CALL FOR PAPERS

Multaqa: a Forum for Gulf Museum Educators

The journal of the Gulf Museum Educators Network vol. 3, spring 2017

What role do museums play in the development and expression of Identity in the Gulf Region?

Guest Editors:
Linda M. Abraham-Silver & Sean M. Gaffaney (English); Mona Rashid Al Ali (Arabic)

Museums have long been recognized as the repositories of cultural treasures and places where communities can go to trace their histories, connect the present to the past, and celebrate diversity and multiculturalism.

This third journal edition aims to discuss the nature of identity, be it civic, cultural or ethnic, in the Gulf region and how museums help to shape identities while considering the following questions:
·

Do museums help their communities to develop or define identity, and if so, how?

Contributions from staff working in all areas of museum education (including interpretation, evaluation, accessibility and professional development) and in all types of museums in the Gulf are particularly encouraged. Articles from former staff of Gulf museums will be considered. Articles will require a professional writing style.

Please note: articles which simply outline the work of an educator or education department without a discussion of the contexts which have and do shape the work or impact practice will not be accepted.

Multaqa will be published in full-colour professional electronic format.

If you are interested in being considered as a contributor, please send an abstract of no more than 250 words and a proposed title for your article, along with your name, affiliation/institution, and email address to:

multaqa@gmail.com

by 1 December 2016

Contributors will be notified by 15 December 2016. Abstracts and articles may be submitted in either Arabic or English and will be published in the language in which they are submitted. Articles will not be translated.

Finished articles should be between 1,500-3,000 words inclusive of any citations, references or endnotes, and will be due to the editor by 01 March 2017.

Writing style is professional, and a style guide will be provided to all contributors. Images may be submitted so long as they are pertinent to the text.

DEADLINES

Abstracts closing date: 1 December 2016

Contributors notified: by 15 December 2016

Articles submitted to the editor: 1 March 2017
Multaqa
a forum for
Gulf Museum Educators

vol. 2, autumn 2016

Guest Editor:
Laura Matzer

Multaqa is the professional journal of the
Gulf Museum Educators Network,
published twice a year

© All Rights Reserved.
Copyright of each article remains with
author(s). No article or part thereof, nor
images, may be reproduced in any manner
without written permission from the
author(s), and full citation of original
publication.

All questions concerning article content
and imagery should be directed to
authors. Author email addresses are for
article inquiries only.

All references and links are correct as of
October 2016.

HOW TO REACH US
Gulf Museum Educators Network
gmuseumeducators@gmail.com

Multaqa
multaqa.gmen@gmail.com

This edition of Multaqa was created
using Blurb: www.blurb.com
Typeface: Ubuntu

Image Left:
From article: There’s participation and there’s
PARTICIPATION (p. 5-10)
(Photograph property of Dar al-Athar al-
Islamiyyah. Used with permission.)
Contents

4
Welcome
Laura Matzer

5
There’s participation and
there’s PARTICIPATION
Susan Eileen Day

11
Ektashif: Art through the Senses—Families
shaping museum programmes in Qatar
Claire Dobbin, Alison F. Eardley
and Joselia Neves

20
Technology and the ‘point of experience’:
aspects of CCTV as possible museum
exhibition evaluation and experience
tracker in Qatar
Pamela Erskine-Loftus

28
My Museum Project at Qatar Museums,
Doha, Qatar
Alexandra Bennett and Huda Al Yafai

35
A History of the World in 100 Objects:
An interactive learning and participatory
experience to inspire young minds
Amal Daiban and Dana Al Mazrouei

Inside Back Cover
Call for Papers, Multaqa vol. 3

Guest Editor:
Laura Matzer is the former Head of Education—Arts Content Development/Interpretation at Abu Dhabi Tourism and Culture Authority (2010 to the fall of 2016). She joins the Remai Modern in Saskatoon, Canada as their Learning and Engagement Curator in December 2016. She holds a MA in Art Museum Education from The University of Texas at Austin, and a BA from the University of Houston in Art Education. Matzer has published essays in Art Education: The Journal of the National Art Education Association, Encyclopedia of Library and Information Sciences, and Multaqa, the journal of the Gulf Museum Educators Network.
Welcome

We hope you enjoy the second edition of Multaqa: a forum for Gulf Museum Educators. Published twice a year by the Gulf Museum Educators Network (GMEN), each edition discusses a different aspect, audience, engagement, or area of museum education in the Gulf region.

GMEN provides a forum for museum educators in the Gulf to share regional and international best practice through the exchange of information. Through discussions, workshops, and sharing of resources, participants discuss their work with colleagues, get feedback, explore issues, and network. Multaqa is another site for this exchange, giving museum education staff in the Gulf access to best practice and case studies elsewhere in the region, and the opportunity to share their work via publication. Each edition of Multaqa has a different editor, thereby also creating opportunities for museum educators to take part in the creation, editing and production processes.

This second edition of Multaqa inquires: How do intentionally designed, participatory activities enhance the visitor experience across museums in the Gulf region? A participatory activity is an experience and place where visitors can create, share, and connect with each other around content. In this issue, a range of essays present participatory experience practices in Kuwait, Qatar, and Abu Dhabi, UAE, where visitors can create, share, and connect with each other around content.

Author, museum consultant, and exhibition designer Nina Simon brought the concept of participatory experiences to attention with her publication The Participatory Museum in which Simon states:

The social Web has ushered in a dizzying set of tools and design patterns that make participation more accessible than ever. Visitors expect access to a broad spectrum of information sources and cultural perspectives. They expect the ability to respond and be taken seriously. They expect the ability to discuss, share, and remix what they consume. When people can actively participate with cultural institutions, those places become central to cultural and community life (this author’s emphasis added; 2010: ii).

Indeed, visitor participation is a timely topic in the contemporary world of museums, art galleries, science centers, libraries, and cultural organizations. As museum educators we cannot assume that visitors understand the relationship of the works in a gallery, know what questions to ask when they look at an object, feel comfortable or confident to ask questions, or know how to use a label. As these essays highlight, participatory experiences give consideration for visitor needs, experiences, and motivations, shifting from a passive (and presumptuous) nineteenth century exhibition model, to an intentional, creativity-centered, and participatory twenty-first century model.

I hope that you will find in these articles new best practices to try out in your own institution. Should you want further details, each article features the author(s) contact information. Share this issue with your colleagues and participate—the call for papers for the next edition of Multaqa is outlined at the end of this journal.

Laura Matzer
Guest Editor

References

Dar al-Athar al-Islamiyyah (DAI) is a non-profit cultural organisation created to manage the loan of The al-Sabah Collection to the Kuwait National Museum in 1983. While the Kuwait National Museum is currently undergoing rehabilitation, DAI operates a small, teaching museum known as the Amricani Cultural Centre which exhibits this outstanding collection of Islamic art, but which struggles to engage young children. Dedicated programming, such as family days, while successful on the day, did not create a sustained connection between young participants and DAI. DAI staff attended the American Alliance of Museums’ (AAM) conference in Baltimore in 2013, where engaging young people in museums was a popular topic, with presentations on pre-school programmes, early and secondary education, and Common Core. The enthusiasm museum professionals brought to effectively addressing these subjects was inspiring and we returned eager to offer more engaging, participatory experiences for children.

Origins
DAI decided to make increasing the participation of elementary age children, especially those already involved in our Children’s Art Workshop (CAW) programme, a priority. Taking cues from AAM’s conference, the education team discussed: asking children what they wanted in a museum, expanding existing in-gallery education programmes, and creating more academic art programmes yet these approaches fell short. We realised that if the objective is to attract more children to a museum and sustain their interests, the ‘expert opinions’ needed are from the children themselves. The 6–12 year olds in DAI’s CAW—many longstanding participants—were logical contributors. Our ‘a-ha’ moment was, ‘why stop with a conversation’: beyond asking children what they wanted to see in a museum, what if we asked them to create an exhibition they thought other children would like to see?

Requirements
While this idea worked in theory it required ongoing support of DAI staff, including collection owners, director-general, curator, conservator, museum administrator, exhibition designer, and facilities manager. We required designated space, agreement on physically changing the structure of that space, and funding. Children, in a participatory role, would be tasked with creating an exhibition of objects from the Islamic world from the eighth-nineteenth centuries.

Approach
Getting buy-in from all parties involved began with DAI’s director-general and the collection owners, who are open to ideas that promote an increased awareness of and appreciation for art from the Islamic world. Our pitch was two-pronged: the impact related to meeting the museum’s education goals and the impact on children via Common Core’s ‘Four C’s’: collaboration, communication, creativity, and critical thinking. We believed initiating and executing an exhibition would be a bonding experience for all, creating an affinity for

Susan Eileen Day is Dar al-Athar al-Islamiyyah director of education. In her eight years with the organisation she has developed and implemented more than a dozen programmes for participants between the ages of 18 months and 18 years old.
education@darmuseum.org.kw
museums and appreciation for its objects that would last years beyond the opening. 
Confident the project would extend to participants’ friends and family, school groups, and a general public curious to see what the children had accomplished, the process would be rich with opportunities for children to work in large and small collaborative groups, analyse information, make informed decisions, and use their imagination.

Collections staff raised questions about the project’s implementation and object safety. Once clear the project was being taken seriously and children would not abuse access to museum objects, they joined the project team. Spaces and cases were addressed, as they would define the exhibition size, as well as raising the floor to ensure children could see objects in the exhibition. A six-month implementation plan gave staff ample time to adapt their schedule to this new project.

