have been designed with the mainspring of being comprehensible by all. This issue acquires a particular importance given that the students, as future educators, will soon be called to provide a “bridge of mediation”, or a “scaffolding”, in the sense given by Vygotsky,⁶ even if they are not obliged to teach nursery school children a specific history curriculum. This observation acquires an even greater significance because of the type of exhibition they visited, as the exhibition in the Hourmouziadis Hall at the Athanassakeion Archaeological Museum of Volos has a strong educational character, as discussed above. Therefore, despite the fact that most students stated that the existence of exhibitory modules helped them to understand the exhibition itself, many of them stressed the need of a mediation between themselves and the exhibits, as proved by the following response to the question of whether they would visit the Museum again:

I would go again ... in the company of someone who could explain what we are seeing.

Also, stereotypical perceptions and biases were detected with respect to the past. One student wrote that the jewellery of the

⁶ Vygotsky’s theory on the Zone of Proximal Development (ZPD) is a contribution of prime importance to psychology and teaching. Indeed, it is generally acknowledged that important differences exist among individuals, both as regards their rate of development and with respect to their cognitive capacity. Vygotsky considers that the cognitive-learning potential of each individual can be enriched by the contribution of his environment, meaning that each child possesses a specific cognitive level but, via the mediation of his teacher, parents and peers, he can be led, through interaction, to a superior cognitive level than the one he possesses on its own. The difference between the pre-existing cognitive level and the one the child acquires through guidance is called Zone of Proximal Development (ZPD). In other words, ZPD is the difference between what the child can achieve on its own and what it can acquire/conquer if helped. This theory has a fertile field of application in collaborative teamwork teaching (Vygotsky, 1978).

Neolithic Era “symbolized power, strength and wealth”, disregarding the fact that, in their great majority, they are made of simple materials abundantly encountered in Nature. These opinions point to the fact that the messages the visitors themselves attribute to the exhibition and the exhibits in certain cases overlay the exhibition and the messages the curators wish to convey. Therefore, answers of this type, which are not based on the exhibits themselves and the data, but on the visitors' already formed perceptions, demonstrate that stereotypes can become an obstacle, both initially in the careful observation of the artefacts, and later on, in their interpretation.

Consequently, we can assert that the activation of the visitors' interest constitutes a challenge for the curators – even of the most successful exhibitions. In particular, an important challenge is to activate the visitors' interest to such a degree that they ask themselves questions not only about the past as presented by the curators, but – something even more difficult perhaps – about their own perceptions and references, knowledge and biases. Another issue is the extent to which the visit of a museum exhibition can contribute to the construction of critical thought and to understanding the existence of different viewpoints about the – in the present case, archaeological – exhibits.

In conclusion, learning through objects does not seem a usual practice of the educational system in Greece. This could be explained by the fact that organized educational visits to museums are relatively rare. This is regrettable, because these could lead to acquiring the corresponding “cultural capital”, which would help visitors to understand the museum's “language”. In the case at hand, the educators could become, in the future, helpful supporters in the education of their pupils through objects, which, in any case, are an important source of knowledge and pleasure for people of all ages. Given the small sample used in the present research, this conclusion, as well as the preceding ones, should be verified on the occasion of other investigations.

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Does a summer camp favour the relationship with the museum?

Magaly Cabral

Presentation

This research aimed to verify how the participation of children in the Museum of the Republic's Summer Camp favours their relationship with the Museum. Some children participate or participated to the Summer Camps for years in a row and now, not having any more the age to participate, they take their younger brothers and sisters to it or even just visit the Summer Camp.

Introduction

The Museum of the Republic in Rio de Janeiro is the former residence of the presidents of the Republic of Brazil. The Palace became a museum and its surrounding gardens/park was also opened to the public. In 2009, the Museum of the Republic decided to revive the Summer Camp for children after a break of several years. It has been organizing the Summer Camp every year since then.

This offer promotes, through playful and creative activities, a special contact with the Museum. It is a different way to interact with it, different from the school visit, for example. Even if the school visit is mediated through a free and enjoyable dialogue, it happens in a context where the choice was not made by the child, but by the teacher. Even when the teacher does not relate the visit to a classroom situation, it is still a school activity. Moreover, as the activity name – Summer Camp – implies, it is a holiday program. Vacation is a time for playing and experiencing pleasure. It is not a

time to “study”. We can’t forget that playing helps in solving problems, developing creativity, physical, perceptual, emotional, intellectual and social capacities. Of course it also favours easy and natural learning. But, on the other hand, our Summer Camp is an activity that is carried out in a museum, and therefore it has a commitment to develop educational and cultural activities too, to encourage knowledge production in the children. This goes without mentioning the overall goal of helping the participant children to know what a museum is.

The Summer Camp

The Summer Camp of the Museum of the Republic always works around a theme. Sometimes it is a theme directly linked to the Museum, for example with a special object. Sometimes these themes are related to the city, such as elections, or to issues being experienced by the children. It offers various activities: visits to the Museum and always more than once, visits to other cultural spaces, recreational activities, creative activities, etc. As said earlier, the planning of the Summer Camp always seeks to balance the educational propositions with games and playful activities. To participate to the Summer Camp is a choice of the child, and if he or she returns the following years, it is because it was enjoyed.

An activity that is always offered during the Summer Camp is to learn about the backstage of the Museum. During this activity, children visit its various sectors and talk with professionals who work in them. This enables the children to know the various professions existing in a museum.

The Summer Camp yearly receives 50 children from seven to eleven years of age. They come from the community around the museum. Some live in the slum near the Museum, others are the children of maids who work in the nearby residences. And others are from the middle-class residents of the neighbourhood. This mix of social origins in the Summer Camp is quite interesting.

The Summer Camp is carried out during the month of January, i.e. during the Brazilian school holidays. It takes place from Monday to Friday from 13h to 17h. It is lead by the educators of the Museum's Education Sector. Provided there are financial resources, someone specialized in recreational and creative activities may be hired to support the regular team of the Museum.

The themes developed for the Summer Camps of the Museum of the Republic since 2009 were as follows:

- 2009 – Children’s play in the Museum;
- 2010 – Carnival in the Museum;
- 2011 – Ecology in the Museum;
- 2012 – The Elector of the Future (year of election for Mayor of the City of Rio de Janeiro);
- 2013 – Rio, World Heritage;
- 2014 – Energy (after the restoration of the old electricity generator of the Palace);
- 2015 – Rio, 450 Years of History (anniversary of the city of Rio de Janeiro).

There are children who participated every year to the Summer Camp since 2009. Many of them can no longer do it because of their age. Nevertheless, they ask to follow its activities because they are sometimes bringing their brothers or sisters who are participating. In 2014, a boy asked to become a monitor since he could no more participate because of his age.

Given the interest of these children to go on participating to the Summer Camps activities, the following question occurred to the Museum's Education Sector team: after attending the camp for four or five years, what relation do these children establish with the Museum of the Republic? Or is their interest limited only to the Summer Camps activities? After reviewing the literature on summer camps, it was realized that many other questions have been studied (see for instance Pasquier and Min, 2014) but not the one addressed here.

The research

We selected 13 children, some of them not being allowed to participate anymore, some of them having done it since 2009. The parents of these children were contacted and sent the questionnaire below for their child to answer it.

Name:
Age:
1 – You participated to the Summer Camps in:
2009 () 2010 () 2011 ()
2012 () 2013 () 2014 () 2015 ()

2 – Which of this (these) Summer Camp(s) did you like most?

- () 2009 – Plays in the Museum
- () 2010 – Carnival in the Museum
- () 2011 – Ecology in the Museum
- () 2012 – The Elector of the Future
- () 2013 – Rio, World Heritage
- () 2014 – Energy
- () 2015 – Rio, 450 Years of History

3 – Had you ever visited the Museum of the Republic before participating to the Summer Camp?

