Winning ways

Visitor responses to the Royal Game of Ur display

November 2006

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The **Royal Game of Ur** display attracted record numbers of visitors to Room 3, and was highly successful at attracting and engaging *family visitors*.

Playing the replica Game of Ur was the most **absorbing** exhibit of any Room 3 display so far, and facilitated family **learning**.

Whilst many visitors left after a quick look, those who stayed in the room for longer gained significant learning outcomes. Visitors engaged with the **cross-cultural**, cross-era context and loved the chance to learn through interaction.
Contents

1 Summary 5
2 The Royal Game of Ur 9
3 Scene setting 10
4 What we did 12
5 Who visited? 14
6 What did visitors do? 17
7 How engaged were visitors? 28
8 What did visitors engage with? 31
9 How did visitors respond? 35
10 Conclusions 41
11 Comparison table 43
## Summary

### 1.1 The best attended Room 3 display so far

The Royal Game of Ur display attracted record numbers of visitors to Room 3. The size of the core Room 3 audience identified in Room 3 reports (more likely to have a specialist interest, be from London and be frequent British Museum visitors) has remained largely static, but many more general visitors were attracted to this exhibition than to previous displays.

### 1.2 Huge family appeal

The proposition to ‘play a game’ visible from the door of Room 3 attracted large numbers of families: 45% of visitors were in a family group. 30% of visitors to Royal Game of Ur were under 16 years old – this means that over a fifth of children who visited the museum during this period visited Room 3.

### 1.3 Visitors drawn to Royal Game of Ur once inside the museum

Relatively few visitors were aware of the display before their visit to the museum, and awareness of the Middle East Now season as a whole was low. However, this means that the visual cues for visitors worked very well in attracting visitors to the room once on site.

### 1.4 Visited on the way out of the museum

40% of groups were visiting Room 3 on their way out of the museum, at the end of their visit to the British Museum. This is different to previous displays, where visitors were more likely to visit at the start of their visit than at the end. Observations suggest that visitors might have noticed the room on their way in but chose to save the fun experience until the end of their visit.

### 1.5 Three types of visitor behaviour

Around four in ten visitors to Room 3 just popped in quickly to the room, and left after looking at one object – normally the Game of Ur.

Around half the visitors stayed to take part in the game, with around one in six of these visitors then looking again at some exhibits on the way out.
The remaining visitors (roughly one in ten) followed the display diligently, looking at most of the exhibits.

1.6 Most visitors look at the object in focus

Three quarters of visitors looked at the Game of Ur case – similar to the 80% of Warren Cup visitors who looked at the object in focus in the last Room 3 display.

1.7 Visitors absorbed in playing the game

The board games at the rear of the room were the most absorbing exhibit of any Room 3 display so far. On average, visitors spent 151 seconds at the game, but one in five players spent over 10 minutes at the exhibit. Usage of this exhibit accounted for 77% of total engaged time in the room.

The exhibit successfully engaged family groups, with adults / siblings able to watch and advise whilst other family members played. 60% of people who played or watched were judged to have become engaged with the exhibit.

1.8 Relatively low engagement with the rest of the display

62% of visitors were principally browsing around the display, and only 48% of visitor time in the room was spent engaging with objects. The appeal of the playing the game section seems to have caused visitors to overlook the other exhibits in the room. The Asha board and Ivory box were looked at by few visitors, which may also be due to the relatively plain display style of these cases. Similarly, the text panels were not particularly well used.

1.9 Volunteers a success

Visitors gave positive feedback about the sense of welcome and human contact / guidance provided by volunteers in the room. Volunteers did not have a measurable effect on visitor engagement as volunteers were in the room at the busiest times when crowding was a problem. However, volunteers were able to diffuse frustrations caused by crowding, directing visitors on to other parts of the museum and encouraging them to play online. They were also able to help non-English speaking visitors to understand the exhibits.
1.10 Changed perceptions of the British Museum

The Royal Game of Ur display challenged visitors’ preconceptions about the visit experience at the British Museum, and added variety to a visit.

Interactivity

Visitors did not expect the British Museum to have interactive elements. This provided welcome variety to repeat visitors’ experiences, and surprised first time visitors.

Edutainment

The display struck the right balance between fun and education. This was especially appropriate for family groups, most of whom hope that their children will learn something and enjoy themselves during a museum visit.

Appealed to different learning styles

Visitors were not expecting to be able to play in the museum. Whilst this method of delivering learning points obviously appeals to children, it was also helpful and enjoyable for many adults – learning through practical experience provided variety for visitors.

Straightforward and easy to understand

Visitors found the game easy and compelling to play. The display delivered on the clear offer visible from the floor.

Human scale and welcome

The presence of volunteers and the down to earth, human tone of the exhibition were appealing to visitors and not necessarily what they expected from the British Museum.

1.11 Delivered important learning outcomes to visitors

Understanding of cross-cultural connections

Visitors responded positively to the cross-cultural approach of the display, and some spontaneously drew further comparisons between cultures.

Sense of connection with the past

Being able to share common experiences with ancient peoples (through playing the game) gave the visitors a sense of commonality and deep understanding of life in the past.
Spontaneously drawing parallels with present-day activities

Many of the groups we spoke to mentioned that the game was similar to those they played as a family. This is a particularly significant for young visitors – from previous research, we know that being able to link exhibits to personal experience is particularly engaging for children.