However, after three months of preparation we had not yet asked children from the CAW programme if creating an exhibition was something they were interested in doing. By February 2014 we raised the subject with them, outlining what was involved in planning and implementing an exhibition. The project schedule included working over the summer and Saturday mornings. While compromises would be involved and no one would get their way every time, we discussed the benefits of being given the chance to create an exhibition for their friends and family to see, and promised decisions would be made by them and we would be neutral facilitators. We asked them to make their first decision: did they want to create an exhibition using objects from The al-Sabah Collection to be displayed in Amricani Cultural Centre? By vote they agreed and suggested schools should help.

The following week we began the project with eighteen children. We introduced the idea that objects could be categorised differently, depending on the story being told. Using a silver bracelet as an example, we asked how the object might fit in an exhibition. After explaining it could be used in an exhibition of silver objects or of bracelets, children began to understand and mentioned shape, size, jewellery, maker/manufacturer, origin, metal, and decorations as potential categories. With copies of past catalogues, and working in collaborative groups, we discussed choosing themes and they reviewed objects, making notes on what they liked.

Each child suggested a theme based on their favourite object. With as many ideas as individuals proposing them, each explained why their idea should be implemented, voting for four ideas they liked best. Themes were written on separate pieces of paper and with four scraps of construction paper, children were told to put a piece of construction paper on each of their four favourites, reducing eleven ideas to four. Advocates for remaining ideas made their pitch and voted for just two themes. Animals and science as themes emerged as winners in a divided vote. Six to nine year olds outnumbered ten to twelve year olds so the exhibition would feature animals.

Exhibition theme confirmed, the collection office selected over 250 objects, excluding manuscripts and fragile objects or those already promised as loans to other institutions. A5-sized pictures of each object were printed on cardstock, with information on the reverse. (Children worked with both objects and pictures; classrooms that supported the programme received only pictures.) Knowing the gallery to be used for the exhibition, DAI conservator and curator estimated the exhibition would feature 110 to 130 objects.

By March children made their initial object selections, agreeing on the first ten in the exhibition. Each child selected two objects, yielding a pool of thirty-two objects. The subsequent vote to select their favourite
object was interesting in that they did not necessarily vote for the objects they themselves had picked. Next, they voted for three objects via a paper vote, understanding that the top ten would be included in the exhibition. Children thought carefully about their choices and critically discussed items such as having “too many bird (objects)”. In the final edit, some children saw all their choices eliminated and, even with lobbying, there were no hard feelings.

Previously the children had mentioned they thought schools should help, yet had not determined how. They decided schools should have the chance to select objects. Each participating classroom would be given ten image cards and asked to pick six from the group. For the exhibition narrative, to create panels, labels, and support materials, the children devised five questions for the students to answer for each object selected: why did you choose this object? How would you describe this object? Does it remind you of anything you see around you every day? What do you think the animal is thinking? Is he/she happy or sad? Angry? Fierce? What do you want people to think when they see this object?

With less than a week, we communicated and recruited government and private elementary schools, including two special needs schools. The selection process was up to them, as long as students involved were between age six and twelve, selections were made by the students, and the programme team received responses by the April deadline. Of twenty-three schools contacted, fourteen agreed and we received responses from ten.

For a March session preparing school packets, the children selected 140 objects, divided into groups of ten. There was significant discussion about approach: should the group include only one animal or one point of origin or should it be arbitrary? The following month, children participants selected an additional forty objects, answering the same five questions for each of the fifty objects they had selected.

Brainstorming sessions considered how to organise objects and their narrative. One week later each picked one of fifty objects already selected and explained how they thought it worked as part of an exhibition. During this exercise a thread of a theme emerged.

By late April school responses were in and with fifty objects already selected laid out, they placed sixty-six objects selected by the classrooms. The process was now more difficult because, in addition to having the object, they had responses to the questions to consider. Children would rule out an object only to add it back after reading why the student had selected it. From the sixty-six objects, fifty were selected for the exhibition. Added to the fifty already selected by the children participants, the children had one hundred of the 120 objects anticipated for the exhibition. By early June, an additional twenty objects were chosen by the children participants and twenty objects had been designated ‘space permitting’. Text panels were drafted for all objects and we discussed themes, stories, and names. Before participation was reduced by summer holidays we needed to choose an exhibition name, the proviso being that it worked in Arabic and English. Children reduced their ideas list down to two or three names, and while we did not prefer either we took care not to suggest alternatives. Ultimately they settled on Long Ago Zoo: Animals in The al-Sabah Collection.

Children were asked to present logo and poster designs in September, presenting five logos and six poster ideas. All liked one logo: a bird from a ceramic dish that ‘flew off’ the object and the poster was a combination of two ideas. Next, children decided on fonts and colours for printed materials and exhibition space. The title font, Rosewood Standard, was selected as it looked like something “in a carnival”, with Berlin San for other text. For print materials, shades of turquoise and gold were selected. There was quick consensus on wall colour: Gumball Blue, a bright blue and “perfect for a zoo”. Raised rubber flooring samples were presented for children to choose from. They did not like any. They had
their own, logical, idea. If the walls were going to be blue like a bright sunny day, then the floor should be grass, as you would find at a zoo.

We sought approval for a graphic designer to create the poster, exhibition graphics and printed material, explaining that this was typical for any professionally curated exhibition. The designer proposed other fonts and picked a more complimentary shade of turquoise and soft brown shade replacing the gold. While the reaction to Gumball Blue exhibition walls and grass floor was mixed, the director-general understood and agreed to their design preferences.

Five weeks before opening, the decision to group the objects by animal was made, with secondary grouping by origin. Children agreed that the conservator could determine object order based on what best suited the space, so visitors could compare and contrast how animals were represented in one culture versus others. 'Space permitting' objects were given a priority ranking. Fonts proposed by the designer were rejected in favour of two the children had already picked, and they selected their poster from the two options proposed.

For exhibition guide and graphics content, inside the space, children wished to include a map instead of painting all walls. We suggested the map cover a whole wall and they agreed. They also identified other graphics inside the gallery: a ‘welcome’ poster, a poster explaining how to read a label, and an opinion space. Leading to the exhibition, they decided on an introduction, curators list, and picture explanation of how the exhibition was created. In collaborative teams, each wrote an introduction to animal sections. One child was selected to give the speech at the opening, his text featuring on outside panels and as the guide introduction. Late September to mid-October was spent finishing text and children agreed to have some help, with spelling and grammar edits, and translation.

With walls painted, grass flooring laid, and cases in place, the conservation team and children met in the gallery and began the installation. The display started with cats, then birds, elephants, mythical creatures, one-of-a-kind animals, horses, gazelles, fish, rabbits, and closed with camels. After a lesson on how to handle objects and rationale behind these practices, the children told the conservator precisely where they wanted each object placed, reflected in their attentive comments: "more that way", "back a bit" and "turn it towards me".

Late October the exhibition opened, with children participants as hosts, greeting and directing people as they arrived. The DAI director-general opened the exhibition, with Kuwait’s Minister of Information and Minister of State for Youth Affairs commending participants. Children participants took stage as one of their own addressed two hundred plus people:

We are extremely glad that you came tonight. We want you all to experience an exhibition about Islamic animal artefacts curated by children. The DAI thought that the best people to curate an exhibition for children were children. So they asked the DAI Children Art Workshop if we wanted to do it, and we said yes...I hope, after you visit Long Ago Zoo you’ll agree that children can do great things when given the chance.

Results
DAI has an exhibition unique in its creation and successful in its implementation. We know from anecdotal evidence visitors spend more time with Zoo than other DAI exhibitions. Typically visitors look at an object, review/read the label and move on to the next object. In Zoo, they look at the object, read the label and then go back to the object to understand the child’s comment regarding the object.

Both children participants, and children in the classrooms, identify Zoo as their exhibition. They are at home there, bring people to see it, and highlight the object they chose or their class chose or the label they wrote. Two years on children visit with their class and talk about
how they had been here before and worked on an exhibition.

Media coverage introduced the museum to many who were unfamiliar with DAI, or in how we featured children. Attendance increased, as did participation in Family Days, children’s programmes and school visits. The fact that the museum let six to twelve year olds create their own exhibition using objects more than 1,000 years old is remarkable. The exhibition is now part of DAI’s history, and offering such a participatory experience communicates to children that they have a place in the museum.

“I won’t say that we didn’t have some concerns when we decided to hand over part of the museum and open the vaults holding The al-Sabah Collection to a group of 6–12 year olds. There’s a reason why only a handful of museums have ever done an exhibition like this. But I have been impressed by these children every step of the way” said National Council of Culture, Arts and Letters Assistant Undersecretary Abdulkareem al-Ghahban. “The choices that were made were thoughtful and, in many cases, inspired. I guess it’s true: never underestimate the abilities of enthusiastic and motivated children”.

Examples of the captions in Long Ago Zoo: Animals in The al-Sabah Collection
All photographs property of Dar al-Athar al-Islamiyyah. Used with permission.

**Dado Panel Fragment**
LNS 384 S
5th-6th centuries AH/11th-12th centuries CE
Ghazni, Afghanistan
East Iranian World
Marble
H: 38 cm; W: 45.2 cm; T: 8.9 cm
My teacher said the funny looking people were normal looking harpies. I think they’re very unusual and I like their long noses and wings. I also like the old Arabic writing. I can’t read it but I think it must be important.