Yes () No ()

4 – If you answered yes, what did you like most when you visited the Museum?

5- If you answered no, after participating to the Summer Camp, what did you like most in the Museum?

6 - After participating to the Summer Camp(s), did you happen to visit the Museum of the Republic or to attend to some of its activities?

Yes () No ()

7 – If you answered yes, what did you do? (you can mark more than one answer)

- () Visiting the Museum itself
- () Visiting new temporary exhibitions
- () Participating to educational activities for children in the Garden
- () Participating to different activities in the Garden for children and adults (music, theatre, story telling, circus, etc.)

Ten of the 13 children selected answered the questionnaire. These ten children had participated to the Summer Camps as follows:

2009 to 2012 – João¹
2009 to 2014 - Antônio (in 2014 also as monitor) + Janine
2010 to 2014 – Pedro
2011 to 2015 – Susana + Francisco
2012 to 2015 – Paula + Maria
2013 to 2015 – Lúcia
2014 and 2015 – Larissa

The preceding list shows that the majority of the children involved in the Summer Camp and answering the questionnaire had participated to four or more of them, and that only two had participated to two or three sessions of the Camp. So one can say that the majority of the children had a good knowledge of the Camp activities, but also of the Museum of the Republic, its sectors and the various kinds of professionals working in it.

The results

The results will be presented in relation with each question of the questionnaire.

Question 2: Which of the Summer Camp(s) did you like best?

Three out of four of the 2009-2014 children choose the “Carnival at the Museum” theme. As for the 2010-2015 group, four out of seven elected the “Rio, 450 Years of History” theme, and three pointed out the “Energy” one. So one can say that the selection of the children varies and that there is no real favourite amongst the themes.

Question 3: Had you ever visited the Museum of Republic before participating to the Summer Camp?

The answer is very clear: only one child had not visited the Museum of the Republic before participating to the Summer Camp. So the children were at least a little familiar with the Museum.

Question 4: What did you like most when you visited the Museum?

Only five children answered something related to museum themes, but all of them cited President Getúlio Vargas’ bedroom², clothes, etc. Four children referred to the Garden, while one did not answer the question. Looking at these results, it seems that only the President

¹ This name and the following ones are fictitious.

² The room in which President Vargas committed suicide remained unchanged since then and is one of the most famous highlights of the museum for adults as well.

Vargas' belongings had the favour of all the children. As for the rest, the children made a variety of choices.

Question 5: If you answered no, after participating to the Summer Camp, what did you like most in the Museum?

The only child who had not visited the Museum before the Summer Camp pointed the frames of the paintings. It sounds a queer answer, and it would have been interesting to interview this child in order to understand exactly what she meant.

Question 6: After participating to the Summer Camp(s), did you happen to visit the Museum of the Republic or to attend to some of its activities?

All the nine children who had already visited the Museum of the Republic before attending the Summer Camps continued to do so. And the only child who had not visited before still did not after participating to the Camps. Once again, it would have been interesting to interview this child in order to understand why she did not come back to the museum. Would it be because she really did not like what is in a museum, or especially in the Museum of the Republic? Or was it for totally other reasons?

Question 7: If you answered yes, what did you do? You can mark more than one answer.

The same nine children mentioned that they participated to activities realized in the museum, like visiting it (six) or visiting new temporary exhibitions (seven), but also they said that they had participated to educational activities taking place in the Garden (three) or to activities such as music, theatre, story telling, circus, etc. (four). Considering this variety, one gets the impression that these children behave like frequent adult visitors. So one is allowed to ask why? Is it because they developed a taste for museums or because they got attached to the Museum of the Republic, the latter having become to a certain extent "their museum"? And once again, it would have been interesting to interview them to deepen the understanding of their answers.

Conclusion: questions and perspectives

The results presented above show that the children who start frequenting the Summer Camp of the Museum of the Republic come

back, and sometimes come back many years in a row. It is tempting to say that this is because they like the activities offered by the Camp and the balance between the educational and the playful ones. The fact that one of them wanted to become a monitor certainly indicates a kind of attachment to the Camp, probably to the Museum and perhaps to museums in general. Results obtained in a similar investigation at the *Biodôme de Montréal* also show an attachment, but the attachment is to the environmental phenomena rather than to the institution itself (Bénard and Dutoyer, 2006; Granet and Samarakoon, 2008; Hautemanière and Michel, 2007; Huet and Passieux, 2009).

As for developing an intensive "museum practice", like what has been seen with all the children except for one, it is totally rejoicing. The notice given by one child's mother is very interesting: her son started to be more interested in museums in general. So it would be very profitable to understand which factors exactly (may) account for the development of this interest.

Regarding the child who did not return to the museum once the Camp was over, one has to say that she participated to only two of them. So one should check if she comes back for other ones and if she develops a taste for the Museum like the other children. If this is the case, it should mean that having the same children many camps in a row is very important and it would be interesting to pinpoint how the taste develops. Still considering this particular child, one should also check if there are children who, in spite of participating to many camps, do not become museum *habitués* because it is the playful activities that attract them, and whatever one does with them, they do not turn frequent museum visitors.

As a concluding remark, one should underline the very small size of the sample selected for the investigation described above. It may not be representative of all the participating children. So although its results are very interesting, one should be careful and consider them rather like hypotheses that could lead future researches. Regarding these researches we have seen many times that having detailed interview with the children would greatly help understanding the various benefits for them to participate to the Summer Camp. We have also seen that this sort of interview should help identify the sources of the benefits and how they act.

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Public opinion survey of users of the Gardens of the Museu da República in Rio de Janeiro

Rosane Maria Rocha de Carvalho

Introduction

In 2014, the Director of the Museu da República in Rio de Janeiro requested a new survey to be carried out. This survey was focusing on the public who frequents the Museum's Gardens to verify if there had been any changes compared to a previous survey conducted in 2009 (Carvalho). The Museum team wanted to identify which activities should be developed to attract people who just use the Gardens to visit both the long and short term exhibitions, i.e. the core of the institution's activity. The Museum's Director believed that an understanding of the needs and desires of the public through surveys was essential to understanding how to guide the Museum's future actions.

Methodology

The methodology was designed according to the following stages: identifying the groups to be interviewed, choosing an appropriate time to do the research, a quantitative and qualitative approach to the investigation, elaborating a questionnaire, deciding the size of the sample, categorizing and analyzing the answers to the questionnaire.

Identification of sub-groups to be studied and timing of the research

An earlier 2009 survey identified 17 groups of Gardens users, verified the frequency of their use, their purpose, and the approximate number of each type of user on different days of the week. The intention

was to differentiate between actual users of the Gardens and those who were only passing through.

In the current study, the Museum Director chose to interview only seven of these groups, namely: passers-by, mothers using the playground, elderly sitting on benches, groups of people singing, movie-goers, frequenters of the bookstore, the cafe and the bistro.

Since the Museum was installing in the Gardens an exhibition called *Connections: Inside Outside*, to be announced on banners with photos of the different exhibition spaces of the Museum to encourage park goers to visit it, it was decided that the best time for public research would be between September the 22nd and November the 12th 2014, whence the exhibition was taking place. The exhibition was announced in the Gardens' main pathway, and the banners affixed to the stately Royal Palm Trees up until October the 30th. After this date, it was moved to an adjacent path, also popular with the public, since much of the main path was hosting an event called *A Spring of Books 2014*. Museum staff felt this change would not interfere with the announcement.