Understanding of historical continuum and perspective

By following the game’s development across continents and throughout time, visitors gained a sense of historical perspective and also an understanding of continuity.
The Royal Game of Ur

The Royal Game of Ur display was held in Room 3 at the British Museum from 20 July to 3 September 2006. Admission to the room was free.

Covering the school summer holiday slot, the Museum wished to mount a display that would appeal to a family audience. The display featured three related board games and the opportunity to play a reconstructed version of the Royal Game of Ur, thought to be the oldest board game in the world.

The display formed part of the Museum-wide Middle East Now programme of events, exhibitions and displays that sought to shed a positive light on the region.
Scene setting

Room 3 is used by staff at the Museum as a 'test-bed' to trial new methods of display and interpretation. Each display in the space is visually different and employs different display and interpretation schemes.

3.1 Objectives of the display

The *Royal Game of Ur* display sought to fulfil the following key objectives:

- To inform visitors that the Royal Game of Ur is the oldest board game in the world
- To deliver a family friendly display

3.2 Presentation and interpretation scheme

For this display Room 3 was sectioned off into two zones, with a large title panel dividing the room. The front zone, taking up around two thirds of the floor-space comprised three display cases on plinths.

A large plinth containing the Royal Game of Ur and a cuniform tablet was mounted in the centre of the front zone, immediately in-front of the entrance to the room. The case afforded visitors 360° views of the Royal Game of Ur, as well as the opportunity to view the game from above. Each of the four sides of the case display featured different information, as a means of encouraging visitors to view the game from different perspectives.

The purpose of this display technique was to reinforce the iconic nature of the Royal Game of Ur, encouraging visitors to recognise its significance. At around 4,600 years old, it is thought to be the oldest surviving board game in the world.

In addition to the Royal Game of Ur display, the front zone also featured two later versions of the game – an Ivory board (2000 – 1000 BC) and the Asha board, a modern version of the game.

Text panels giving details of further sources of information, the development and location of the game, who played the game and the excavations at Ur were mounted on the walls. These also contained images and a map of the Middle East.
The rear section of the room contained three tables with chairs. Each table incorporated a replica version of the Royal Game of Ur, with instructions on how to play the game. Wall text panels gave further information on playing the game. The purpose of the replica games was to encourage an appreciation of the game by playing it, or watching others play.

Between 11am and 4pm each day volunteers were in the room to encourage visitors to play the game and to answer any questions.

It was anticipated that visitors would look at the Royal Game of Ur upon entering the room, work their way to the rear section, play the game, or watch others playing, and then return to look at some of the objects in greater depth before exiting the room. In doing so they would connect the different versions of the game together and take away an understanding of the significance of the Royal Game of Ur as the oldest known board game.

Although the display contained quite a lot of information, the interpretative text was presented in a snappy, simple, bullet-point style. The overall display scheme was designed to be bright, clean and simple.
What we did

Morris Hargreaves McIntyre was commissioned by the British Museum to evaluate the Royal Game of Ur display as part of an on-going evaluation of the Room 3 displays. This report forms the sixth report in the series.

The following primary research took place at the Museum over five shifts between 29 August and 3 September 2006, covering weekdays and weekends:

1 Sequential visitor tracking
We tracked individual visitors during their visit to Room 3. We recorded their usage of each case and text panel, the order in which they used them and the time they spent.

This data allows us to identify patterns of visitor behaviour, which is essential for understanding how visitors are responding to the design of the exhibition. We are able to tell how deeply visitors engaged, and relate this to the assumptions about visitor behaviour which were built into the design of the space. This also allows us to identify any ergonomic, interpretative or display problems affecting engagement.

88 visitors were tracked using sequential visitor tracking.

2 Meaning making observations
Using observation, we classified visitors’ behaviour into three modes: Browser, Follower and Searcher. Visitors were observed throughout their visit to the room and their dominant behaviour mode noted. This gives a measure of how engaged visitors were with the display as a whole.

88 visitors were classified into Meaning making modes.

3 Engagement matrices
We recorded visitors’ levels of engagement with the exhibits using engagement matrices. Visitors’ behaviour was mapped according to their depth of engagement and usage of interpretation. This technique allows us to identify how successful the exhibits and surrounding interpretation are at engaging visitors.

408 Engagement observations were carried out.

4 Mini-survey
Visitors were asked a short series of questions to determine: group composition; motivation; knowledge of the subject; prior awareness of the exhibition and intentional visiting; levels of repeat visiting to the museum as a whole and to Room 3; and impact of the visit.

This information provides a basic segmentation of visitors to the Room 3 exhibitions, and allows for comparisons against all visitors to the British Museum over the evaluation period.

70 mini surveys were completed.

5 Post-it notes and vox pops
Respondents were given a pencil and pad of post it notes, colour coded according to their group type (families, first time independent adults and repeat independent adults).

When visitors addressed an exhibit, they noted down any comments, questions or responses they had. This was followed by a short interview with our researcher, where they were asked to give more detailed responses to aspects of the exhibition.

This exercise produces a rich source of qualitative data on visitors’ responses to the exhibition.

27 post it notes and 10 vox pop interviews were collected.

6 Entrance observations
Visitors were observed as they passed the entrance to Room 3 to determine the ratio of visitors ignoring, rejecting or entering the exhibition. This exercise provides an indication of the relative attractiveness of this display against others in the room.