**Vessel Fragment**
LNS 1120 C
Late 6th–early 7th century AH/late 12th–early 13th century CE
Herat
East Iranian World, Central Asia
Fritware
H: 2.27 cm; D: 10.96 cm
This is a creative object and I would describe this object as a kind of cultural art. I like this art because it’s unique and I like the Tiffany blue colour. I think the camel is angry and I wish he wasn’t. I think they’re out hunting for food and maybe they haven’t found any yet.
Hukka Base
LNS 1192 M
circa 11th century AH/circa 17th century CE
India, Deccan
Bronze
H: 22.4 cm; L: 14.6 cm; W: 11.8 cm
I would never have guessed this was part of a shisha pipe. My brother smokes shisha a lot and his pipes don’t have anything that looks like this. I want him and all the other people who smoke shisha to see that the pipes looked like a long, long time ago.

Scraper
LNS 531 C
6th–7th centuries AH/12th–13th centuries CE
East Iranian World
Fritware
H: 4.7 cm; L: 8.4 cm; W: 4.5 cm
I think it’s an Alien! Look at the eyes and the big brain. No, it’s a hedgehog. I saw one on Nat Geo once. I know it’s a hedgehog, but I don’t know what to do with it.

Belt Strap Fitting
LNS 571 HS
Possibly 5th century AH/possibly 11th century CE
Herat, East Iranian World
Jade
H: 3.06 cm; L: 5.3 cm; W: 1.47 cm
This cat, maybe a lion, looks like it was made of a special stone. My mother has a porcelain glass cat that looks like this. This cat might be in the water but my mother’s cat definitely isn’t. He might be calling for help if he’s in the water, because cats don’t really like water.
What would it be like to step into a painting? Do you know what a painting feels like? Does it make a sound? How does it smell?

These questions attracted over sixty families to Ektashif: Art through the Senses. The programme, which took place at Mathaf: Arab Museum of Modern Art in Qatar, revolved around the concept of a ‘sensory toolkit’. Designed to provide an un-facilitated gallery experience, in which families can explore art in new ways together, the programme and toolkit were developed as part of a collaborative research project. This involved curators and educators from Qatar Museums (QM) joining forces with researchers from the University of Westminster in London and Hamad bin Khalifa University (HBKU) in Doha, Qatar. Combining expertise in museum studies, curatorial practice, cognitive psychology, and audio-visual translation, the project was grounded in multisensory learning and inclusive design.

Developing the programme

The project began in December 2015. At this time QM curators were developing new strategies to increase access to collections for children. One idea they were exploring was the creation of ‘sensory toolkits’, designed to support a deeper multisensory engagement with objects that cannot be touched. The researchers from the University of Westminster were working on methods for evaluating the long-term impact of a museum visit, and were interested in multisensory tools as a way of promoting memorability. The Translation and Interpreting Institute at HBKU was developing approaches to audio-visual translation, making use of multisensory imagery and enrichment, to increase access and inclusivity for sighted and non-sighted museum visitors. The project combined this unique portfolio of skills and professional perspectives to explore and evaluate how multisensory interaction might enhance the impact of a family museum experience in Qatar.
The development of *Ektashif: Art through the Senses* centred on three core aims:

1. Remove barriers faced by families in traditional museum spaces
2. Extend engagement with artworks that cannot be touched
3. Make learning about Qatari art and culture more relevant, meaningful and engaging for children and families.

The main activity within the programme, which grew from these aims, focused on a painting by celebrated Qatari artist Jassim al-Zaini (Image 1). This large mixed media artwork incorporates real wood and metal studs, as well as thick, textured paintwork. Unglazed and in reach, on the wall of a museum that necessarily prohibits visitors from touching the artworks, the intuitively and tantalisingly tactile painting would ordinarily provide a frustratingly limited offer for families. The introduction of a sensory toolkit aimed to increase levels of engagement for children and reduce levels of anxiety for parents, whilst maintaining an authentic museum experience.

The title of the painting *Turathiaat*, meaning ‘traditional’ in Arabic, refers to its rich content relating to Qatari heritage and culture. The sandooq (box), the palm frond guffa (basket), the sadu (carpet) and the carved gypsum panels in the centre of the painting, although ubiquitous in Qatar, are becoming increasingly symbolic of times past. Traditional items such as these have, relatively recently, ceased to play functional roles in many contemporary households. Although painted in 1970, al-Zaini’s image projects a dramatic shift between the old and new—by contrasting a crumbling arch and a broken heb (water jar) on the right with the semi-abstract forms of modern construction on the left.

The value and potential for bringing this important cultural content to life, through multisensory engagement and intergeneration storytelling, made *Turathiaat* the perfect subject for QM’s first sensory toolkit.

Image 1: *Turathiaat* (Traditional), Jassim al-Zaini, 1970. Mixed media on plywood, 82x121.5cm. (Picture courtesy of Mathaf: Arab Museum of Modern Art, Doha)
The **Turathiaat Activity**

The first stage of the *Ektashif* programme took place at Mathaf in April 2016 and was open to families with at least one child aged zero to eleven. The name *Ektashif*, meaning ‘discover’ in Arabic, was chosen to reflect the visitor-led nature of activities within the programme.

The focal point was the *Turathiaat* activity. For this, each family was given twenty-five unfacilitated minutes to explore the painting together, using a sensory toolkit. Designed to promote tactile, auditory, and olfactory modes of exploration, the toolkit encouraged families to interpret and engage with the artwork in ways that suited their specific needs.

The toolkit included an enlarged image of *Turathiaat*, reproduced as a play-mat. Spread out on the gallery floor, in front of the artwork, the play-mat enabled children to step into and around the composition, exploring the different textures and details within. Addressing the first aim of the project, the play-mat helped create and delineate a welcoming space for families within the museum (Image 2).

Every element in the sensory toolkit related to something within the painting. Drawing on its rich historical content and tactile qualities, objects, replicas, puzzles, and props inspired a range of hands-on activities. Some links between the toolkit and painting were very literal, such as an accurate replica of the sandoq (chest) in the centre. Other references were subtler, including wooden building blocks made to resemble the colours and shape of semi-abstract cube-like forms to the left-hand side of the painting, or the scent pots which included traditional spices and aromatics associated with Qatar (cardamom, cinnamon, frankincense, and saffron).

Opportunities for auditory engagement ranged from a descriptive audio guide, which could be listened to in English or Arabic, to the sounds made by the children themselves (and some adults) on musical instruments provided.

The formal qualities of some elements within the picture, such as the cobweb on the right and the pylon on the left, were brought to life through interactive toys. Whether building with the coloured blocks, stretching the elastic bands to create the criss-cross pattern on the pylon, or winding the fluffy grey wool around the pegs to make a web, children (and adults) were engaging with the content of the painting through constructive play (Image 3). Programmes like this shift the emphasis away from sight as the unique sensory channel for experiencing art, and as such, address the second aim of the programme.

Whilst permitting independent play, the programme was designed to promote social interaction and collaborative learning. The intention was that families would be able to develop and share their own narrative journeys around the painting, using the multisensory tools provided. It is hard to quantify whether or not programmes like this achieve such aims, which is what made the evaluation process and design, created by the researchers at the University of Westminster and HBKU, such a crucial element of the project.

**Evaluating the programme**

Traditionally, museums have focused on qualitative methods, such as interviews and observation, for evaluating the success of programming activities. Cognitive psychology, on the other hand, is generally based on quantitative methods, which can require a baseline measure to enable comparisons between conditions. In order to establish whether the multisensory nature of the *Turathiaat* activity enhanced concepts such as fun, engagement, and multigenerational interaction, it was necessary to run a second comparative activity. For this, families were simply given ten minutes in another gallery and asked to select their favourite painting. Without a sensory toolkit, this required cognitive engagement with the artworks, which depended solely on vision.

Evaluation data was collected in the form of observations, questionnaires and semi-structured interviews. The observational research recorded how families interacted
Image 2: Sensory toolkit in front of Jassim al-Zaini’s painting *Turathiat* at Mathaf: Arab Museum of Modern Art, Doha. (Picture by Angela Ruggles.)

Image 3: Family engaging with the sensory toolkit. (Picture by Angela Ruggles.)
with the toolkit, the artworks, with each other, and to some degree the museum environment. A standardised observation sheet was designed to enable students at HBKU and staff across QM to contribute consistent data to the evaluation process for both tasks.

The questionnaires captured the personal perspectives of adult participants, focusing on their thoughts during the tasks. This included memories, as well as reflections on the specific activities. Questionnaires were completed immediately after the programme, then again one month later, as part of a second family activity. In order to assess the impact on memory, the two sessions enable comparisons to be made across time. They also created opportunities for a more in-depth analysis of data. In addition to capturing how thoughts about the experience and the painting had embedded over time, the follow up session included all participants being asked to draw the painting from memory (Image 4).

On a practical level, accurate quantitative data requires large participant numbers. As such, sixty families participated in the first phase of the programme and evaluation process in April 2016. The standardised observation sheets were designed to be time efficient, but still required a huge amount of focused work from the students and staff completing them, as well as those analysing the data.

The evaluation process also asked a lot of participants. Whilst the focus of the project for the researchers was on generating strong data through comprehensive well-crafted questions, museum staff needed to ensure that the visitor experience was that of a coherent family programme. Concerns arose in the planning stage around how to balance these essential and potentially conflicting project priorities resulting in a number of compromises.
Questionnaires were briefer than initially proposed, for example, and observations were made at a set distance away from the family. Although this sometimes meant missing dialogue, it enabled participants to relax into a natural and authentic pattern of behaviour, which was as important to the research as to the visitor.