The announcement in the Gardens was corresponding with the information displayed on the Museum website:

"The Exhibit: *Connections: Inside Outside* aims to stimulate new ways of looking at and thinking about the connection between the outside and the inside of the museum, between the street, the Gardens and the Palace itself. Starting on September 22nd, it will be announced in the main path of the Historical Gardens of the Museu da República. Thirteen panels with images of inside the Palace itself, the Museum, and poems to build a bridge between the outside and the inside, between the Museum, the Gardens and the street, will be posted in the Gardens. The Ministerial Hall, the bedroom where President Getúlio Vargas committed suicide, the Moorish Hall, the Chapel room, the Grand Hall, the exhibition *Memories of the Palace* during the original ownership of the Baron of Nova Friburgo, all the poetics and the history of the Museum and its collections will invade the Gardens, looking for, finding, doing and undoing connections with its visitors. Everyone is invited and even better, challenged to visit the Catete Palace itself to become acquainted with the other collections of the Museu da República and create new connections."

As a supplementary stimulus to the website, a multimedia interactive link was added to the exhibition on display coded in flash.

The researchers were asked by the Museum Director to interview the group of *passers-by* while seeing the banners as well as other

groups in the locations they usually frequent: *mothers using the playground, elderly people on benches, singing groups, movie-goers and frequenters of the bookstore, the cafe and the bistro.*

Quantitative and qualitative survey

It was decided to conduct a quantitative and qualitative survey, using structured questionnaires with closed questions to get the participants (Gardens users) profile as well as open questions to get their opinion. The latter were written in such a way as to encourage a more relaxed and complete response and allow researchers to identify interconnections, possible approaches and points of interaction. The research was done largely by an interviewer who had participated in a previous qualitative research inside the Museum and by two interns in History and Education.

The questionnaire

The questionnaire was created after discussion with the Museum Director to anticipate questions or issues. It sought to find out if users had noticed the different communication actions implemented by the museum in the Historical Gardens and if these actions had stimulated them to visit the museum and its exhibits.

Survey of visitors to the Historical Gardens of the Museu da República	
Questionnaire for Gardens users:	
Date: __ / __ / __ Time: __	
Groups interviewed in the Gardens	
<input type="checkbox"/> passers-by	<input type="checkbox"/> movie-goers
<input type="checkbox"/> mothers using the playground	<input type="checkbox"/> bookstore frequenters
<input type="checkbox"/> elderly sitting on benches	<input type="checkbox"/> Cafe frequenters
<input type="checkbox"/> singing groups	<input type="checkbox"/> Bistro frequenters
1. Personal data	
Gender:	<input type="checkbox"/> female <input type="checkbox"/> male
Age:	_____ years
Education:	_____
Neighborhood where you live	_____
Occupation	_____
Neighborhood where you work	_____

2. Your activity here in the Gardens is...

() frequent () occasional () rare

3. If it is frequent, which is the frequency?

Days: _____ Time of the day: _____

4. Two banners were posted on the Gardens' entrance railings with information about the exhibition *A Res publica brasileira* and Museum hours. Did these banners invite you to visit the exhibition and the Museum?

() yes () no (if "no", go to question 9)

FOR PERSONS WITH POSITIVE ANSWERS (OR FOR THOSE WHO HAD ALREADY VISITED THE MUSEUM)

5. Have you already visited the exhibition "A Res publica brasileira"?

() yes () no

6. Museu da República opened an exhibition about President Getúlio Vargas. Do you intend to visit it?

() yes () no

7. When have you visited the museum for the last time?

8. What was the main reason of this last visit?

() knowing the Museum

() bringing friends or relatives

Other _____

IN CASE OF NEGATIVE ANSWER TO QUESTION 4 (OR FOR THOSE WHO HAD NOT ALREADY VISITED THE MUSEUM ASK QUESTION 9)

9. Why not?

10. What would influence you to visit the Museum? Give us some suggestions.

11. The Museum has proposed more integrative activities between the Gardens and the Museum: exhibitions, book fairs, invitations to Museum guided visits. Did you notice these activities?

() yes () no

12. And now, this new exhibition *Connections*, announced in the center of the Gardens, does it motivate you to visit the Museum building inside?

() yes () no

ONLY FOR THOSE WHO WENT TO THE MOVIE THEATRE

13. Did the small advertising film about the Museum presented at the beginning of the movie session stimulate you to visit the Museum?

() yes () no

14. Do you know the Museum activities program: its exhibitions, outdoor debates, etc.?

() yes () no

15. If there were a digital large screen next to the Movie theatre with information about the Museum program - exhibitions, debates, films, cultural events - do you think this would encourage you to attend any of these activities?

() yes () no

Which activities? _____

16. Are you aware that the Gardens are part of the Museu da República which is a federal public institution, with opening and closing hours and terms of use?

() yes () no

17. The Gardens open only because they depend on the Museum employees, security guards and budget.

A. What would you do if the Gardens closed?

B. And what would you do if the museum closed, keeping the Gardens open?

The sample

The sample chosen by the Museum Director contained 256 interviews with Gardens users. The interviews began on October the 15th, and continued until November the 29th 2014. The *bistro* segment was discontinued due to the negative reaction of regular customers to responding to the interview questions, their small number, and an article published at the beginning of the interview process in the most

important newspaper in Rio, *O Globo*, entitled *Museum food without art*. This article criticized the quality of the food and the Bistro service, causing the volume of customers to fall. The cancellation was decided with the Museum Director.

Categorization and analysis of the answers to the open questions

In the empirical research, 224 of the 256 interviews were considered valid, the difference between the two numbers corresponding to the cancellation referred to above. It was chosen to tabulate, analyze and present each separate category in order to offer the Museum a clear view of each, and identify those that are more likely to be receptive to any proposed action in the Gardens. This segmentation also allowed for the differentiation of activities to be implemented for each group.

In the analysis of data, we took into account the intention of the Museum Director to assess what had changed in the opinion of the people interviewed since the 2009 research. As is well known in the study of public opinion, several factors influence the responses obtained, such as the location of the interview, how the respondents are approached, their profile, including data such as gender, age, education, occupation and place of residence. We took into account these factors in order to be able to compare the results of the present research with those from the original 2009 survey, so we had a solid basis for a comparison.

In the literature on public studies, some authors like Bourdieu and Darbel (1990), DiMaggio, Useem and Brown (1978) say that visiting museums is not a spontaneous habit. According to DiMaggio, the habit of visiting museums and cultural activities is formed during the school years, through family and friends. Level of education, social and economic standing also influence museum goers and must be studied as well as public policies at the city, state and federal levels.

In the second stage of the analysis presented in the following section, we present the answers on the central issues of the survey. At the end of this analysis, we should have the respondents' perception regarding the most effective actions to take in order to better communicate with them and encourage them to include visiting the Museum along with using the Gardens.

General results

Remark: The following results are global, i.e. do not distinguish the answers of the various groups identified above.

Question 1: Personal data

Data about gender, age and level of education of the respondents have been gathered.

Gender

One can say that the persons interviewed in the Gardens are mostly female, since they represent 66% of the total. This is a much higher percentage of women than the one found in the population of Rio de Janeiro. According to the Brazilian Institute of Geography and Statistics (2014), the Rio population contains 53,2% of female and 46,8% of male. The high percentage of women in the sample may have been affected in part by the group *mothers using the playground* of which, for obvious reasons, 99% were female.

Gender	Absolute number	%
Female	148	66,1
Male	76	33,9
Total	224	100

Table 1 – Gender of the respondents

Age

One can say that 37% of the respondents are between 21 and 40 years of age, and 35% between 41 and 70. Together they represent 72% of the interviewed persons. This huge group has more women, and relatively high levels of education when compared to the rest of the sample. One can say that the ages are well balanced. This makes sense as the Gardens of the Museu da República, besides offering a series of activities for all ages, is located between three densely populated neighborhoods: Catete, Gloria and Flamengo, and is a secure alternative for open air leisure activities and encounters, according to some of the responses of those interviewed. For these reasons it attracts both young and old ones.

Age	Absolute number	%
15-20	9	4,0
21-30	36	16,1
31-40	48	21,4
41-50	21	9,4
51-60	25	11,2
61-70	33	14,7
71-80	23	10,3
81-90	17	7,6
N.Inf.	12	5,3
Total	224	100

Table 2 – Age of the respondents

Level of education

As for the educational level: 54% of the respondents from the Gardens have a college degree or more (Table 3).