200 entrance observations were carried out: 100 with visitors on their way into the museum, and 100 with visitors on their way out.
5 Who visited?

5.1 Visitor profile

Similar to overall Room 3 profile

The data shown above fits with findings for previous Room 3 displays: Room 3 visitors are more likely to be from London, more likely to be repeat visitors to the museum, more likely to be making a incidental visit and less likely to have specialist knowledge than all museum visitors. These differences tend to be less pronounced in the summer months, when a greater proportion of general, social visitors to the museum as a whole means that Room 3 attracts a lesser proportion of its 'core' audience.

Attracting more young visitors

The key difference between the profile of visitors to Royal Game of Ur when compared with both visitors to the British Museum and to previous Room 3 displays is a dramatic increase in the proportion of visits made by children under 16 years of age.

30% of visitors to the Royal Game of Ur were aged 16 or under, as compared with only 16% of visitors to the Museum. The previous highest proportion visits made to a Room 3 display by visitors under the age of 16 was 11% for Views from Africa (there is no comparison for a Room 3 display occupying the same summer slot as the Royal Game of Ur).

The figures demonstrate that the display had a very strong family appeal, with almost half of visitors visiting as part of a family group.

5.2 Getting visitors into Room 3

Place in the visit

For 44% of visitors, Room 3 was their first encounter with the museum's collections that day. 1% said Royal Game of Ur was the only room they planned to visit that day.

39% visit on their way out of the museum. This is an increase from the result for Warren Cup (20%) and Three Crosses (28%).
Attracting visitors into Room 3

Of 200 visitors who we observed passing Room 3, 11% entered the exhibition. This is consistent with the overall visitor figures (see above).

Our entrance observations showed that around six in 10 visitors (61%) who walked past the entrance to Room 3 did not notice the *Royal Game of Ur* exhibition.

This is extremely similar to the results for *Warren Cup* (56%) and *Rembrandt* (60%), which suggests this is due to the position of the room at the side of the entrance hall.

Like last time, visitors on their way out were less likely to notice the room. However, unlike the results for *Warren Cup*, visitors passing the room on their way out of the museum are actually more likely to enter Room 3 than those on their way in. Although we do not know for sure, perhaps the relatively light-hearted, ‘easy’ proposition of *Royal Game of Ur* – play a game – might appeal as a last thing to do at the end of a visit.

5.3 Motivation

The columns below compare Room 3 visitors’ main motivations* for visiting the British Museum with the main motivations of visitors to previous Room 3 displays and those of all visitors to the Museum.**

**Main motivation for visiting the British Museum**

<table>
<thead>
<tr>
<th></th>
<th>Social</th>
<th>Intellectual</th>
<th>Emotional</th>
<th>Spiritual</th>
</tr>
</thead>
<tbody>
<tr>
<td>All British Museum visitors</td>
<td>41%</td>
<td>37%</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>The Royal Game of Ur</td>
<td>35%</td>
<td>39%</td>
<td>21%</td>
<td>5%</td>
</tr>
<tr>
<td>Warren Cup</td>
<td>20%</td>
<td>40%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td>Rembrandt</td>
<td>20%</td>
<td>34%</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td>Samurai to Manga</td>
<td>33%</td>
<td>33%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>Views from Africa</td>
<td>23%</td>
<td>47%</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Room 3 norm</td>
<td>25%</td>
<td>39%</td>
<td>23%</td>
<td>12%</td>
</tr>
</tbody>
</table>

The results demonstrate that the motivational profile of visitors to the *Royal Game of Ur* display are far closer to that of all British Museum visitors than has been the case for previous displays.

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* Refer to *Made in Africa: Room 3 scoping study* for definitions of visitor motivations

** Annualised figures taken from June 05 – May 06 rolling survey
The largest specific motivators for visitors to the *Royal Game of Ur* were to encourage children’s interest in history (16%), to visit one of the major attractions in London (13%), and to pass the time in an enjoyable way (13%).

This shows that the display this time has succeeded in attracting more generalist, family visitors than previous Room 3 exhibitions hence the rise in visitor figures but static levels of pre-aware visitors.
6

What did visitors do?

6.1 Usage

Usage of exhibits

The chart below illustrates the proportion of all visitors to Room 3 viewing the four core exhibits comprising the display.

Percentage of visitors using each exhibit

As the chart demonstrates, the case containing the Royal Game of Ur was the most visited case in the display, visited by almost four in five visitors. This figure is at the top end for cases in Room 3 and is similar to that recorded for the Warren Cup case in the previous display. That 23% of visitors to the room did not visit the exhibit despite its ‘object in focus’ status in the room is also very similar the 20% of visitors to Warren Cup who did not view the primary object.
Six in ten visitors to *Royal Game of Ur* visited the rear section of the display, where they had the opportunity to play, or watch others playing, a replica of the game.

**Relatively low use of supporting object cases**

The ivory box was only visited by a small proportion of visitors – 16%, very much at the lower end of the scale for cases in Room 3. Perhaps this is because this static display (and also the Asha board to an extent) lacked the jewel-like display style used in *Warren Cup*: the objects were sitting on a plain white background in plain cases, with little special lighting or effects to draw visitors' attention and make them look special.

**Over half of visitors have taken part in a game**

54% of visitors in the exit survey claimed to have played the game. However, the tracking identified that only 18% of visitors actually did so, with a further 39% watching others play: this gives a total of 57% which more closely matches that of the exit survey. This implies that visitors did not have to play the game to feel that they had taken part.