Participants also self-regulated the impact that the evaluation process had on their overall experience. Some enjoyed and fully committed to the reflective process of completing the questionnaires, whilst others contributed more briefly, as more of a courtesy to the organisers.

The interviews enabled a more relaxed and in-depth qualitative assessment of the *Turathiaat* experience, with a smaller sample of participants. Six families, varying in size from one adult and one child to three adults and seven children, were interviewed. Children included boys and girls aged one to eleven, and adults included parents, aunts, and grandparents. Semi-structured in format, the interviews included set questions to record specific reflections on the programme, as well as prompts to encourage more open-ended discussion. In most cases this initially revolved around the painting, but led to a wide variety of personal connections being made and shared. The *Ektashif* project enabled QM to demonstrate the potential of their sensory toolkit concept, which expanded greatly as a result of the collaboration with HBKU and the University of Westminster. This can now be rolled out across QM Family and Schools Programmes, focusing on different artworks, objects and museums. It was the opportunity to evaluate the programme, however, and measure its impact with local and international audiences, that will help realise the full potential of multisensory engagement as a way to increase access to collections for children and families.

The evaluation of *Ektashif: Art through the Senses* has generated a vast amount of data, for which analysis is still ongoing. As well as having significance for upcoming academic publications, the results will provide an invaluable resource for museums, in and beyond the region.

**Removing Barriers**
The first and overarching goal of the *Ektashif* programme was to remove barriers faced by families in traditional museum spaces. The advertisement alone attracted over sixty families to Mathaf, revealing the value of merely promoting more multisensory visitor experiences. Over one hundred children participated in the programme. With an average age of 4.5, and the majority being aged between two and seven, these children and their families are an important and currently underrepresented audience for museums in Qatar.

It is well documented that modern art museums can be intimidating spaces. The *Ektahsif* programme took place in one of Mathaf’s main galleries, so that the context being addressed by the programme was an authentic museum environment. The play-mat and the toolkit transformed the pristine expanse of floor beneath the painting from one side of a ‘white cube’ into an inviting place for families to sit and play.

The visitor information sheets revealed that over 15% of the adults who participated in the *Ektashif* programme had never been to a museum or art gallery before. It is pertinent to note, in relation to audience development, the power that a family activity can have in attracting first-time visitors of all ages.

Observations captured the fact that many adults as well as children participating in the *Turathiaat* activity intuitively removed their shoes, sat, and even lay down in front of the artwork. These are neither standard behaviours in a modern art gallery nor the actions of visitors who feel uncomfortable, suggesting the programme succeeded in making a traditional, object-based museum environment a more welcoming space for families.
**Extending Engagement**
The second objective of the programme was to extend engagement with objects that cannot be touched, in this case an artwork. Being unable to touch comes up again and again in audience research with parents in Qatar as a significant reason for not visiting museums, closely followed by restrictions on noise.

*Ektashif* participants clearly benefitted from the range of tactile and sound-based interaction facilitated by the sensory toolkit. In the questionnaires, parents state that they enjoyed the *Turathiaat* activity not just for their families, but also for themselves, giving it a higher rating than the favourite painting task. Families were also more likely to use all of the twenty-five minutes allocated for the *Turathiaat* task, than using the full ten minutes available for choosing their favourite painting.

A higher level of anxiety among parents was also observed in the favourite painting activity, particularly with regards to younger children needing to be carried, restrained, or repeatedly reminded not to touch the artworks. In contrast, during the *Turathiaat* task, adults were observed enjoying the experience, not only as facilitators for their children but as active participants. Once given permission to play adults seemed to engage with the sensory toolkit for their children, with their children and, in many cases, for themselves. In one instance it was observed that initially “the father seems like he thinks toys are for children and the painting for him and the only thing he is meant to engage in”. But then later on in the session he is observed to “really get into making the cobweb on his own”. This serves as another reminder to recognise and address the needs of adults within a family group as well as the children, especially those for whom the museum context might be unfamiliar.

**Learning Together**
The third goal of the programme was to make learning about Qatari art and culture more relevant, meaningful, and memorable for children and families. The level at which families understood their *Ektashif* experience as ‘learning about’ or interpreting the painting varied dramatically. Some did not recognise the blocks as having any connection to the artwork, for example, whilst others made the visual link with al-Zaini’s abstract forms, and one parent even commented on the conceptual significance, through playing with the bricks, of constructing and deconstructing the artist’s image.

What was important was that families supported and enhanced each other’s learning experience (Image 5). This was observed as a reciprocal and alternating process, with children and adults identifying and sharing the connections they made between the painting and toolkit:

- Look Mum, all these toys are like the painting! (Quote from child, Family 9)
- Mother explained connections between the toys and painting...Girl recognised tower from painting herself. (Observation, Family 4)

Observing who took the lead during the *Turathiaat* task demonstrated a symbiotic relationship, with children taking the lead in some instances and the adults in others. For the majority of families these roles changed throughout the session.

The observation, interviews, and questionnaires confirm that by engaging the whole family in learning together, the sensory toolkit helped enrich the visitor experience for everyone (Image 6). Although based on the content of the painting, the visual, olfactory, tactile and auditory tools were designed to promote open-ended exploration. Families were invited to make their own connections and meaning. This enabled a visitor-led exchange around the painting, from which narratives surrounding Qatari art and culture could unfold naturally and in accordance with age, ability, and interest.

In some cases, personal connections allowed families to engage with the painting in authentic ways that were uniquely relevant to
Image 5: Sisters and mother engaging with the sensory toolkit. (Picture by Angela Ruggles.)

Image 6: Family transforming the gallery space with the sensory toolkit. (Picture by Angela Ruggles.)
them:
  My son said ‘this looks like my Grandma Fatima’s house’... she has a box similar to this box and she has most of these elements in her majlis.
  (Interview, Qatari Mother)

Participants who were less familiar with the subject of the painting, however, were also able to engage with and construct meaning around the content, using the sensory toolkit. Only 50% of participants had the descriptive audio guide, which was developed by HBKU. This allows a comparison to be made between audiences with in-depth contextual information about the painting and those without. What is becoming evident from the early stages of analysis is that with the right tools, in the right environment, families are able to elicit meaning with or without the ‘museum’ voice.

Opportunities for families to actively participate in the creation of narrative journeys around a painting, and to share in physical, sensory, intellectual, or purely imaginary interpretations of art, can engage and empower families with children of any age. The Ektashif sensory toolkit demonstrated how, with remarkably few resources, museums can transform traditional object-based exhibits into welcoming engaging space for families (Image 6). Participatory programmes like these offer more than new ways for families to learn together—they provide new way for museums to learn from families—and join forces in shaping the museums of the future.

“Once given permission to play adults seemed to engage with the sensory toolkit for their children, with their children and, in many cases, for themselves.”
Technology and the ‘point of experience’: aspects of CCTV as possible museum exhibition evaluation and experience tracker in Qatar

Pamela Erskine-Loftus
The Media Majlis at Northwestern University in Qatar

The tracking and evaluation of participants in exhibitions and their participatory experiences is a primary component of audience research and evaluation, and increasingly seen as fundamental in informing exhibition and programming creation. Through combinations of evaluation techniques, immediately actionable and longitudinal data on visitation can be gathered. Traditionally evaluation methods used have involved multiple staff—and often external consultants and companies—as well as many hours spent by interns sitting in the corners of galleries watching visitors. So how might a museum with a very small staff and limited evaluation budget, go about tracking participatory experiences in its exhibitions?

This article will discuss components of two major aspects currently being investigated for a new museum in Qatar, and how this museum might use built-in technologies—significantly the Gulf region’s omnipresent close-circuit television (CCTV)—to garner visitor data on audience engagement, or not, in exhibitions. To frame this discussion some information on the institution is needed, which highlights some of the heightened possibilities for technology as tracking, as well as some of the more unusual contexts of the situation. The museum under discussion, The Media Majlis at Northwestern University in Qatar, is located on Education City, the sprawling university and research facility run by Qatar Foundation on the outskirts of Qatar’s capital Doha. The museum is a component of Northwestern University’s school in Qatar (NU-Q), one of the twelve schools that make up Northwestern, a leading research university founded in 1851 in Evanston, just north of Chicago, USA. Since 2008 NU-Q has been sharing a facility with another university on Education City but will very shortly move into its own, purpose-built building, which is where the museum is located. Therefore The Media Majlis is an academic museum, physically located within an American university, which will be open to the general public and due to its exhibition of media (communication, broadcast, journalism, film, animation, gaming, etc.) will have extensive technological capacity within exhibition spaces to accompany more traditional object-based content. With the aim of actively engaging, learning from, and empowering audiences with exhibition content, the museum’s use of ‘Majlis’ is both a title and an activity.

The following discussion is broadly divided into two aspects: (1) the notion, ethics, and legal components of the use of technology as experience tracking, using CCTV as an exemplar; (2) whether this type of technology tracking can actually be of use in examining engagement and participation in exhibitions. CCTV is used here as an exemplar as it is the most wide-spread visual technology across the Gulf, and the type most likely to already be installed in museums, even those with limited or no other in-gallery technologies. Unsurprisingly the vast majority of literature on CCTV and museums concern security; there is currently little on its specific use for tracking and evaluation of engagement — “the curious neglect of video in visitor research” (vom Lehn & Heath 2016: 2)—and none on this use in the Gulf region. As The Media Majlis will also use other interactive technologies these will also be noted.