Level of education	Absolute number	%
Illiterate	1	0,4
Elementary	31	13,8
High school	69	30,8
College	99	44,2
Master	12	5,4
PhD.	11	4,9
No Reply	1	0,4
Total	224	100

Table 3 – Level of education of the respondents

Sociologists Bourdieu and Darbel (1990) have already drawn attention to the strong relation between a high level of education and access to cultural works. They say:

“[...] statistics show that access to cultural works is the privilege of the educated, cultured classes. All behaviors of visitors and their attitudes

towards the works displayed are directly and almost exclusively related to education, economic status and prolonged familiarity with the elite culture” (Bourdieu and Darbel, 1990).

Nestor G. Canclini, in his studies with the attending public of the museums of Mexico, observed:

“The high proportion of the attending public with University degrees indicates that the interest in museums [...] increases with the economic, educational level, and a prolonged familiarity with the elite culture” (Canclini, 1989).

Museum Gardens users have a higher education level than the city general population. According to the statistics of the Brazilian Institute of Geography and Statistics (2010), only 20,7% of the people aged 25 years or more – which is the age level most represented in the present research – have more than 12 years of schooling in the metropolitan region of Rio de Janeiro. This is a low percentage considering the size of the population of the city. It also means that the percentage of interviewees of this research that have a college degree or more is much higher than in the general population of the city. Also, looking at the relationship between gender and level of education, we see that a large percentage of women have a college degree or more.

Question 2: Gardens’ utilization

One can say that most of the respondents (64%) report using the Gardens frequently, while nearly 20% use it only occasionally. So it seems that the respondents tend to use the Gardens intensively.

Use of the Gardens	Absolute number	%
Frequently	144	64,3
Occasional	64	19,6
Rare	36	16,1
Total	224	100

Table 4 – Frequency of the visits to the gardens

The frequency of the Gardens utilization could be explained by the fact that it attracts a great number of people who live or work near the museum, which is also the case with the Flamengo Park or the New York Central Park. But while the Flamengo Park is much

bigger than the Gardens, it does not offer the same level of security as the museum Gardens. Indeed the latter are surrounded by a high fence and watched by uniformed security guards. The researchers were able to discover in the interviews that the older age group sought the Gardens to rest, walk and socialize with security.

Question 3: Periodicity

Answers to question 3 show that the majority of the respondents who report using the Gardens frequently use it four times (about 23%), five times a week (about 15%) or even everyday (about 18%). So these results (Table 5) confirm a heavy use of the Gardens.

Frequency in the Gardens	Number	%
Once a week	15	10,5
Two times a week	20	13,9
Three times a week	16	11,2
Four times a week	33	23,1
Five times a week	22	15,4
Everyday	26	18,2
Weekend	3	2,1
Once a month	8	5,6
Total	143	100

Table 5 – Frequency of the visits to the Gardens

Question 4: Did the banners invite you to visit the exhibition and the museum?

70% of the respondents answer positively to this question, leaving only 25,5% who say “No” and 4,5% who do not respond.

The use of the banners on the railings next to the two gates with information about the exhibition *The Brazilian Res Publica*, and the Museum opening hours are among the several things the Museum Director uses as ways to communicate with the people frequenting the Gardens and attract them to the Museum and its exhibits.

Many respondents say that they feel enticed by the banners that advertise temporary exhibitions and the opening hours, but they have not always seen the exhibition shown in the Museum. Some still hold the belief that they have already visited the Museum. This reflects the old misconception that museums don’t have new

exhibitions. But the responses indicate that many view the banners on their path as an important way to encourage people to go inside the museum. So this form of promotion should continue.

The banners are a good form of promotion. They have a good visibility and the researchers team sees them as an effective incentive for greater participation and more visits to the Museum. The researchers suggest their use to be continued, as well as introducing displays about the exhibitions distributed in the Gardens near to the places where the visitors congregate.

Question 5: Have you already visited the exhibition *A Res Pública Brasileira*?

66% had visited it, which leaves 33% who had not and 1% who did not answer. This positive response shows cultural interest, which makes sense given the high degree of education that predominated in those interviewed.

In fact, since a long time museum managers have discovered that there is a relation between the habit of visiting museums and frequenting other cultural offers such as the theatres, films, concerts, etc. (Bourdieu, 1986).

Those who had not visited the exhibit responded "No" for a variety of reasons such as age, accessibility or lack of interest (they had seen before).

Question 6: Museu da República opened an exhibition about President Getúlio Vargas. Do you intend to visit it?

In their majority (70%), Gardens users answered that they intended to visit it, 25%, that they did not and 5% didn't answer. This question was addressed to the interviewees because the Director of the Museum of the Republic wanted to know if the public was aware of this new exhibition and if they were going to visit it, since the President was very popular in his era.

Question 7: When have you visited the Museum for the last time?

This question brought such a variety of answers that the researchers did not even succeed to identify categories.

Question 8: What was the main reason of the last visit?

The researchers received 152 reasons. These could be regrouped in the categories indicated in Table 6. The most frequent categories of answers seem to be by far bringing friends (about 47%) or knowing the museum (23%).

Main reason for last visit	Absolute number	%
Bringing friends and relatives	71	46,7
Know the Museum	35	23,0
No answer	21	13,8
Visit exhibit again	10	6,6
Visit the exhibition	5	3,3
School visit	3	2,0
Curiosity	3	2,0
Tourism	1	0,6
Visit with students	1	0,6
Stroll	1	0,6
Elderly people	1	0,6
Total	152	100

Table 6 – Reasons for visiting the Museum

Question 9: Why not?

In case of a negative answer to question 4, and for those users who had not visited the museum yet, question 9 asked the reason for it. The first three categories that cumulate nearly 80% of the answers could be interpreted as a lack of interest.

Why haven't you visited?	Absolute number	%
No answer	16	35,6
No interest	11	24,4
I don't know	7	15,6
I haven't seen the banners	4	8,9
My focus is the Gardens	3	6,7
My goal is meet people and walk	2	4,4
I knew already, no curiosity	2	4,4
Total	45	100

Table 7 – Reasons for not visiting the Museum

According to DiMaggio, one sees again that the habit of frequenting museums and cultural activities is formed while people are young, at school, within the family and with friends. A high percentage of those who expressed a lack of interest in taking advantage of the cultural side to the Museum were still interested in fully taking advantage of the beautiful Gardens.

Question 10: What would influence you to visit the Museum? Give us some suggestions.

The meaning of the two first categories of answers (Table 8), which represent about 60% of them, is very difficult to interpret. Most of the other answers indicate aspects on which the Museum could act, for instance, by providing more information about the programs, new exhibitions, family activities or activities for the children. As the research team observed that users don't seem to like to enter the museum palace and express their preference for outdoor cultural programs, it could be interesting to develop activities for them, the majority taking place in the Gardens.

What would influence you to visit	Absolute number	%
No answer	24	45,2
I don't know	9	17,0
Information about programs	8	15,1
More time	4	7,5
Friends	2	3,8
Information about elevators	2	3,8
New exhibitions	2	3,8
Family activities	1	1,9
Interactive activities with kids	1	1,9
Total	53	100

Table 8 – Potential incentives to visit the Museum

Question 11: The Museum has proposed more integrative activities between the Gardens and the Museum: exhibitions, book fairs, invitations to Museum guided visits. Did you notice these activities?

The majority of the respondents, 80%, noticed them, 2% did not, and 9% did not answer. So one can say that the majority of the

people interviewed were aware of the integrative activities organized by the Museum. Amongst the ones who did notice, some said that they even participated to activities like the Green Nature event or the Book Fair. But also some underlined that knowing more in advance the details of the Museum programing would help organizing themselves more easily and attend to a greater number of activities. So the researchers recommend that the Museum develops a specific communication for the Gardens.