**Lots of interaction with volunteers**

10% of visitors were observed talking to volunteers in the playing the game section of the room: in real terms this is over 8,000 visitors.

**Usage of cases**

Visitors to the *Royal Game of Ur* visited an average of 1.88 exhibits (including the replica game), this is compared to previous Room 3 displays in the table below.

<table>
<thead>
<tr>
<th>Display title</th>
<th>Number cases</th>
<th>Avg number viewed</th>
<th>Avg % viewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Made in Africa</td>
<td>3</td>
<td>2.49</td>
<td>83%</td>
</tr>
<tr>
<td>Views from Africa</td>
<td>6</td>
<td>3.24</td>
<td>54%</td>
</tr>
<tr>
<td>Samurai to Manga</td>
<td>6</td>
<td>3.36</td>
<td>56%</td>
</tr>
<tr>
<td>Rembrandt</td>
<td>2</td>
<td>1.92</td>
<td>96%</td>
</tr>
<tr>
<td>Warren Cup</td>
<td>5</td>
<td>3.27</td>
<td>65%</td>
</tr>
<tr>
<td>Royal Game of Ur</td>
<td>4</td>
<td>1.88</td>
<td>47%</td>
</tr>
</tbody>
</table>

The results do not correspond the emerging pattern identified, that the lower the number of cases in the room the higher the likelihood of visitors visiting more cases. We would have expected visitors to view an average of around 75% of exhibits. Perhaps this is due to the draw of playing the
game, which distracts visitors from looking at the supporting object cases, and the relatively low key display style of these cases.

**Number of exhibits used**

The chart below illustrates the number of cases used by visitors to Room 3.

![Chart illustrating the number of cases used by visitors to Room 3.]

While every visitor to the room visited at least one of the three cases or the replica game, there is a very sharp drop-off once visitors have viewed one element, and again after two elements.

While very visitor visited at least one element in the room, having visited one element there was a considerable drop off, with 43% of visitors then exiting. This compares with only 8% who exited the Warren Cup display having looked at only one element. The results indicate that there was a clear difference in the types of people who visited the display (see section 5.2 below for more discussion of this).

It seems that visitors are not following the exhibits around the exhibition – instead, they are browsing around, looking at a few parts, then leaving. This suggests a relatively low engagement with the exhibition, compared to other Room 3 displays.
**Usage of text panels**

The diagram below shows the proportion of visitors to the room who used each of the text panels.

The results above show a generally low usage of text panels, compared to *Warren Cup* where usage of text panels was between 25% and 39%. This is consistent with the comparatively low levels of usage around the exhibition generally.

The panel text with the highest usage was 'Middle East as a gateway'. This may be partly due to its location – on the left of the entrance is often where visitors look for an 'introduction' panel. It may also be because the panel included a map, which may have had more intrinsic appeal for visitors than the other panels. However, it may be that visitors used this panel fairly near the beginning of their visit, after which there was a fairly high drop off in reading the panels.

Around 60% of visitors who visit the ivory box or the Asha board read the associated labels. On average, *Warren cup* object labels were read by just over half of users.
Usage of the Game of Ur

The chart below shows, of the 77% of visitors who looked at the Royal Game of Ur, the percentage looking at and reading the text on each of the four sides.

**Percentage of Game of Ur visitors looking at each side**

<table>
<thead>
<tr>
<th>Side</th>
<th>Looking at Game</th>
<th>Reading Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front</td>
<td>82%</td>
<td>69%</td>
</tr>
<tr>
<td>Left</td>
<td>36%</td>
<td>29%</td>
</tr>
<tr>
<td>Back</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Right</td>
<td>15%</td>
<td>13%</td>
</tr>
</tbody>
</table>

On average visitors looked at 1.47 sides of the Royal Game of Ur, compared to users of the Warren Cup, who looked at 2.5 sides on average. This is perhaps due to the object – it is relatively easy to get an understanding of the game from looking at one or two sides (and principally from above), whereas the Warren Cup was different on every side so encouraged close inspection from multiple perspectives.

However, this does mean that many visitors to the exhibit missed the interpretation on the left, back and / or right sides, which may have hampered their ability to make meaning from the object and pick up the key messages.
6.2  Circulation

Start of visit

The diagram below illustrates the proportion of visitors beginning their visit to Room 3 at each of the sections making up the display.

*Proportion of Room 3 visitors starting at each section*

As the graphic illustrates, the majority of visitors begin their visit by looking at the Royal Game of Ur case display. The 67% of visitors who begin their visit at the ‘object in focus’ compares with the 35% who began their visit at the Warren Cup case.

In increasing the viewing area for the object and having less exhibits in the room, the problem of crowding around the object in focus has largely been overcome. Only 4% of visitors had their view of the game hampered because of crowding, compared to 40% for the Warren Cup. However, it is interesting to note that crowding is not actually a barrier to use – even though there were fewer crowding problems this time, a similar proportion of visitors (77% compared with 80% looking at the Warren Cup) looked at the object in
focus. In Warren Cup, visitors seemed to think that a crowd meant the cup must be worth a look and persevered until they got a chance to use it!

The majority of visitors seemed to understand the visual cues that the game was the central point to the display.