Using technology as evaluation of participatory behaviour and experiences
The tracking of visitors at the “point of experience, where visitors face and examine the
exhibit both alone and in concert with others” (vom Lehn 2006: 1343) involves their dwell time, engagements with different exhibition components, interaction with each other, and enjoyment. Traditionally this is time consuming, requires trained people and budget, and may currently in the Gulf require external/international consultants or companies due to a lack of both museum’s with evaluation departments, and available regional freelance evaluation experts. In some museums there may be great interest within staff for audience evaluation however if this is not recognized as important at the highest levels then data collected is often not enacted; evaluation does not always tell you what you want to hear nor support plans and ideas which those in decision making positions want to enact. However, the systematic collection of even basic data can be highly informative in improving audience-museum engagement and relations—visitors like museums that listen to them. The Media Majlis has been looking at how it might build in audience evaluation to its exhibitions so as to continually collect data and do this in the most streamlined way due to staff size (small) and budget parameters. This audience evaluation is particularly important in a new facility where presumptions about visitors, their movement and engagement are untested. Although aspects of layout, design and interpretation may be based on extensive international research they still need testing and validation in Qatar and Gulf contexts.

CCTV is now omnipresent in the Gulf, and in some countries (UAE[i], Qatar[ii], Bahrain[iii], Kuwait[iv]) is required by law in all public or semi-public spaces, including villa/housing/residential compounds, malls and individual shops, hospitals, schools and universities, banks, warehouses, etc. Other national laws related to privacy, storage of private or medical data, technology crimes, and communication, may also impact the use of CCTV and who may have access to it. As The Media Majlis is within a university, which has CCTV throughout, this may offer an avenue for evaluation. Certainly the use of a built-in, and in the Gulf highly familiar, system is preferable to the installation of cameras specifically for filming, which has been the case in many past evaluation projects (see for examples vom Lehm 2006; Moss, Esson & Bazley 2010). These film cameras, just like the intern sitting in the corner with a clip board and stopwatch tracking visitors manually, are intrusive and highly visible which most often results in changes to visitor behaviour (Meisner et al. 2007: 1537)—we all behave differently if we perceive we are specifically being watched: “it is often argued that visitors unavoidably react to the camera and merely play act when being filmed at an exhibit” (vom Lehm, Heath & Hindmarch 2002: 17). This will therefore produce skewed results, an aspect noted even in pre-video research conducted through the use of time-lapse photography (Nielsen 1946; Phillips 1995), and in research where installed television cameras were concealed from view but spotted by some visitors (Shettel et al. 1968: 34-35).

As CCTV’s purpose is surveillance—close observation of a suspected person—its use for a secondary purpose of observation and tracking also needs to conform to all legal requirements, as well as ethical aspects of research and museums. The most noted of these is the concept of informed consent. Most often noted in the small print one must agree to before downloading software or an app, or the copious forms requiring your signature at the doctor’s office or hospital before treatment, informed consent is broadly the agreement (consent) by a person that they have been informed of all aspects and outcomes related to the service or experience they are about to engage in. If one is to video/record/photograph specific audience or engagement evaluations, such as focus groups, interviews, or verbal questionnaires, then informed consent must be obtained in writing (Research Councils UK 2011). However the video recording of “naturalistic observations in public places”, which does not actively “cause personal identification or harm” (Educational Researcher 2011: 152) ethically does not require this specific consent as per ethical codes used by museum visitor researchers[v].
One aspect of The Media Majlis, which is somewhat unique within the Gulf, is that it must not only consider Qatari law and ethics but also American. Thus far within the development of the museum, laws and regulations on aspects across the spectrum of museum work have not contradicted each other, and we have used whichever is the most rigorous as a basis for work. This therefore means that we have had to consider American uses, requirements and general understandings of CCTV and surveillance as we progress with this project. Whereas general Gulf views of CCTV are more aligned with those in the UK and other northern European countries—where CCTV use is taken for granted and so ubiquitous as to be ignored—in the United States this type of surveillance is viewed, and therefore used, quite differently (see for far greater discussion of the US context, The Constitution Project 2007). Within the USA CCTV can most often be used within offices and other buildings and semi-public spaces providing that those in the spaces are clearly and specifically notified in advance and continually of its use, and the purpose of that use.

The outcome of considering informed consent, ethics and the museum’s accommodation of American legal and operational aspects will mean that we will be more visible and transparent with the fact that we are undertaking technology-based tracking and evaluation than a similar organization in Qatar would need to be (though they may of course choose to do so). As an organization, we will therefore need to be forthright in letting visitors know that tracking is taking place, and offer a way for visitors to know more about what we are doing, how and why, should they want to know. The most obvious way to do this will be with signage (bilingual) in visible places prior to a visitor entering exhibition spaces, as has been used in other research projects (see vom Lehn 2006: 1344; Moss, Esson & Bazley 2010: 28). Multiple projects have noted that though some visitors have asked additional questions about the recording of audiences and about the research in general they have not seen this as a problem or shown reservations about visiting (e.g. Meisner et al. 2007: 1537). However all research cited in this article derive from European or North American projects, so how this may play out in Qatar or elsewhere in the Gulf is currently unknown—on the one hand CCTV is omnipresent, on the other hand social and cultural norms may bring up additional privacy concerns.

It has been noted that CCTV notification ‘signage’ covers a wide range of forms (textual, imagery, symbols, etc.), and research on what combination of these is most effective in Qatar at communicating what is occurring will need to be undertaken (see for discussions on this aspect in the UK, Cole 2004).

It should also be noted that this use for observation and participation tracking is a secondary use—CCTV still needs to be able to fulfil its function of security. Depending on the museum this therefore may shape the amount of time that recordings are available for analysis, who may view them, and where this may be conducted amongst other aspects (for creating parameters based on use of systems see for example Home Office 2013: 17-18). Equally though staff conducting evaluation may not want all information which the museum’s CCTV as a security system could provide, particularly if this may compromise ethical components such as aspects of identification. For example, CCTV recordings could allow the matching up of visitors with the vehicles they arrived in due to CCTV in the parking area, thereby identifying visitors via their license plate—an identification that evaluation staff actively does not want.

It is hoped that we will augment this research with tracking via the built-in interactive technology in the gallery spaces. Touch screen or table systems offer a way to track what is chosen from a menu of options, how long it is engaged with, and what a visitor moves onto next—pertinent as the curatorial narrative within an exhibition may not actually be how visitors interact with content nor find meanings between what may have been
considered disparate components by the exhibition’s curators. For bi- or tri-lingual exhibitions the language(s) chosen by visitors for text or audio can be highly informative for future work, an aspect of evaluation which would be very difficult with traditional in-gallery observation and static wall texts. Providing these tracking systems do not collect personal data—which would be difficult even if one wanted to—it is hoped that this constant influx of choice and use data will contribute to future audience-centred development of exhibition content.

**But can technology tracking be informative about participatory experiences?**

Whether via CCTV or other built-in systems, conducting audience evaluation via video is only important if it can reveal to us something useful—collection for the sake of collection is a waste of time and money, not to mention unethical. The saving of time and money is only such if technological evaluation can offer informative and actionable data. It is easy to see how examination of recorded CCTV footage of exhibitions can yield information on number of visitors, group composition, movement and way-finding, and even dwell time (the amount of time a person dwells/spends at a particular object or interactive). However the aspect of participation and engagement, and if one can gauge or evaluate that from recordings, is both different and difficult.

By watching video footage the evaluator may create the same tracking devices as an in-gallery evaluator, such as floor plans marked with the visitor’s route, dwell time, if there is conversation/interaction with other visitors, and overall time spent in the exhibition. However it should not be presumed that longer dwell times and a long total visit is indicative of greater engagement, though it has been suggested that there is a correlation. A visitor may have many reasons for spending considerable time in an exhibition, which may not be related to actual participation with the content. Equally, a short visit may be experience-laden and rich for the visitor. Visual observation cannot evaluate or record this completely. Exhibition experiences and engagements are culturally shaped—by both the visitor and by the evaluator. The visitor brings with them their culturally and socially learned behaviours which for some may be more outgoing and understood as ‘interactive with others’, whilst other visitors may be quiet and introspective. Both ends of the spectrum and all iterations between may be engaging and learning. “Experience of exhibits is fundamentally produced in social interaction between visitors” (vom Lehn 2006: 1353) and so how we analyse interaction and consider participation is vital. The understandings of the evaluator colour the data being recorded as they may note their understandings of behaviour and engagement, which may be quite different than what the visitor intended. Some projects have used multiple evaluators to review and code videoed experiences in order to minimize evaluator bias, unintentional though it may be (Shettel et al. 1968: 33-37 & 110-117), as well as the creation of complex analytical frameworks/schema to understand conduct and experiences (Meisner et al. 2007: 1536). It is the degree of action recognition—the understanding of movement (using a preset coding schema) and people’s movement interaction with objects and other people—which is what we are interested in (for introductions to action recognition see Poppe 2010; Weinland, Ronfard & Boyer 2011).

A disadvantage for engagement evaluation via CCTV is most often the angle of view. CCTV designed for security is high up with a wide view, most often with a still/non-moving camera. An in-gallery evaluator is on a similar level to the audience, and therefore more able to see behaviour and facial expressions. This must be balanced up however with the previously mentioned impact of the in-gallery evaluator on the visitor and how this may affect behaviour. Research presented in 2003 proposed a ‘stereo vision’ video recording system, which would then be able to render from multiple cameras a 3D recording of visitor experiences in galleries, but this research does not appear to have been developed further in museums (see Bahadori & Iocchi 2003). If an existing CCTV camera can
be made duel purpose, and offer both security as well as a suitable viewing angle for tracking, this will still leave the aspect of stitching together visitor visits across multiple camera recordings. As Yalowitz and Bronnenkant have noted in their concise introduction to tracking visitor behaviour in museums, the aspect of angle and coverage means that this method of recording is perhaps best used for single exhibit components, groupings of objects or content, or small areas (2009: 49).

