# Performing Interpretations of Museum Exhibits in Groups

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## Abstract

The content provided in and by museums and galleries to support visitors' meaning making has evolved from traditional text-based explanations towards more social, participatory and embodied experiences. This paper looks at group experiences of a mobile guide that supports embodied interpretation by instructing visitors to enact movements, to explore the role of performed interpretation in a group visit. A selection of features of collocated performance of interpretations is presented, before a discussion of how these particular kinds of embodied interactions might be augmented with wearable technology.

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Galleries; museums; visiting; mobile guides; collaboration; personalization; interpretation; wearables.

# **ACM Classification Keywords**

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

#### Introduction

Museum interpretation refers to the materials – such as labels, text panels, audio guides and interactive displays – that accompany art or museum exhibits to support visitors in making meaning. While traditionally museums provided an official interpretation that suggested a singular way of viewing an exhibit, it is becoming more common for contemporary institutions to support visitors in engaging with multiple viewpoints and determining their own way of making meaning [11]. One way of achieving this has been to move away from providing interpretation in the form of information and narrative, to interpretation that supports visitors to engage in more participatory and experiential ways [7].

Studies of museum visiting have revealed that museum visits frequently take place not alone, but in small groups [3], and also the challenges that can arise during group visits, such as the difficulties involved in maintaining group coherence while also paying

# **Examples of Interpretations**

# Performing an overt action:

"Close your eyes and crouch down by the side of the bell. Very slowly, use your hands to feel the different crevices."

"Attempt to sit on an invisible chair."

"Mimic the facial expression of the crow."

# Performing a subtle action:

"Stand up tall and look down to see inside the golden jug."

"Crouch down and take a good look at these objects and think about what you think they are."

"Look at the object from different angles and then focus on the hollow balls." attention to exhibits and interpretation [9]. In response, there has been an interest in designing interpretive museum experiences that support social interaction, such as by sharing audio guides [1] and making connections with others around exhibits [2].

Physical movement and bodily orientation have been shown to be instrumental in how groups collaborate and make meaning when visiting museums [8, 10]. Physical gesture has also been incorporated into interpretative experiences such as The Lega, a handheld device that allows visitors to share interpretations or 'traces' of artworks through recording visitors' physical movement of the device [6].

This paper looks at an interpretative experience that directs visitors to perform particular gestural interpretations. The paper is concerned with the role of performing physical interpretations of exhibits within a collocated group visit, exploring how conspicuous gesture and whole body movement play out in a group visit. The paper concludes with a consideration of how gesture might be supplemented with wearable technology to augment the body as a group resource.

# The experience

The experience discussed in this paper was an audio and text-based guide delivered on a smartphone and headphones. The experience was specifically designed to be used by visitors in small groups, with each visitor having their own device. The experience guided visitors on a tour of a set of exhibits with three forms of interpretation for each exhibit: a selected music track, an instruction for how to engage with the exhibit, and a portion of text to read after engaging. Music was generally used to suggest a theme or mood,

instructions suggested a way to engage with the exhibit, and text was used to deliver an explanation more in line with traditional interpretation. The experience was designed to support social interaction between groups of visitors using mobile audio guides [4, 5]. This involved toggling visitors between a mode of isolated engagement with exhibits and a mode of being socially engaged with their group members. This was achieved through delivering audio and text at different points during the experience.

The three types of interpretation – music, instruction and text – were designed to complement each other and create an interconnected experience throughout the visitor's engagement with an exhibit. This position paper focuses on the instructions given, how visitors responded to them with physical gesture and how these were negotiated by collocated groups.

The instructions ranged from those that asked visitors to perform a physical action to those that directed their attention to a particular feature of the exhibit (see side panel).

Twelve groups of 3-4 visitors were recruited to take part in a study at an art and local history museum where they could use a mobile guide described above that presented interpretation as above. The interpretation content of each group's experience was personalized towards the group itself, and this was determined through a co-design process. The content was delivered to all the group members on their individual mobile devices. They were studied as they used the experiences in their groups.



Figure 1: Two participants taking it in turns to crouch down and touch the exhibit concerned.



Figure 2: Two children compete at acting like a lion as parents look at the exhibit concerned.