Question 12: And now, this new exhibition Connections, announced in the center of the Gardens, does it motivate you to visit the Museum building inside?

As many as 61,1% of the respondents said yes, 37,9% said no, and 1% did not answer. So the exhibition *Connections: Inside Outside* seems to have been effective. Unfortunately, it remained in place only for a short period of time (52 days) because it had to move and leave place to the Spring Book Fair. The researchers wonder what would have been the influence of the exhibition on the Museum frequentation if it had stayed in place longer?

Question 13: Did the small advertising film about the Museum presented at the beginning of the movie session stimulate you to visit the Museum?

On the whole, 78% of the *movie goers* considered that the short film about the Museum presented at the beginning of the movie session stimulated them to visit the Museum, 9% were not affected, and 13% did not answer, many of them because they arrived late to the movie and did not see the short film. The ones who answered positively added that this was a great initiative. Therefore the researchers advise the Museum to go along using this communication means.

Question 14: Do you know the Museum activities program: its exhibitions, outdoor debates, etc.?

Few people (38% of the respondents) knew the Museum programing, the majority did not (59%), and 2% did not answer the question. The majority who did not know offer comments like: "*Here there is no information*", "*Could the museum promote its activities better near the Praia do Flamengo?*" or "*There is very little publicity*". The researchers think that these comments mean that the Museum information should be displayed preferably where people circulate or congregate in the Gardens.

Question 15: If there was a digital large screen next to the Movie theatre with information about the museum program - exhibitions, debates, films, cultural events – do you think this would encourage you to attend any of these activities?

The majority of the respondents (90%) answered positively, only 10% did it negatively, with 1% who did not answer. As we have already seen and are seeing again, the main request of the Gardens users is for more promotion of the Museum's cultural agenda, and its diffusion through different means and media. As the 2009 survey offered approximately the same results, the researchers believe that installing a screen beside the movie theatre would be a positive initiative.

Question 16: Are you aware that the Gardens are part of the Museu da Republica, which is a federal public institution with opening and closing hours and terms of use?

The majority of the people interviewed (82%) did know this information. Only 17% did not and 1% did not answer. This high rate of positive answers is of great importance because in the 2009 survey, while there was no posting, it was observed that most of the users of the Gardens thought that they were a City property, without any strict regulation. This observation makes us suggest that it is appropriate for the Museum to keep posting that the Gardens are the Museu da República's property, with strict opening hours and terms of use.

Question 17: The Gardens open only because they depend on the Museum employees, security guards and budget.

A. What would you do if the Gardens closed?

B. And what would you do if the Museum closed, keeping the Gardens open?

Remark: This double question is inspired by what Flanagan (1954) called the "critical incident" technique. It is useful when one wants to identify attitudes, motivations or feelings without the interviewee being embarrassed. The aim is that he could talk freely, abundantly, in order to help the researcher to capture his real feelings.

A. What would you do if the Gardens closed?

Nearly 70% of the answers express regret in one way or another, and almost 20% include an evident intention to protest. The content of these answers underlines the pleasure derived from the Gardens because it is a green space that allows contact with nature, and to a

certain extent explains the sadness of loosing it, indignation and the intention to protest. Those who respond they would go somewhere else could be seen as expressing more or less the same thing but using other words. Finally, the 8% saying that they would visit the Museum is encouraging because it indicates a further potential of action for the Museum.

If the Gardens closed	Absolute number	%
Bad idea, would be sad	66	31,6
Would go somewhere else	40	19,1
Would protest	36	17,2
Would visit the Museum	16	7,7
A shame, would miss it	15	7,2
Would be a loss	13	6,2
I have no idea	9	4,3
This is my yard	6	2,9
Having both is important	6	2,9
No answer	2	0,9
Total	209	100

Table 9 – What would the respondents do if the Gardens would close?

B. What would you do if the Museum closed, keeping the Gardens open?

Here as well as above, the respondents express regret (approximately 45%) and some answers include evident intention to protest (approximately 15%). But almost 30% expresses its preference for the Gardens themselves. So the museum team should take this data into account while planning the cultural activities offered in the Gardens.

And if the Museum closed	Absolute number	%
I would come to the Gardens	60	29,0
Having both is important	38	18,4
Would protest	31	15,0
Bad idea, would be sad	27	13,1
A shame, would miss it	15	7,2
Would do nothing	9	4,3
Don't know	9	4,3
It is important for our culture, history and heritage	8	3,9
Other people would miss	5	2,4
No answer	5	2,4
Total	207	100

Table 10 – What would the respondents do if the Museum would close?

Final considerations

As for the Gardens users who were interviewed, one can say that they are largely women, evenly distributed according to age and in the majority having a graduate degree or more. They live near the Gardens and tend to use it regularly. Finally, they are well aware that the Gardens pertain to the Museu da República that takes care of its security and determines its opening hours.

Considering the Palace or the Museum alone, i.e. without the Gardens, would be inappropriate especially because the public tends to link both. But also it would be retrograde (Seckler, 2014) because it would go against the orientation proposed by two important charters: the *Juiz de Fora Charter* written in 2010 on the occasion of the International Meeting of the Historic Gardens Managers, and the *Florence Charter* produced by the International Council of Museums and Sites (ICOMOS) in 1981. Finally, it seems that this orientation was applied successfully in Rio de Janeiro at the Museu Casa Rui Barbosa. So the Museu da República should continue to host exhibitions on themes that could be treated in the two noble places that are the Gardens and the Museum.

The Museum being responsible for the Gardens, it should not forget that for a large proportion of its users, it is a place of leisure

where they want to relax, walk, bring children to play, taking advantage of the green space and the security it offers because it is fully enclosed, has controlled access and watchful employees. Neither should the Museum forget the users who enjoy its cinema, cafe and outdoor events.

It seems that the promotion means used by the Museum about its activities, mainly the banners installed at the Gardens' entrance, the short film shown before the movie program and a digital large screen announcing the Museum's programs are already or would be well received by the Gardens users. These means could also strongly attract the respondents to question 17 B who said that they were strongly interested in the Museum and its offer.

In the same vein, since many of the users expressed affection for the Gardens and underlined its importance in their lives, developing exhibitions for both inside and outside the Palace, with users personal photographs for instance, would strengthen the ties between them and the Museum. That could bring the latter more attendance and increase its interaction with the local community surrounding the Museum.

Considering the results of this research, the Museu da República managers are now testing other forms of intervention that could strengthen its relation with the whole spectrum of groups using the Gardens and especially the ones who regularly frequent it.

As a proposal for future investigations, we suggest that the Museum continues to analyze the impact of different promotions and efforts that it is using to communicate its programming to the Gardens users. A further step would be for the Museu da República to stimulate the interest of similar museums for doing the type of research presented, as this would make possible comparative studies.

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Abstracts

Résumés

Resumen

Silvia Alderoqui y María Cristina Linares (coords.), Dina Fisman, Graciela Galindon, Adriana Holstein, Daniela Kotliar, Mariana Ladowski, Silvia Paz, Constanza Pedersoli, Mercedes Pugliese, Mariano Ricardes y Laia Ross

Participación y representación de los visitantes en el Museo de las Escuelas

Abstract

Research on collecting the voices of visitors and their representation is a structural axis of the educational policy of the Museo de las Escuelas. Its aim is to design and operate devices and prototypes that will involve visitors, and capture stories and narratives that become visible and evident in the construction of conceptual design and museum exhibitions. The intention is to promote the complex interaction between historical explanation, prospects for the visitors and the experience of visiting the museum. The challenge is how to set the intersection of the memories and individual voices with academic knowledge for mutual enrichment and thus knowledge, voices and experiences of the visitors become part of the heritage story told by the museum.