The human in-gallery evaluator does have one distinct advantage—CCTV systems do not usually record sound but in-gallery there is a good chance the evaluator can hear the visitors, and may be able to give contextual data on the amount or tone of conversations and person-to-person engagement, or about giggles or exclamations of delight, or dismay. The recording of conversations have been part of studies which have installed research-specific cameras, though it is noted that conversation analysis most often becomes the focus of study and analysis of “bodily conduct” and interaction are less well developed/analysed (vom Lehn 2006: 1344). Perhaps then the recording of bodily conduct only will allow us to focus on that experience behaviour and not be distracted by the contents of conversations, though seeing that discussions are occurring would still be of importance.

For The Media Majlis the physical use of exhibition technology components—such as touch-screens—will for the most part not be evaluated as a form of participation. The increased use of personal devices has made the physical movements of ‘touch, swipe, pinch’ components of everyday life, and therefore the initiation of digital content by pressing a screen is no longer an indicator of a deeper step within engaging with content. However with digital layering allowing audiences to self-delve through multiple layers of content (from the image, film or text, to deeper discussion, archive materials, interviews, conservation, 3D digital models, etc.) perhaps the depth of content engaged with, combined with dwell time and conversational aspects, may reveal indications of engagement. However, the fine lines between presuming engagement and a learning experience, and aspects of curiosity, (over)comfort with technology, or lack of comfort with technology, probably cannot be ascertained from video footage alone.

**Moving forward**

Overwhelmingly the literature on CCTV or other video system use for audience tracking is positive. The timesaving aspect of the use of CCTV/video over in-gallery observations is undoubtedly the ability to watch at suitable times, re-watch, fast forward through quiet times, and therefore consolidate work and streamline staff time. However, the existing limited literature on CCTV/video evaluation for the purposes of engagement/participation assessment shows that technology use is most successful when accompanied by other forms of evaluation. Those engagements which have been researched include the productivity of art exhibition CCTV footage combined with questionnaires and in-depth interviews (Beaumont 2005), an interesting project where science centre exhibition video was discussed and reflected on by the visitor(s) who had been recorded (Stevens & Hall 1997), and the combination of video and in-gallery observation (vom Leh 2006; for a concise but detailed outline on possible combined video and in-person data collection and analysis methods see vom Leh & Heath 2006: 102-105; 2016: 6-11.) Therefore we will need to supplement our CCTV and touch-screen tracking with complementary evaluation tools, most likely questionnaires and visitor follow up conversations, in order to give contexts to what we are witnessing in the exhibitions. There are cost implications to this, but perhaps more so time/staffing aspects which we will need to assess.

Although not examined in existing literature, there is for The Media Majlis the question of how the use of CCTV even with additional and complementary evaluation techniques will be able to separate the in-gallery technology from the content. Is a visitor engaging with the technology, or with the content? How do we find out? Can repeated evaluation of the
Is a visitor engaging with the technology, or with the content? How do we find out? Can repeated evaluation of the same technology across multiple exhibitions (and therefore different content) help us with this?

same technology across multiple exhibitions (and therefore different content) help us with this? We see in-exhibition technology like screens and touch tables in the same way as picture frames or display cases—they are the mechanism through which we can deliver content. If visitors are concentrating on the technology not the content then all we have likely created is an exhibition about technology, not about the content. The previously mentioned aspect of CCTV angle and coverage may actually work in our favour as we pick specific areas or technology groupings for engagement evaluation—rather than whole exhibitions—meaning we can concentrate on dissecting the ‘frame’ from the content.

As The Media Majlis initiates evaluations it must be seen as ‘action research’, an active and on-going process which informs our work and which re-tests and questions our assumptions, and not a one-off project so we can say ‘we’ve done audience research’.

A future-orientated afterword
Notable in this discussion is the passive use of CCTV—its use to view and record experiences and engagement, or lack thereof, in exhibitions—as opposed to it contributing to those experiences. Projects such as MNEMOSYNE, “studying techniques for passively observing museum visitors in order to build profiles of interest for personalizing multi-media content delivery” (Karaman et al. 2016: 3788) have been used to create interactive experiences at the end of a visit based on visitors’ behaviour in the preceding exhibition. Similar to older CCTV research this Italian-based project recognizes that “an accurate profile of each visitor is necessary, and that these profiles should be collected as passively and non-intrusively as possible” (Bagdanov et al. 2012: 40; see project website, MICC 2015).

Other projects have also looked at how existing, or at least non-intrusive, technologies can contribute to greater or different experiences in exhibitions (see Roccetti, Marfia & Bertuccioli 2014), however the majority of recent literature still concerns either the creation of digitally-engaging content for exhibitions, or the creation of more customized paths through exhibitions, rather than any evaluation of existing behaviours. Hopefully as technologies become even more agile, unobtrusive, familiar, and cheaper, the assessment of participatory experiences can be further developed, and just as importantly, shared.

Endnotes
[i] The UAE has no federal law specifically overseeing CCTV but some Emirates do, for example Dubai’s Law no.24, 2008; Abu Dhabi Law no.5, 2011; Ras Al Khaimah Law no.3, 2015.
[ii] Law no.9, 2011, overseen by the Ministry of Interior’s Security Systems Department.
[iii] Draft law under review for CCTV in all ‘institutions and businesses’ as of August 2015.
[iv] Kuwait’s National Assembly approved a law in June 2015 mandating CCTV in public places across the country, including all spaces where people congregate and have ‘social activities’.
[v] Quoted here is the code and standards used by the Visitor Studies Association for ethical research in informal learning environments (http://}
References

Pamela Erskine-Loftus holds a PhD in Arabian Peninsula Museology and Masters in Museum Studies, and is currently the director of the forthcoming museum, The Media Majlis at Northwestern University in Qatar. Prior senior museum positions include with Sharjah Museums Department, UAE; Qatar Museums; and The Museum of Modern Art, New York. Pamela is the editor of three books on museum practice in the Gulf, and coordinator of the site MAPcollective.org pamela.erskine-loftus@northwestern.edu

### References

Alexandra Bennett is Deputy Director Learning and Outreach for Qatar Museums Family and Schools Programmes, having previously worked at the National Portrait Gallery in London. She holds a Masters in History of Art from the Courtauld Institute of Art, London, and a Masters in Museum Studies from the University of Leicester.

abennett@qm.org.qa

Huda Al Yafai was formerly Head of Library for Qatar Museums Family and Schools Programmes. Prior to joining Qatar Museums, Huda was the Library Resources Centre Coordinator at Al-Ahnaf Bin Qais Independent School in Qatar, and previous to that, an Information Specialist at Al-Shafallah Centre for Children with Special Needs. Huda holds a Bachelors degree from Qatar University in Information and Library Science, and a Diploma in English Language.
My Museum Project at Qatar Museums, Doha, Qatar

Alexandra Bennett and Huda Al Yafai
Qatar Museums Family and Schools Programmes, Doha, Qatar
Introduction
In 2014 Qatar Museums Family and Schools Programmes worked in partnership with the Museum of Islamic Art and students from Qatar Academy Doha to produce an interactive exhibition exploring identity and what it means to be a young person in Qatar today. The final exhibition was installed in the Museum of Islamic Art Library. The My Museum project comprised more than twenty in-depth workshops, activity sessions, and museum visits over a three-month period during school hours, after school and on weekends. The project aimed to support children to explore their own identity and the role that museums can play in identity formation. It was designed to give a team of ten students a participatory, real-life experience of the activities that go on behind the scenes of a large museum. My Museum was a project that involved learning about learning.

Qatar Museums Family and Schools Programmes
Qatar Museums Family and Schools Programmes develop and deliver programmes in the community for children and families in Qatar. One of the strands of programming is called Al Ma’mal. This strand aims to give teams of children the opportunity to collaboratively work on real-world challenges in an extended project format alongside professionals to create a final tangible outcome. Projects develop in response to ideas from children that support positive change. These might take the form of a campaign, a business, a building—something that will benefit the wider community.

Motivations for participatory approach with children
There were several motivations behind working with children to develop an exhibition. The staff team wanted to research how a project could take children through all stages of developing an exhibition as a final product, from start to finish, involving professionals working side-by-side with the children. Whilst this project focused on museums, other future projects could be focussed on different subject areas or disciplines. Developing the project’s structure was key, so museums were used as the first project, as this is where the staff team had the most experience. Although co-curated displays with children are not new, they are new in the context of Qatar. This project was a unique instance of foregrounding children’s voices and experiences as participatory contributors of content and designers of interpretation and display.

Another key motivation for working with children was to gain an insight into their thinking as they moved through the project, to learn how children might understand concepts and in turn develop a display that communicated these concepts in a way other children would connect with. As such, the museum staff would learn alongside the children about how children learn. At the centre of the project were a set of ideas around experiencing museums, and what takes place during the process of ‘learning’, which the staff team were interested to explore with the children. Falk and Dierking state that: Learning is the process of applying prior knowledge and experience to new experiences: this effort is normally played out within a physical context and is mediated in the actions of other individuals. In addition, learning always involves some element of emotion and feeling. (1997: 216)

The museum team wanted to explore the idea that exhibitions can be experienced with the whole of our bodies and senses, and that sites, lighting, objects, and activities can engage our memories and emotions in different ways. The project recognized that the experience of each child during each museum visit would be different. Research has demonstrated the huge diversity of children’s memorable recall: the most striking aspect of children’s self-report about their museum experiences was the diverse, highly individualistic, and idiosyncratic nature of each child’s recollections, interests and learning. (Anderson et. al. 2002: 217)

Memory exercises were used to demonstrate to the children that different people
experience museums in different ways, making different connections to their own interests and prior experiences.