**Around the display**

*Three types of visitor behaviour in the display*

The data on visitor flow suggests that there are three main categories of visitor behaviour in Room 3 this time:

1. A small number of dedicated, follower type visitors are doing everything in the gallery (around 7% of visitors).

2. A larger proportion come in, look at the game case and / or the rear section and decide it is not for them, leaving almost immediately or having a cursory browse around one or two more elements.

3. Visitors who play or watch the game and then leave immediately, or have a quick look at something else.

**Order of use**

The general pattern was for visitors to visit the Game of Ur upon entry to the room. After this, many visitors (type 2) left.

Of visitors who stayed in the room, most tended to head for the Playing the Game section at the rear, with only a small proportion of visitors (type 1) viewing the other two exhibits on their way to the rear section.

Those who played the game (type 3) were more likely to make a beeline for this area – 63% of those who played visited this area first, as compared with only 18% of all visitors to the room. These visitors also tend to do less of everything else in the room: only 44% of those who played the game also looked at the original version of the Royal Game of Ur, as compared with 77% of those who did not play the game. They are also less likely to look at the supporting objects and read less of the text panels.

*Playing the game encourages some visitors to look again*

Having visited the rear section some visitors then looked at the supporting objects before leaving the room. 60% of visitors visited the rear ‘Playing the Game’ section, with one in six of these then looking at the Royal Game of Ur case, and 13% looking at either / both of the other cases. This demonstrates
that playing the game prompted a significant of players to reconsider the objects.

**Crowding prevents everyone playing the game**

Only six visitors were able to play the game at a time. It was evident that demand far outstripped supply, with the rear section too busy for visitors to play the game for 65% of tracked visits and only 18% of visitors playing the game.

However, it seems that visitors who were only able to watch a game rather than play themselves still got some benefit and felt like they had participated. See section 6.1 above for more discussion of this.

### 6.3 Dwell

**Average time spent in Room 3**

Visitors spent a mean average of 4 minutes 3 seconds in the display. This is very similar to the average dwell time for Warren Cup, at 4 minutes 9 seconds – the longest dwell time for the Room 3 displays tested.

The dwell times for Room 3 displays are split into cohorts and compared in the table below.

<table>
<thead>
<tr>
<th>Length of visit</th>
<th>Average dwell</th>
<th>0-2 mins</th>
<th>3-4 mins</th>
<th>5 or more mins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal Game of Ur</td>
<td>4 mins, 3 secs</td>
<td>44%</td>
<td>33%</td>
<td>23%</td>
</tr>
<tr>
<td>Warren Cup</td>
<td>4 mins, 9 secs</td>
<td>38%</td>
<td>29%</td>
<td>33%</td>
</tr>
<tr>
<td>Rembrandt</td>
<td>2 mins, 15 secs</td>
<td>35%</td>
<td>59%</td>
<td>6%</td>
</tr>
<tr>
<td>Samurai to Manga</td>
<td>3 mins, 42 secs</td>
<td>13%</td>
<td>46%</td>
<td>41%</td>
</tr>
<tr>
<td>Views from Africa</td>
<td>2 mins, 49 secs</td>
<td>50%</td>
<td>35%</td>
<td>15%</td>
</tr>
</tbody>
</table>

However, there is considerable variance in these results: the minimum time spent was one minute and the maximum half an hour. The table below gives a more detailed breakdown:
There was a marked difference between the average dwell in the room for those playing the game, and those who did not play. The average dwell for those playing the replica game was 11 minutes 41 seconds, as compared with only 2 minutes 17 seconds for those not playing the game.

These results are consistent with the three types of visitor behaviour, as described above: a large proportion of visitors browsing and then leaving, a cluster of visitors looking at all the exhibits and then leaving, and a smaller proportion staying a long time to play the game.
6.4 **Average time spent at exhibits**

The chart below shows the average length of time in seconds spent at each case by those visitors who viewed them. For the object cases this only includes viewing the objects in the cases, not reading the supporting information, for the rear area this includes playing the game or watching others play only.

As the chart illustrates, there is considerable variance in the proportion of time spent engaged at each of the exhibits. The ivory box recording only 5 seconds - this is the lowest dwell time for an exhibit tested in Room 3 to date, closely followed by the Asha board 12 seconds, which is the second lowest dwell time tested. The 29 seconds spent viewing the Royal Game of Ur case is broadly consistent with the average time spent viewing a Room 3 exhibit of around 30 seconds (when the outliers are removed). However, this is considerably shorter than the 69 seconds that were recorded by those viewing the Warren Cup.
There was no significant difference in the length of time spent at each of the three other cases comprising the display between those playing and those not playing the game.

The 151 seconds spent either playing the game or watching others play is by far the longest dwell time recorded in a Room 3 display, the closest being the AIBO dog in the *Samurai to Manga* display, viewed for an average of 94 seconds.

One in five visitors (22%) seem to have been absorbed in the game, staying in the Playing the Game section for more than 10 minutes.

**Volunteers don’t put visitors off!**

Visitors were more likely to play the game at times when there were no volunteers in the room than when the volunteers were present (38% played when volunteers were in the room, as compared to 68% playing when they were not). Visitors also spent less time in the room when volunteers were present than when they were not.

However, this is simply because volunteers tended to be in the room during the busiest periods. The rear section was too busy for visitors to play the game 84% of the time when volunteers were there, compared to 39% of the time when volunteers were absent.
How engaged were visitors?

7.1 Time spent engaging with the exhibits

On average, visitors spent 118 seconds engaged with the exhibits in the display, out of the 243 seconds spent in the room. The remainder of the time is spent circulating, reading text panels and generally being in the room.