# Performing interpretations in groups

This section presents a selection of features of how visitors performed interpretations within their collocated groups. Generally visitors complied with the instructions they were given, although this wasn't always the case with some groups. This paper focuses on occasions where the instructions were followed rather than cases where they weren't.

# Leading and following

It was often the case that one group member would initiate performing the interpretation, but that once they did, others would join in.

## Turn-taking

Some exhibits had limited physical space in which to perform physical interpretations, in which case group members would often take it in turns to perform the interpretations individually.

#### Demonstrating

Often one participant took it upon themselves to show the other how they felt the interpretation should be performed.

#### Competing

In some groups, two or more members took the chance to outdo each other with some of the more overt physical interpretations. The performance of actions would be supplemented with discussion.

#### Monitoring

It wasn't always the case that groups stayed together for the whole experience. However, they were able to monitor each other's physical engagement from a distance.

#### Assessing

Visitors often discussed their performances with a focus on how well they had achieved the instruction.

## Evaluating

Visitors discussed their performance in the context of the whole experience, and in relation to the exhibit they were engaging with.

# Performing interpretations with wearables

The interactions presented in this paper support previous work that suggests that gesture is used collaboratively as a group resource [8] and can provoke shared coordination and discussion [6]. However, rather than using gesture to represent or mimic features of the exhibits being discussed, the gestures embodied in the experience presented here form part of the interpretation designed for the exhibit, rather than a response to it.

The experience was delivered to visitors on their own, individual devices, giving each group member flexibility and control over their own experience. However, holding a smartphone for the duration of the visit may not be ideal for all people visiting museums – they might be wearing coats, carrying bags, have reduced mobility, or want their hands free to touch or interact with participatory exhibits. It's therefore interesting to consider a move to wearable technology as a method for delivery, and the opportunities this might provide to extend or augment interpretation performances.

Two main points are proposed for discussion at a workshop. Firstly, how might the smaller and less conspicuous nature of personal wearable technologies, such as watches and glasses (as opposed to

smartphones) change visitors' abilities to detect and respond to each others' interactions with the technology, and therefore their performances? Secondly, how might more outward-facing instantiations of wearables, such as wearable public displays or extensions of the body, augment and extend gesture-based interpretation, and thus provide further resources for collaborative meaning making?

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### References

- [1] Aoki, P., Grinter, R., Hurs, A., Szymanski, M., Thornton, J., Woodruff, A. Sotto voce: exploring the interplay of conversation and mobile audio spaces, *CHI* 02, ACM (2002) 431-438.
- [2] Cosley, D., Lewensterin, J., Herman, A., Holloway, J., Baxter, J., Nomura, S, Boehner, K, Gay, G. ArtLinks: fostering social awareness and reflection in museums. *CHI '08*, ACM (2008). 403-412.
- [3] Falk, H. J., Dierking, L. D. *The Museum Experience*. Whalesback Books, Washington, 1992.
- [4] Fosh, L., Benford, S., Reeves, S., Koleva, B., Brundell, P. See Me, Feel Me, Touch Me, Hear Me: Trajectories And Interpretation In A Sculpture Garden. *CHI '13*, ACM (2013), 149-158.
- [5] Fosh, L., Benford, S., Reeves, S., Koleva, B. Gifting Personal Interpretations in Galleries. *CHI '14*, ACM (2014), 625-634.
- [6] Laaksolahti , J., Tholander, J, Lunden, M., Solsona Balenguer, J., Karlsson, A., Jaensson, T. The LEGA: a device for leaving and finding tactile traces. *TEEI '11*, ACM (2011). 193-196.
- [7] Simon, N. *The Participatory Museum*. Museums 2.0, 2010.

- [8] Steier, R. Posing the Question: Visitor Posing as Embodied Interpretation in an Art Museum. *Mind*, *Culture and Activity* 21(2), (2014). 148-170.
- [9] Tolmie, P., Benford, S., Greenhalgh, C., Rodden, T., Reeves, S. Supporting Group Interactions in Museum Visiting, *CSCW '14*, ACM (2014). 1049-1059.
- [10] Vom Lehn, D., Heath, C., Hindmarsh, J. Exhibiting interaction: Conduct and collaboration in museums and galleries. *Symbolic Interaction 24(2)*, (2001), 189-216.
- [11] Whitehead, C. Interpreting art in museums and galleries. Routledge, 2012.