Another idea explored in the project was of museums as places in which people make decisions about who they are and who they will be.

Children visited several museums throughout the project to experience and inform their understanding of a museum's function and role.

Finally, a crucial motivation behind a participatory approach was to give a team of ten children the experience of working as part of a museum team, to learn about different processes involved, including presenting ideas, working in collaborative groups, and negotiating to reach consensus decisions. The museum team wanted to investigate how 21st century skills—skills required for students to succeed in an information age—could be built into the project.

**Partners**

The Museum of Islamic Art Library saw the project as an opportunity to offer another experience to groups of school children already visiting the museum, as well as to increase children's engagement with the library, both in-school and out-of-school. The curatorial and collections teams at the Museum of Islamic Art also collaborated to provide the children with an insight into the making of an exhibition, and an insight into how collections are stored in the museum. The Sheikh Faisal Bin Qassim Al Thani Museum collaborated on the project to provide children with another experience of collections and engaging visiting audiences, in which the children took turns to be 'tour guides', engaging their audience in conversations about objects,
eliciting personal responses, and feedback.

**The project and participation**
The project used Nina Simon’s definitions of different forms of participation as a framework for devising the layered approach constructed within the project. Simon distinguishes between ‘contributory projects’ and ‘collaborative projects’: “contributory activities can be offered to visitors of all types without much setup or participant coaching. These projects can function with minimum staff support; many are self-explanatory and self-maintaining” (2010: 203). For Simon, “collaborative projects are institutionally-driven partnerships in which staff members work with community partners to develop new programs, exhibitions or offerings” (2010: 231).

Within this project, children devising the exhibition with the museum were our collaborators, whereas the audience they were designing it for were invited to be contributors. The project was presented to the children in the form of a challenge: ‘An opportunity to create a public exhibition for the community, working alongside museum and other professionals, that explores what museums can be’. The overall project theme was Identity, which was broken down into three sections: Individual, Group and Community, in order to structure the project and finally structure the exhibition.

The group of ten students, ranging from seven to eleven years old, worked as a team through the process of exploring museum collections to find resonances with their own experiences. This process involved considering how they themselves assign values to special objects, creating artworks and developing drama sequences that expressed and acted out associations and memories with special objects and experiences. Following this, they decided on interactive ways that could be used in a display to develop a similar kind of understanding in their audiences. The students worked with the museum team to design the exhibition, including selecting the location, selecting content, and devising the interpretive approach, as well as consideration of how audiences of different ages would move through the exhibition, and they participated in workshops with a designer and fabrication company to advise on all stages of developing and presenting an exhibition for the public.

Workshops took the children through a structured process in which they worked in collaborative teams to review content generated through the project, including artworks, photographs of visits to the museums, and memory drawings, so they could begin to think of themes they wished to communicate. The process involved coming to consensus on objects to include, and perhaps more challenging, which to discard, in order to successfully communicate the themes. Using the structure of Individual, Group, and Community Identity, each team presented back to the others an idea of how themes could be communicated through the different material they had selected. The children then worked with a designer to decide the different components they would need in the exhibition and the layout, before presenting their ideas to the fabrication company that would build the exhibition.

In the process of creating the exhibition, we encouraged children to take time thinking about their community and what people might enjoy participating in. The idea of contributing towards your community and enjoying an event together is valued in Qatar, and one that the children were already familiar with. Museums are increasingly aware of the need to be perceived and enjoyed as social spaces, and, in particular, as places where families can comfortably spend time together.

**Approach to learning**
The approach to learning in the *My Museum* project was highly experiential. The first half of the project constituted open-ended creative activities with the children to reflect on the impact of museum visits. These included making, drawing, discussion-based, and drama activities. During the activities children were supported to reflect on the way
they recall and make associations and how this affects the interpretations they make in museum spaces. Memory drawings were used at the beginning of several sessions for children to reflect on the impact a particular museum experience had made on them personally.

They were also encouraged to consider how working as a collaborative group and learning about how each other’s responses impacted upon their own ideas. The development of their ideas was tracked in their sketchbooks as they moved through the project. By the time they needed to consider how community audiences might engage with a display, they were confident in expressing their opinions and speaking from their experience.

Final exhibition and legacy
The final exhibition was launched in January 2015, and guided tours were given by children on the opening day. Interactive components designed by the children based on their experience of the project included: a box with movable blocks to design a museum, a magnetic board with coloured strips to describe an emotional response to a memory, a map for visitors to mark where they come from, and a Sidra tree (a local tree that is an iconic symbol of Qatar’s heritage) on which to hang a wish for the future. The exhibition was on view for five weeks, during which time school visits and family visits were facilitated by museum and library staff.

For the future, based on the results of the initial My Museum project, subsequent iterations of the project could be broken down into individual modules and delivered in a briefer, less intensive format. A significant outcome from the My Museum project is that there is now a new re-designed children’s area in the Library, inspired by the My Museum project. According to the Head of MIA Library: Working on the My Museum project was an inspiring experience for MIA Library. At the beginning of the project we had a chance to meet the young curators and this was probably the first time we had worked with children in designing something specific for the library. The display transformed one area of our library into a really exciting base for children. Once the exhibition ended we wanted to recreate the same feeling for children in the library so we redesigned and expanded the entire children’s area in the space where My Museum had been. More recently, another young visitor - 8 years old – helped us again redesign the reading area so that the tree from the original display, now a book review tree, is a place under which storytellers can sit to tell the children’s story-time. Through taking advice from young visitors, we have significantly increased the number of children visitors to the MIA Library children’s area. I really now believe in the value of consulting with children.

Further lessons learnt from the My Museum project will feed into future exhibitions. It is clear that ongoing consultation with children and families is essential in order to develop relevant provision aimed at these audiences. Above all the project demonstrated how a participatory approach to exhibition design with children for children challenges a museum team to make decisions informed at every stage by a child’s insight, interests and understanding.

This My Museum project proved the value of being in regular dialogue with children throughout the process of developing interpretation and exhibitions for children and families. Moreover, the project demonstrated the innate appeal there can be to children of having other children as facilitators in their experiences. Therefore, the Qatar Museums Family and Schools Programmes team are keen to set up further panels with children to ensure their ideas and perspectives continue to inform these processes, and are exploring ways in which children who enjoy opportunities to take more responsibility, play more participatory and facilitating roles in future workshops.

The project took the Qatar Museums Family and Schools Programmes team’s work a significant step further towards the goal of children initiating their own projects,
Image 3: Presenting ideas. (Picture by Alexandra Bennett.)

Image 4: Memory drawing of visit to Sheikh Faisal bin Qassim Al Thani Museum. (Picture by Alexandra Bennett.)

Image 5: Final Exhibition. (Picture courtesy of Qatar Foundation.)
Images 6 & 7: New re-designed children’s area in MIA Library. (Pictures by Susan Parker-Leavy.)

developing a significant amount of organizational knowledge in the process, including developing a cross-departmental approach to delivering learning projects. Reflections from children and adults participating in the *My Museum* project demonstrate its impact:

We have been able to make our own exhibits and our own memories. I really like showing people what we have done in the project, and the exhibit we have created.
(Participant, age 10)

This collaboration with museum staff has been phenomenal. It has broadened the perspectives of the students and enabled them to make powerful and meaningful learning connections with the wider community.’
(Teacher, Qatar Academy Doha)

It inspired me in memories, I have very strong memories.
( Participant, age 7)

The best things was when we started the project and we found out we were going to make our own display and learn how museums work.
( Participant, age 10)
**A History of the World in 100 Objects: An interactive learning and participatory experience to inspire young minds**

Amal Daiban, Zayed National Museum, Abu Dhabi Tourism and Culture Authority, UAE, and Dana Al Mazrouei, University of Leicester, UK

**Introduction**

Schools in different countries utilise museum programmes that offer comprehensive educational resources, and these help to improve the students’ capabilities and understanding of the world around them (Jensen 2013; Berry 1998). The exhibition *A History of the World in 100 Objects*, presented in the United Arab Emirates (UAE) by the Abu Dhabi Tourism and Culture Authority (TCA Abu Dhabi) in collaboration with The British Museum, is the main case study for this article. Our key aim is to highlight how the programme and context for school tours in this exhibition aligned with the principle of museums in contributing an interactive and participatory learning experience that can enable students to develop their own opinions, ideas, and inspirations.

**A History of the World in 100 Objects**

Museum programmes aim to stimulate new thoughts and enable communities to learn more about the world they have inherited and the one they have created, becoming more compassionate to the diverse cultures of people around them (Silver & Newsom 1978: 405). *A History of the World in 100 Objects* (AHOW) is based on a 2010 series broadcast on BBC Radio by Neil MacGregor, former director of The British Museum. The broadcasts formed a narrative to explore world history from two million years ago through objects from The British Museum’s collection. In 2014 TCA Abu Dhabi, in partnership with The British Museum, transformed part of the content into an exhibition narrative. The story told by the exhibition, as developed by curator Becky Allen, confronted contemporary audiences with one hundred significant objects that made them consider different cultures across time and space.