Resumé

La recherche sur la collecte des voix des visiteurs et leur représentation est un axe structurant de la politique éducative du Museo de las Escuelas. Son objectif est de concevoir et de faire fonctionner des dispositifs et des prototypes qui feront participer les visiteurs, ainsi que de recueillir des histoires et des récits qui deviennent visibles et évidents dans la construction de la conception des expositions. L'intention est de promouvoir l'interaction complexe entre l'explication historique, les perspectives des visiteurs et l'expérience de la visite au musée. Le défi est de trouver le bon point de rencontre entre des souvenirs, des voix individuelles et des connaissances académiques pour leur enrichissement mutuel et donc pour l'enrichissement des connaissances. Les voix et les expériences des visiteurs deviennent ainsi partie intégrante de l'histoire racontée par le musée.

Resumen

La investigación acerca de la recolección de las voces de los visitantes y su representación es un eje estructural de la política educativa del Museo de las Escuelas. Su objetivo es diseñar y poner en funcionamiento dispositivos y prototipos que promuevan la

participación de los visitantes, y la captura de relatos y narrativas que se vuelvan visibles y evidentes en la construcción del diseño conceptual y museográfico de las exposiciones. La intención es fomentar la interacción compleja entre la explicación histórica, las perspectivas de los visitantes y la experiencia de visita en el museo. El desafío consiste en saber cómo configurar la intersección de las memorias y voces individuales con el conocimiento académico para su enriquecimiento mutuo y que de este modo los conocimientos, voces y experiencias de los visitantes, pasen a ser parte del relato patrimonial del museo.

Michel Allard

La fonction éducative dans l'histoire des musées québécois (1824-2015)

Abstract

The history of museum education in Quebec is still in its infancy. Over and above epistemological and methodological issues, the researcher must map out the evolution of museum education. In the early nineteenth century, societies called learned created the first museums for the benefit of their supposedly knowledgeable members. From 1850 on, institutions dispensing education at all levels started museums that were focused on teaching. This was especially true in the realm of the natural sciences. As classification gave way to experimentation, these school museums declined. Meanwhile, the museums created by learned societies had to expand their audience and organize educational activities in order to survive. Since the 1970s and 1980s, researchers and "museologists" have been developing specific theoretical and operational models for museum education. In such a context, museums in Quebec are not only limited to exhibiting artifacts. They also fulfill a mission of education in society in which they are integrated.

Résumé

Au Québec, l'histoire de l'éducation muséale en est à ses premiers balbutiements. Outre les questions épistémologiques et méthodologiques, le chercheur doit établir les grandes lignes de son évolution. Les premiers musées sont mis sur pied au début du XIXe siècle par des sociétés dites savantes à l'intention de membres supposément connaisseurs. À partir de 1850, les établissements de tous les ordres d'enseignement organisent des musées axés sur l'enseignement,

particulièrement celui des sciences naturelles. Au fur et à mesure que la classification cède la place à l'expérimentation, ces musées scolaires déclinent. Quant aux musées des sociétés dites savantes, ils doivent pour survivre élargir leur public et organiser des activités éducatives. Depuis les années 1970-1980, des chercheurs et des muséologues développent des modèles théoriques et opérationnels spécifiques à l'éducation muséale. Dans ce contexte, les musées québécois ne se limitent pas à exposer des objets, mais remplissent une mission éducative au sein de la société.

Resumen

En Quebec, la historia de la educación y de los museos se encuentra en pañales. A parte de las cuestiones epistemológicas y metodológicas, el investigador debe establecer las grandes líneas de su evolución. Los primeros museos fueron abiertos al inicio del siglo XIX. A mediados de este siglo, los establecimientos escolares de todos niveles organizan museos dentro de sus muros, especialmente para la enseñanza de las ciencias naturales. A medida que la clasificación da paso a la experimentación, estos museos escolares declinan. Hablando de museos organizados por sociedades científicas, para sobrevivir, estos deben ampliar el público y organizar actividades educativas. Desde los decenios 1970 y 1980, investigadores y profesionales de los museos desarrollan modelos teóricos y operativos específicos a la educación en los museos. En este contexto, los museos quebequenses no se limitan a exponer objetos sino a cumplir una misión educativa en la sociedad.

Magaly Cabral

Does a summer camp favour the relationship with the museum?

Abstract

Do children who participate to a summer camp offered by a museum for three or more consecutive years become visitors? This is the question that the Museum of the Republic's Educational Service team developed when it was observed that some participants whose age had exceeded the limit (12 years) wanted to work as monitors. Was their relation with the Museum limited to the activities of the summer camp? Or did it enlarge and include other activities to which the Museum invited them to participate?

The research was carried out with participants to the summer camps offered by the Museum of the Republic since 2009. The

conclusion is positive since the children who participated to many camps tend to become visitors of this museum.

Résumé

Les enfants participant pendant trois années consécutives ou plus à des activités de vacances (camp/centre aéré) proposées par un musée en deviennent-ils des visiteurs? Telle est la question que l'équipe du Service éducatif du Musée de la République s'est posée quand elle s'est aperçue que certains enfants dont l'âge avait dépassé la limite permise (12 ans) voulaient y participer en tant que moniteurs. Leur lien avec Musée se limitait-il aux activités du camp de jour? Ou s'élargissait-il à d'autres activités auxquelles le Musée les inviterait à participer?

La recherche a été menée avec les participants des camps de jour du Musée de la République depuis 2009. La conclusion est positive, car les enfants qui participent à plusieurs camps semblent se transformer en visiteurs du musée.

Resumen

¿Se transforman en visitantes los niños que participan durante tres o más años consecutivos en un campamento de verano ofrecido por un museo? Esta fue la pregunta que el equipo del Servicio Educativo del Museo de la República se hizo al darse cuenta de que algunos de los participantes cuya edad había superado el límite permitido (12 años) querían participar como monitores. ¿Su relación con el Museo se limitaba sólo a las actividades del campamento de verano? ¿U se alargaba hasta otras actividades que el Museo los invitaba a participar?

La investigación se llevó a cabo con los participantes de los campamentos de verano del Museo de la República desde 2009. La conclusión es positiva porque los niños que participan a varios campamentos parecen volverse en visitantes del museo.

Nicole Gesché-Koning

The avant-garde of European museum education in Belgium

Abstract

This paper analyzes the pioneering role played by Belgium in European museum education, from Samuel Quiccheberg's treatise on museology to Jean Capart's founding of the first museum education department in 1922, up to further developments within

the 20th C. It is but an introduction to a deeper study on the history of Belgian museum education to be completed.

Résumé

Cet article analyse le rôle de pionnier joué par la Belgique au sein de l'éducation muséale européenne. Partant du premier traité de muséologie de Samuel Quiccheberg, il aborde ensuite la création par Jean Capart, en 1922, du premier service éducatif muséal, et en étudie les développements au cours du XX^e siècle. Il n'est qu'une brève introduction à une histoire de l'éducation muséale belge qui demande à être complétée.

Resúmen

Este papel analiza el rol de pionero jugado por Bélgica en la educación museal europea desde el primer tratado de museología de Samuel Quiccheberg hasta la fundación en 1922 del primer departamento de educación en un museo, siguiendo con el desarrollo futuro de otros departamentos en el curso del siglo XX. Este artículo constituye solo una introducción a una historia de la educación museal en Bélgica a completar.

Fernanda de Lima Souza and Adriana Mortara Almeida ***The History Museum of the Instituto Butantan: visitors' profile and perception***

Abstract

This article aims at describing the Instituto Buntantan's History Museum visitors' profile and analyzing how they perceive its exhibition. The data used for this article was collected by means of interviews with the visitors of the Instituto Butantan Park in 2012, and by observational study with interviews with the visitors of the History Museum in 2013.

Most visitors of the History Museum have university degree, are more than 30 years old, live in the Metropolitan Region of São Paulo and are accompanied by their family. They appreciate mainly the museum objects / scientific instruments. Timing and tracking have permitted to identify the objects that attracted the greatest number of visitors and also those that provoked the longest stops.