This means that on average, visitors spent 48% of their time in the room engaged with the exhibits, the lowest for the exhibitions tested.

<table>
<thead>
<tr>
<th>Exhibition</th>
<th>Total time</th>
<th>Time engaged</th>
<th>% time engaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal Game of Ur</td>
<td>243 seconds</td>
<td>118 seconds</td>
<td>48%</td>
</tr>
<tr>
<td>Warren Cup</td>
<td>249 seconds</td>
<td>183 seconds</td>
<td>72%</td>
</tr>
<tr>
<td>Samurai to Manga</td>
<td>223 seconds</td>
<td>160 seconds</td>
<td>71%</td>
</tr>
<tr>
<td>Views from Africa</td>
<td>169 seconds</td>
<td>100 seconds</td>
<td>59%</td>
</tr>
</tbody>
</table>

Visitors therefore spent over half the time in the room circulating or reading the text panels. This perhaps indicates that they were interested in the context of the games, but were not necessarily encouraged to explore the actual objects in great depth.

Distribution of total engaged time

The chart below shows the relative ‘stickiness’ of the exhibits – the total engaged visitor time that each of the exhibits accounts for overall. This measure takes into account how many visitors use each exhibit and the length of time visitors spend engaged with the exhibit.
The chart shows that playing the game accounts for by far the largest proportion of engaged time in the room, over three quarters. Looking at the Royal Game of Ur exhibit accounts for just under one fifth of engaged time.

This means that of the 118 seconds, only 27 seconds (11% of total time in the room) was spent looking at the three objects, again indicating that the display did not encourage visitors to look at the objects in great detail.

### 7.2 Meaning making

Visitors were observed throughout their visit to Room 3 to determine their dominant meaning making mode. The results are shown below, alongside the results for the previous two exhibitions.

**Dominant meaning making mode**

<table>
<thead>
<tr>
<th></th>
<th>Royal Game of Ur</th>
<th>Warren Cup</th>
<th>Rembrandt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Searcher</strong></td>
<td>26%</td>
<td>28%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Follower</strong></td>
<td>46%</td>
<td>48%</td>
<td>42%</td>
</tr>
<tr>
<td><strong>Browser</strong></td>
<td>28%</td>
<td>24%</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Follower</strong></td>
<td>34%</td>
<td>36%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Browser</strong></td>
<td>62%</td>
<td>56%</td>
<td>58%</td>
</tr>
<tr>
<td><strong>Searcher</strong></td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

*Meaning making modes are as follows: Searcher (seeking out specific information), Follower (following others), Browser (browsing through the exhibit).*
The results show very high levels of browsing, with more than three in five visitors displaying this relatively unengaged behaviour.

These results are consistent with the patterns of circulation and dwell identified in sections 5.2 and 5.3 above: a large number of visitors who only spend a brief time in the room before deciding it is not for them, and a smaller proportion of visitors who engage.

Those who play the game were more likely to display follower behaviour than those who do not: 81% as compared to 34% of non-players. Again, this fits with a segment of visitors becoming absorbed in the game, and a small segment diligently following the front part of the exhibition.

The low proportion of searchers shows that only a small number of visitors went on to make comparisons or revisit exhibits in some depth.
8

What did visitors engage with?

8.1 Depth of engagement

We judged depth of engagement on a scale of observed behaviours, defined as follows:

*Levels of engagement*

<table>
<thead>
<tr>
<th>Success</th>
<th>Term</th>
<th>Static exhibits</th>
<th>Game playing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Extended period looking at exhibit in depth, studying it closely</td>
<td>Sit down and play / watch others for extended period</td>
</tr>
<tr>
<td>Successful interactions</td>
<td>Immersion</td>
<td>Spend time looking at the exhibit in some depth</td>
<td>Have a go, or spend time watching others play</td>
</tr>
<tr>
<td></td>
<td>Discovery</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exploration</td>
<td>Consider / pick up pieces but then move on – or briefly watch others</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Orientation</td>
<td>Acknowledge the exhibit, but quickly moving on</td>
<td>Acknowledge the game, but quickly moving on</td>
</tr>
</tbody>
</table>

The chart below shows the percentage of visitors addressing each exhibit who were judged to have a successful engagement with the exhibit.

The dark blue columns below show the percentage of users who engaged with the exhibit (reached discovery or immersion), and the light blue columns show unsuccessful attempts at engagement (orientation or exploration).

The chart also shows how these results compare to our benchmark rates of success for engagement. These benchmarks rates were established according to engagement results on a variety of different types of museum exhibits, looking at clusters in the range of results.
The Playing the game section – where visitors could either play or watch others play – was the most engaging exhibit in the display by far, engaging six in ten of those who used it. Perhaps this could have been increased even further if there had been the opportunity for more people to play; whilst visitors seemed to get something out of watching, visitors were more likely to reach immersion if they played the game.

However, the object cases struggled to engage visitors. This fits with the low dwell time at these cases.

8.2 The role of interpretation in engagement

Visitors' use of interpretation at each of the exhibits was recorded on the engagement matrices, and the results are shown in the chart below.

- None: the visitor did not use any interpretation
- Reference: the visitor referred to written interpretation alongside the exhibit
- Human: the visitor spoke to someone about the exhibit – either staff or other visitors

Interactions which used both reference and human interpretation are recorded as ‘human’.
Did lack of interest prevent use of interpretation?