Museum educators often search for programmatic offerings that combine new perspectives with innovative ideas that develop engaging experiences for the audience. Museums in general, and particularly the field of museum education, has witnessed a gradual shift in an interpretive approach from object-centred to audience-centred, encouraging people to participate and be active thinkers as part of their experience (Berry 1998). Museums are spaces to inspire, participate, encourage dialogue, communicate with the public, engage, and share ideas. Museum educators engage the public through designing programmes with an objective to provide a meaningful experience (Stein 2012: 216). In this exhibition museum educators at TCA Abu Dhabi offered various interpretation tools and programming: educator resource guide, educator afternoon, activity guide, multimedia guide, workshops, and tour activity packs for schools. By hosting the AHOW exhibition, museum educators were seeking to offer diverse content with the objective of engaging the audience to experience tangible links with different human civilisations in a contemporary context.

People construct meaning and sense about the world through the patterns they create.
Designing a successful museum programme accessible for all audiences requires consideration of the various age groups and their learning capabilities. For example, students aged three to five do not yet have a rich sense of history and have short attention spans in comparison to those aged eight to eleven, who have a more developed sense of the past and better skills in concentrated thinking. In *The Museum Educator’s Manual* (2009: 78), Bingmann, Grove and Johnson discusses how museums can work on opportunities for visitors to develop a deeper understanding of an exhibition. James Matthews, a senior museum educator at TCA Abu Dhabi, believes that one of the main principles in designing a workshop is to create content that relates to an artefact in the exhibition and complements it, and should be adaptable to take into consideration the ‘differentiation’ of the participants—an activity can be adapted in terms of the depth of content whilst still maintaining a successful outcome (Matthews 2016).

For the AHOW exhibition the educational offerings for schools, such as tour activity packs and workshops, were organised by taking into consideration age groups, tour duration, relevance to the exhibition, level of engagement, and accessibility of content. The content of the tour activity packs for visiting schools were in line with different levels of the K–12 education systems in the UAE, and divided according to the learning capabilities of different age groups. As school guided tours ranged between 1-1 ½ hours in length it would have been challenging to explain the narrative of all the hundred objects in a single visit. As a result the best solution was a selection of appropriate objects, chosen for each
Designing a successful museum programme that is accessible for all audiences requires consideration of the various age groups and their learning capabilities.

cycle/age group/tour theme. The objects selected were based on a variety of criteria including themes, subject/curriculum links, object size, and subject matter. The content was simplified and incorporated elements of art, principles of design, character, communication, and artistic techniques. In order to achieve a hands-on / minds-on tour, props and hands-on activities were provided in the galleries to allow maximum interaction with artefacts and a deeper meaning-making of the content.

Many museums aim to offer new ways of engaging their audiences through multi-sensory interactives that allow different audience segments to connect and have wider access to the collection. Museum educators typically seek to design programmes that are accessible and develop a dialogue with participants, for example, The National Gallery of Canada’s Art For All, which allows visitors to use their senses and participate without previous knowledge of art, encouraging audiences to communicate with each other (Sweeney 2009: 235). TCA Abu Dhabi museum educators have a similar approach, as programmes being designed cater to various educational systems, and in some cases to audiences with limited art education.

Creative learning activities
The foundational educational theories of Jean Piaget and John Dewey illustrate that learning is an active process that is based on personal experiences—learners should interact mentally or physically to create their own meaning (Gardner 1983: 3-5). In order to enhance school tours and student experiences during a visit to AHOW, various hands-on activities were
arranged to develop a participatory approach. Tour activity packs entitled *Character and Identity* encouraged students to develop personal opinions and self-expression. As part of this activity, students selected their own character, created an identity, and shared ideas with each other without using the object label as a guide; finally, the visitor engagement specialist/tour guide revealed the identity of the sculpture and discussed the historical context of the artefact. *Mimicking Characters*, part of the *Character and Identity* tour, on the other hand, incorporated learning through physical movement, by imitating the sculpture’s posture. Here, students would select their character and look closely at the posture detail, facial expressions, and gestures to mimic their form. This approach of mimicking characters engages students by encouraging them to look at objects more closely, further enhancing their understanding of the object on display (Image 1). In the *Patterns* tour, students explored pattern in the various sections of the exhibition, using discussions, interaction with textile props, pattern rubbing, and building patterns using geometrical shapes. Various hands-on activities reinforced the retention of information, using physical and cognitive approaches for learning (Image 2).

There are key elements that museum educators may use as a guideline to create a better visitor experience: connecting, collaborating, and communicating in an activity (Simon 2010). Upon encountering Albrecht Dürer’s drawing *Rhinoceros* in the gallery, a visitor engagement specialist read a description of an Indian rhinoceros that had arrived into the Portuguese capital Lisbon, written by an unknown artist in 1515. Dürer at the time had never seen a rhinoceros, yet was able to draw from this description, despite its inaccuracies. Students were asked questions about how they thought the artist could create the artwork without ever seeing a rhinoceros. After or prior to the gallery visit, students investigated Dürer’s approach by taking part in an activity that had pairs of students seated back-to-back, with one describing the object and the other student creating an image based on the other student’s description and communication skills. Upon completing the activity, students had greater appreciation and relation to Dürer’s approach in drawing through a literal description, reinforcing the idea presented in the guided tour. This type of role-play enables students to develop their visual and verbal communication skills while learning more about the artwork in context. Museum educators can thus design hands-on activities to be flexible in terms of an individual outcome, while still relating to the artefact being viewed and discussed (Image 3).

**Take-Aways**
What we learned from working with activity packs in the AHOW exhibition includes:
- In our experience, activity tour packs are more engaging for a younger audience, and allow for a more immersive learning experience.
- A simple theme for a tour such as *communication or patterns*, is more accessible to school audience segments when introducing unfamiliar and complex objects.
- The TCA Abu Dhabi visitor engagement specialists in the exhibition realized that activity tour packs made the tours more interactive for younger audiences and created a richer educational environment, enriching the content of their tours.
- Activity tours provide a participatory framework for participants to easily exchange personal thoughts and reflections, organically building connections within the exhibition and encouraging greater relatability to individual’s personal lives.
- A flexible approach that is more ‘organic’ when designing hands-on programmes allows variation depending on the capability of the participants, whilst still maintaining the objective of the activity.
- Visitor engagement specialists play a vital role in the success of highly participatory tours, in which their enthusiasm level directly affects the level of interaction of the participants.
References

Dana Al Mazrouei is a PhD candidate in Museum Studies at the University of Leicester, with a grant awarded from Sheikh Mohammed Bin Zayed Higher Education. Dana graduated from the Sorbonne University with a Master’s in Art History and Museum Studies, and has interned in the Musée du Louvre, Centre Pompidou, and Bibliothèque Nationale de France, all located in Paris. She is currently working on a dissertation that aims to develop an innovative outreach strategy for museum education, in order to expand and define the role of the museums in the UAE.
DMazrouei@tcaabudhabi.ae

Amal Ahmed Bin Daiban is a researcher for the Zayed National Museum project with Abu Dhabi Tourism and Culture Authority. She graduated from Zayed University with a Bachelor degree in Education, worked as a public health educator for two years in SEHA, and has completed a work placement with The British Museum. Her major tasks as a researcher are documenting oral history stories from past generations of UAE citizens and residents, conducting research on topics that are related to UAE history, and developing Zayed National Museum gallery narratives.
CALL FOR PAPERS

*Multaqa: a Forum for Gulf Museum Educators*

The journal of the Gulf Museum Educators Network
vol. 3, spring 2017

*What role do museums play in the development and expression of Identity in the Gulf Region?*

**Guest Editors:** Linda M. Abraham-Silver & Sean M. Gaffaney (English); Mona Rashid Al Ali (Arabic)

Museums have long been recognized as the repositories of cultural treasures and places where communities can go to trace their histories, connect the present to the past, and celebrate diversity and multiculturalism. This third journal edition aims to discuss the nature of identity, be it civic, cultural or ethnic, in the Gulf region and how museums help to shape identities while considering the following questions:

- Do museums help their communities to develop or define identity, and if so, how?
- How are racial or ethnic identities presented in our museum exhibits or programs, and do approaches in the Gulf differ from approaches in other parts of the World?
- Are identities socially imposed or do they become a personal choice, and what role do museums play in this discussion?
- What role do museums play in reinforcing cultural cohesion?
- How can museums meaningfully participate in contemporary discussions of identity and what does this mean in particular for our Gulf museums?

Contributions from staff working in all areas of museum education (including interpretation, evaluation, accessibility and professional development) and in all types of museums in the Gulf are particularly encouraged. Articles from former staff of Gulf museums will be considered. Articles will require a professional writing style. Please note: articles which simply outline the work of an educator or education department without a discussion of the contexts which have and do shape the work or impact practice will not be accepted.

*Multaqa* will be published in full-colour professional electronic format.

If you are interested in being considered as a contributor, please send an abstract of no more than 250 words and a proposed title for your article, along with your name, affiliation/institution, and email address to: multaqa@gmail.com by **1 December 2016**. Contributors will be notified by 15 December 2016. Abstracts and articles may be submitted in either Arabic or English and will be published in the language in which they are submitted. Articles will not be translated.

Finished articles should be between 1,500-3,000 words inclusive of any citations, references or endnotes, and will be due to the editor by 01 March 2017. Writing style is professional, and a style guide will be provided to all contributors. Images may be submitted so long as they are pertinent to the text.

**DEADLINES**

Abstracts closing date: **1 December 2016**
Contributors notified: by **15 December 2016**
Articles submitted to the editor: **1 March 2017**