By describing the applied methodology and the results, this article proposes to share the challenges of researching the audience of

cultural institutions. It also contributes to public policies focused on improving museums and other public places.

Résumé

Cet article vise à décrire le profil des visiteurs du Musée d'Histoire de l'Instituto Buntantan et à analyser comment ils perçoivent son exposition. Les données utilisées ici ont été recueillies au moyen d'entrevues avec les visiteurs du parc de l'Instituto Butantan en 2012, et d'observations couplées à des entretiens avec les visiteurs du Musée d'Histoire en 2013.

La plupart des visiteurs du Musée d'Histoire ont un diplôme universitaire, ont plus de 30 ans, vivent dans la région métropolitaine de São Paulo et sont accompagnés de leur famille. Ils apprécient surtout les objets de musée / instruments scientifiques. Le procédé dit de *timing and tracking* a permis d'identifier les objets qui ont attiré le plus de visiteurs et ceux qui ont provoqué les arrêts les plus longs.

En décrivant les instruments scientifiques utilisés et leurs résultats, cet article se propose de partager les défis de la recherche sur les publics des institutions culturelles et de contribuer au développement de politiques publiques axées sur l'amélioration des musées et d'autres lieux publics.

Resumen

Este artículo tiene como objetivo describir el perfil del visitante del Museo de Historia del Instituto Buntantan, y analizar cómo el percibe su exposición. Los datos utilizados para este artículo fueron recogidos a través de entrevistas con los visitantes del Parque del Instituto Butantan, en 2012, y a partir de un estudio observacional con entrevistas a los visitantes del Museo de Historia, que tuvo lugar en 2013.

La mayoría de los visitantes del Museo de Historia tienen título universitario, son más de 30 años de edad, viven en la Región Metropolitana de São Paulo, y van al museo acompañados de su familia. Ellos aprecian sobre todo los objetos / instrumentos científicos. Los registros de *timing and tracking* mostraron los objetos que atrajeron a más visitantes y también los que provocaron más paradas.

Al describir la metodología aplicada y los resultados, este artículo se proponía compartir los retos de la investigación de la audiencia de las instituciones culturales, y contribuir con políticas públicas centradas en la mejora de los museos y otros lugares públicos.

Rosane Maria Rocha de Carvalho

Public opinion survey of users of the Gardens of the Museu da República in Rio de Janeiro

Abstract

The results of a survey on people who frequented the Gardens of the Museu da República, Rio de Janeiro, in 2014 are presented in this article. The methodology comprised two stages: the identification of groups of users by type of activity in the Gardens, followed by a qualitative and quantitative survey using structured questionnaires with questions developed to find out both the users' profile and personal opinions. The purpose of the survey was to clarify if those using the Gardens were visiting the Museum and its exhibitions as well, and if not, what might encourage them to do so. The research allowed the Museu da República staff to identify which activities should be developed to encourage this public to take advantage of the museum and its exhibits as well. The theoretical framework included experts in the fields of museology, communication and sociology.

Résumé

Cet article présente les résultats d'une enquête sur les usagers du Jardin du Museu da República de Rio de Janeiro en 2014. La démarche comprend deux phases : l'identification des groupes d'usagers selon leur activité dans le jardin, suivie d'une recherche qualitative et quantitative réalisée au moyen de questionnaires structurés avec des questions visant à obtenir le profil des usagers et des questions ouvertes pour recueillir leur opinion. Cette recherche vise à déterminer si les usagers du jardin du musée avaient déjà ou se proposaient de visiter le musée et ses expositions. L'enquête a permis à l'équipe du musée d'identifier les activités qui devraient être développées pour intégrer ce public et lui permettre de se sentir plus proche des expositions du musée. Cette recherche s'appuie sur des auteurs qui ont publié en muséologie, communication et sociologie.

Resumen

Presentación de una encuesta de los usuarios del Jardín del Museu da República de Río de Janeiro realizada en 2014. La metodología consta de dos fases: la identificación de los grupos de usuarios del jardín, seguida de una investigación cualitativa y cuantitativa a través de cuestionarios estructurados con preguntas cerradas para obtener el perfil del usuario, y preguntas abiertas para las opiniones.

Esta investigación pretende aclarar si los usuarios del jardín han visitado o intentan visitar el Museo y sus exposiciones. La encuesta permitió al personal del Museo da República identificar cuales actividades deben ser desarrolladas para integrar y atraer este público más cercano a las exposiciones del museo. El marco teórico presenta autores de museología, comunicación y sociología.

Ricardo Rubiales García Jurado

Reflexiones desde la educación contemporánea – el visitante en el centro de la acción museística

Abstract

The present text proposes to reflect on the challenges of today's society from the perspective of some educational paradigms. It revises theoretical perspectives and proposes that the museum's educational work urgently includes elements that have transformed today's formal education.

Résumé

Le présent texte propose une réflexion sur les défis de notre société à partir de certains paradigmes des sciences de l'éducation. S'appuyant sur des positions théoriques, il propose que le travail éducatif des musées inclue rapidement certains éléments qui ont transformé l'éducation formelle actuelle.

Resumen

El texto busca reflexionar a partir de ciertos paradigmas de la educación ante los retos de la sociedad actual. Revisa y presenta perspectivas teóricas y propone que el quehacer educativo en los museos requiere incluir de manera urgente ciertos elementos que hoy, han transformado la educación formal.

Alexandra Tranta

Assimilating the museum experience : dimensions of potential museum educators, based on the result of a limited survey among students of Preschool Education

Abstract

This paper presents the goal, method and results of a limited survey among Preschool Education students of the University of Thessaly,

after a visit to the Hourmouziadis Hall of the Athanassakeion Archaeological Museum of Volos. The visit's objective was to approach how one learns in a museum, before utilizing this experience to conceptualize and realize an educational programme for *kindergarten* children. The exhibition was chosen primarily because it is organized in thematic modules without display cases, allowing direct contact with the exhibits. The particular public was selected because, though not a frequent museum visitor, it was called to propose a mediation between the exhibits and the children, i.e. to convey the ability of beginning to "learn how to learn". Following the visit, the students answered a questionnaire composed of open-ended questions about the museum experience. Their answers served to detect deficiencies in the education of future teachers and thus open the way to include museum education as a means of broadening their horizons.

Résumé

Ce texte présente le but, la méthode et les résultats d'une enquête limitée effectuée parmi des étudiants en Education Préscolaire à l'Université de Thessalie, à la suite d'une visite à la Salle Hourmouziadis du Musée Archéologique Athanassakeion de la ville de Volos. L'objectif de la visite était d'aborder la manière dont on apprend au musée, puis de se servir de cette expérience pour conceptualiser et matérialiser un programme éducatif pour des enfants de maternelle. L'exposition a été choisie principalement parce qu'elle est organisée en modules thématiques sans vitrines, permettant ainsi un contact direct avec les objets. Le public spécifique a été sélectionné parce que, bien que n'étant pas un visiteur fréquent de musées, il était appelé à proposer une médiation entre les objets et les enfants, c'est-à-dire à transmettre la capacité de commencer à « apprendre à apprendre ». Après la visite, les étudiants ont répondu à un questionnaire composé de questions ouvertes sur l'expérience muséale. Leurs réponses ont servi à déceler des carences dans l'éducation des futurs enseignants et donc de suggérer l'inclusion de l'éducation muséale comme un moyen d'élargir leur horizon.