Once again, use of interpretation seems to be directly linked to engagement for the exhibits: low usage of interpretation for the ivory box and Asha board has led to low dwell times and low engagement with the objects. However, from *Warren Cup* we know that visitors tend to look at the object first, and then look for the label if they want to know more. It is therefore possible that visitors were not sufficiently compelled by the object to bother reading the interpretation. This could be due to the plain display style used for objects in *Royal Game of Ur*.

Use of interpretation deepens engagement

However, there is no doubt that use of interpretation did facilitate engagement: 77% of visitors felt that the information provided in the display made them look at the historic objects more closely than they might otherwise have done (compared to 88% for *Warren Cup*). Nobody felt that it had a negative impact on their enjoyment of the objects. Only 4% said that they had not read any of the supporting information– although this does not take into account non English speaking people.

85% those played the game or watched others felt that this had encouraged them to look at the objects more closely than they might otherwise have done.
Foreign language issue

The lack of multi-lingual interpretation is an ongoing issue in Room 3. However, the fairly intuitive nature of the game and the presence of volunteers who were able to communicate through gestures seemed to help non-English speakers this time.
How did visitors respond?

9.1 A very positive response overall

The visitors we spoke to had enjoyed their visit to Room 3, and had really engaged with the mixture of fun activity and educational information:

'I would just say enjoyable and very interesting' Vox pop
'Interesting and bright and at least there is something to do in there as well' Vox pop
'A great exhibition to bring your children to' Vox pop
'It has a lot of information packed in and it's fun and appealing' Vox pop
'Fascinating and full of history' Vox pop
'Simple to pick up and fun' Vox pop

However, it is likely that the visitors willing to take part in a vox pop were those who had stayed a relatively long time in the gallery. We know from the data that a significant number of visitors had a quick look and then left again, without engaging with the theme.

9.2 Interactivity

Children and families enjoyed playing the game. They felt that it was a good choice of game as it was simple enough for young children to play but also included an element of strategy:

'I liked the game in general because it was simple and fun. I liked the game because I am aged 10' Family
'It is a great game the way it is so simple but it's still really captivating and exciting' Family
'Jamie is 7 years old, she likes the exhibition because it is fun ...it seems a great game for kids to learn to think strategically.' Family

Adults also liked the opportunity for interaction and fun:

'Good idea to have an interactive game.' First-time adult
'It was great to be able to play the game.' First-time adult
'Definitely enjoyed being able to actually play the game ...a treat.' Repeat adult
Visitors felt that the opportunity to play a replica game made the experience more interesting and informative. The interactivity provided for a more involved way of learning in the museum environment. They compared this to more traditional museum displays, including those within the British Museum, which they found to be less stimulating:

‘Obviously this part allows you to join in, which the other parts don’t’ Vox pop
‘I think that you get really overwhelmed by just looking, looking, looking in a museum and this gave you the opportunity to read about it, and to see the pieces and to actually experience it. It was wonderful’ Vox pop
‘Somewhere you can actually put your hands on stuff, it’s all very well seeing things, but it is nice to touch and get involved in it as well, and especially when you have got people to explain’ Vox pop
‘It is fun as well, and you can learn about something while you are kind of enjoying being part of it, rather than just looking and reading something...edutainment!’ Vox pop

There was considerable surprise that the museum was doing something like this. Visitors do not consider the British Museum to be an interactive environment, unlike the Science Museum. They were pleasantly surprised at the interactivity the room offered.

‘Not what I am used to but what it should be...I haven’t been to the British Museum for a number of years and it was less interactive then.’ Vox pop
‘Different, there are games, more for the kids.’ Vox pop
‘I think that it was quite surprising, it’s interactive and teaching you the game.’ Vox pop

9.3 Display and interpretation

Enjoyment of the game was enhanced by the user-friendly design. With straightforward rules clearly set out, visitors found they could quickly pick-up the game.

‘Simple rules, counters and spinner made game quick and fun. First-time adult
‘...I think that the boards are quite user friendly.’ Volunteer
‘I thought that they really set it up well...we could easily sit down and read the instructions and get on.’ Vox pop

Several visitors commented on the bright and simply display scheme, finding it inviting.

‘Light-filled, inviting room. Well-presented, easy to read and entertaining displays.’ First-time adult
Exhibition is very nicely set up, airy and light.' Repeat adult

'What attracted me in was that the room was really filled with light and with a very high ceiling and so it just looked very inviting to come on in.' Vox pop

Visitors appreciated the straightforward, easy-to-understand tone of the text panels:

'The wall words were very appealing in their language and easy and simple to read, so that both an adult and a child would be drawn into reading them.' Vox pop

'We saw 'play the oldest game' and it is an invitation to come in and do something ... it was too good to miss.' Vox pop

'Brief history notes are nice... ' Repeat adult

9.4 A victim of its own success?

Visitors were so absorbed in the playing the game area that there was greater demand than Room 3 could supply.