Resumen

Este artículo presenta la meta, el método y los resultados de una encuesta limitada entre los estudiantes de Educación Preescolar de la Universidad de Tesalia, después de una visita a la Sala Hourmouziadis del Museo Arqueológico Athanasákeion de la ciudad de

Volos. El objetivo de la visita era de aproximarse a cómo uno aprende en el museo, antes de utilizar esta experiencia para conceptualizar y materializar un programa educativo para niños de parvulario. La exposición fue seleccionada principalmente porque está organizada según módulos temáticos sin vitrinas, permitiendo así un contacto inmediato con los objetos expuestos. El público particular fue elegido porque, aunque no se trata de visitante frecuente de museos, está llamado a proponer una mediación entre los objetos expuestos y los niños, o sea transmitir la capacidad de empezar a “aprender cómo se aprende”. A continuación, los estudiantes contestaron a un cuestionario compuesto de preguntas abiertas respecto a su experiencia museal. Sus respuestas sirvieron para detectar deficiencias en la educación de los futuros maestros y así proponer que la educación museal sea introducida como un medio de ampliar sus horizontes.

Sofia Trouli

Insights into the genealogy of museum education in Greece: early compatible views on the importance of museum education expressed at two international meetings in Athens

Abstract

The present report investigates two little-known international meetings, which took place in Greece in 1905 and 1954: the 1st International Archaeology Congress (1905), and the 2nd UNESCO and ICOM workshop on Museums’ Mission in Education (1954). Both meetings are unique because they gave to the participants the opportunity to exchange ideas on the importance of theory and practice in museum education. They also provided the possibility of exploring the interrelations possible among museums, archaeology, archaeologists, educators, governments, students and visitors. In addition, both meetings raised many issues that even now remain at the top of the agenda of museum education. In the light of this fact, we must respectfully remember the existence of the earliest voices and appreciate the longer “genealogy” of Greek museum education – and accept to be inspired by their ideas and practices.

Résumé

Le présent rapport examine deux réunions internationales peu connues qui ont eu lieu en Grèce en 1905 et 1954. Il s’agit du Premier congrès international d’archéologie (1905) et du Deuxième

stage d'études international de l'UNESCO et de l'ICOM sur le rôle des musées en éducation (1954). Ces deux réunions sont uniques parce qu'elles ont donné aux participants l'occasion d'échanger des idées sur l'importance de la théorie et de la pratique en éducation muséale. Elles ont aussi offert la possibilité d'explorer les interrelations possibles entre les musées, l'archéologie, les archéologues, les éducateurs, les gouvernements, les étudiants et les visiteurs. En outre, les deux réunions ont soulevé de nombreuses questions qui figurent encore aujourd'hui au sommet de l'ordre du jour de l'éducation muséale. À la lumière de ce fait, nous devons nous rappeler avec respect l'existence des premières voix et apprécier la « généalogie » de l'éducation muséale grecque – et accepter d'être inspirés par leurs idées et leurs pratiques.

Resumen

El presente informe investiga dos reuniones internacionales poco conocidas, que se realizaron en Grecia en 1905 y 1954: el Primero Congreso Internacional de Arqueología (1905) y el Segundo Taller: "La Misión de los Museos en la Educación" organizado por UNESCO e ICOM (1954). Ambas reuniones fueron únicas; brindaron la oportunidad a los participantes de intercambiar ideas en cuanto a la importancia de la teoría y práctica de la educación en museos y permitieron explorar las posibles interrelaciones entre arqueología, museos, arqueólogos, educadores, instancias de gobierno, estudiantes y otros visitantes. En ambas reuniones se levantaron muchas cuestiones que aún hoy continúan en la agenda de la educación en los museos. A la luz de esta realidad, debemos recordar, de manera respetuosa, la existencia de voces anteriores reconociendo la larga "genealogía" de la educación en los museos en Grecia – y aceptar de ser inspirados por esas ideas y prácticas.

Maria Esther A. Valente, Andréa F. Costa and Flávia Requeijo
The audience of a science museum and the concept of time

Abstract

Time is a multidisciplinary concept of historical, scientific, and philosophical importance. We refer to time in our daily conversations. It is the theme of songs, poems and different forms of artistic expression. Over the centuries, many philosophers and scientists have studied and thought about time. Given its relevance, the concept of time should be fully explored by science museums. We believe

that science communication in museums can be improved by educational approaches that incorporate historical and philosophical dimensions of science, for they may help visitors understand the social and cultural construction of scientific thought. To achieve these goals we have developed an exhibition about the science and history of time measurement focusing on historical scientific time measurement instruments. The exhibition was followed by an evaluation study. This study has focused on the contribution of historical scientific instruments of science museums to the communication of scientific concepts. The main goal was to understand what the visitors know about the time and its measurement, how they perceived them and how they valued the display of historical instruments in science museums.

Résumé

Le temps est un concept multidisciplinaire d'importance historique, scientifique et philosophique. Nous nous référons au temps dans nos conversations quotidiennes. Il est le sujet de chansons, de poèmes et d'autres formes d'expression artistique. Au cours des siècles, beaucoup de philosophes et de scientifiques ont étudié et réfléchi au sujet du temps. Au vu de son importance, le concept de temps doit être largement exploité par les musées de science. Nous croyons que la communication scientifique dans les musées peut être améliorée avec des moyens éducatifs qui intègrent les dimensions historiques et philosophiques de la science pour qu'ils puissent aider les visiteurs à comprendre la construction sociale et culturelle de la pensée scientifique. Pour atteindre ces objectifs, une exposition a été développée sur l'histoire de la science et de la mesure du temps. Cette exposition a pour thème central les instruments historiques de mesure du temps comme moyens de communiquer des concepts scientifiques. L'exposition a fait l'objet d'une étude d'évaluation. Le principal objectif était de comprendre ce que les visiteurs saisissent des concepts scientifiques – le temps et sa mesure – et comment ils évaluent l'exposition d'instruments historiques dans des musées de science.

Resumen

El tiempo es un concepto multidisciplinar de peso histórico, científico y filosófico. Nos referimos al tiempo en nuestras conversaciones diarias. Es el tema de canciones, poemas y otras formas de expresión artística. A lo largo de los siglos, muchos filósofos y científicos han estudiado y pensado sobre el tiempo. Dada su relevancia, el concepto

de tiempo debe de ser ampliamente explorado por museos de ciencias. Creemos que la comunicación científica en museos puede ser mejorada por medios educativos que integren las dimensiones históricas y filosóficas de la ciencia, para que puedan ayudar a los visitantes a comprender la construcción social y cultural del pensamiento científico. Para alcanzar esos objetivos, fue desarrollada una exposición con base en la historia de la ciencia y de la medición del tiempo con foco en instrumentos históricos de medir el tiempo. La exposición fue seguida por un estudio de evaluación. El estudio se centró en la contribución de instrumentos científicos históricos de museos de ciencia para promover la comunicación de conceptos científicos. El principal objetivo fue comprender lo que los visitantes perciben sobre los conceptos científicos – el tiempo y su medida – y como ellos valoran la exhibición de instrumentos históricos en museos de ciencia.

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Tribute to Daniel Winfree Papuga

Željka Jelavić



Daniel Winfree Papuga (26.02.1955 – 18.05.2015)
Photo: Grgur Žučko

We have sad news to share with you: our colleague and CECA member Daniel Winfree Papuga passed away on May, 18th 2015 at the age of 60 years after a short illness of pancreatic cancer. He was born in California of Ruthenian and English ancestry.

Daniel was a social anthropologist educated at the University of Oslo. He was employed as curator at the Ringve Museum in Trondheim, Norway. He has worked for the Oslo University Ethnographic Museum for a number of years, and served as president of the ICOM International Committee for Museums and Collections of Ethnography (ICME) between 2004 and 2007. Daniel published numerous articles and curated several exhibitions, among them "Farewell – Death and bereavement in multi-cultural Norway". He was active with various projects within pedagogy and management such as editing the quarterly journal PEDIMUS for the educational section of the Norwegian Museum Association, and editing NAFA-NETWORK for the Nordic Anthropological Film Association.

Daniel died in his Croatian home in presence of his life partner Lidija.

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