Visitors wanted extra space so that families could play together and interact as a group:

'Extra seats for spectators would be helpful.' family

'Maybe we could provide more chairs.' Volunteer

'Chairs for spectators, families and friends are very helpful.' Volunteer

Some visitors said that, for the space allowed, the game took too long to complete and there were problems with groups monopolising boards for long periods:

'...would take ages to actually finish the game though.' First-time adult

People often play more than one game and if tables are occupied potential players leave the gallery.' Volunteer

'The only thing people haven't liked is that there aren't enough tables for more people to play the game.' Volunteer

However, the volunteers were able to diffuse potential frustration by directing visitors to other resources:

'Because some people haven't been able to play we have directed them to the webpage and the shop ... you can play it online for free.' Volunteer

'We have been directing them to Room 56 and to Room 10 to the winged bull and they quite like the idea that there was ancient graffiti.' Volunteer
9.5 Volunteers

Visitors appreciated having the volunteers in the room. They felt that they were friendly and helpful and that they added to the sense of interaction.

‘Excellent exhibit, particularly useful to have people to come and explain the games without being asked.’ Family

‘Very polite and helpful advisors ... creates involvement and interaction with friendly staff from the very beginning of the visit.’ Family

‘...I like the way they come up and help without being asked, I think that is a very good thing.’ Vox pop

9.6 Context

A number of comments were made regarding the narratives and human stories within the display as they gave visitors a way to make meaning: a point of connection with the past. Visitors were fascinated by the discovery of the rules and that the game was played by ancient peoples.

‘...especially enjoyed learning about Indian Jewish community ...Really enjoyed the story of the discovering of the game and how the rules were verified in the present day.’ Repeat adult

‘...it makes you think that they were living persons and they played, and their day-to-day life.’ Vox pop

‘It is very interesting, in past times how people spent their time.’ Vox pop

Some visitors felt that the display had left them wanting more. However, comments in this vein were far less abundant than for previous Room 3 displays. This is likely to be an effect of the sign-posting, written and verbal, but also a appreciated that the display has a defined scope – it does what it says on the tin.

‘I really liked learning about the Indian Jewish community, I had no idea that there was a Jewish community in India and so that is something that I would like to find out more about.’ Vox pop

‘Great game, informative exhibition – would be nice to see an exhibition featuring games from all over the world.’ First-time adult

‘We liked the information about the original rules, maybe you could translate more of them...’ First-time adult

‘Would be nice to have variations for once you’ve mastered it.’ Repeat adult

‘I was more interested in learning about senet and hoped to see some links, it is said that spiritual and religious teachings were hidden in these games.’ Family
9.7 Outcomes

Visitors connected the exhibition to the present day

The visitors we spoke to had drawn comparisons between the royal game of Ur and games played now. This seemed to be particularly effective for family groups – we know from past studies on family engagement with objects that children often need these direct comparisons to their own experience to encourage empathy and engagement.

‘Very interesting game, like an early version of Ludo, kids of 6 – 11 liked that it is easy to learn.’ Family

‘I think this is a good game and it is fun. It is exciting to learn a new game. This game is a bit like Ludo – my favourite game.’ Family

‘It seems like an Indian board game. We have played Ludo and this seems to be an old version of it.’ Family

Visitors gained a sense of historical perspective and continuum

Respondents spontaneously remarked that the display had given them an understanding of developments through time, whilst also feeling commonality with people in ancient civilisations:

‘I thought it was fascinating knowing that it is still played now’ Vox pop

‘It is interesting how the game started, because the game that we just played is like a kids game that he has got’ Vox pop

‘I am shocked that they played a game like this 4000 years ago. I thought that civilisation wasn’t that they were playing games 4000 years ago. So it is all very intriguing.’ Vox pop

‘The analogy to chess and other games helps to maintain that continuation I suppose.’ Vox pop

‘...makes you think about the evolution of our history, about games that started almost 5000 years ago.’ Vox pop

The display prompted visitors to make cross-cultural comparisons

The explanation of the game’s cross-cultural history also stimulated some visitors to draw further cross-cultural comparisons:

‘The links to all the countries where it has come through and so on, that was interesting’ Vox pop

‘...young people have likened this game to other board games from different countries – for example Africa.’ Volunteer
Visitors intended to follow up after their visit

The display stimulated visitors’ interest in the topic and made them want to carry on playing or find out more:

‘Great game, we are going to purchase a set.’ Family
‘The further information board was very useful – whenever anyone asked about buying the game I was able to show them the web address.’ Volunteer
‘I would look on the website when we get home and we can have a look at the game as well.’ Vox pop
‘...they get interested and want to find out about this and we direct them to the British Museum webpage.’ Volunteer
‘...people have had a really good time playing the game, so much so that people have either gone and bought it in the shop, or when you tell them you can play it online then they will go and play it on the Museum webpage, but they have also been taking sketches of the game so they can make their own.’ Volunteer
‘...we are going to look at it online.’ Vox pop
‘Probably go on the internet and start with the Game or Ur and see where it takes me.’ Vox pop
10 Conclusions

10.1 An overall success

Whilst *Royal Game of Ur* did not have universal appeal for every type of British Museum visitor, it was very successful in attracting and engaging general and family visitors. It was therefore a great choice of display for the summer holiday period.

The display attracted record numbers of visitors to Room 3 with a clear and resonant proposition to do something. The display was satisfying in scope and scale for visitors – it delivered on its promise, and there was clear signposting for opportunities to find out more.

10.2 Clear support for interactivity

Visitors were surprised and delighted by the chance to have a hands-on experience during their visit. It did not seem to matter that visitors were handling replica games – the opportunity to learn through play appealed to children, parents and independent adults. Playing the game was much more popular than anticipated, with queues forming in the room at busy times.

This interactive exhibition helped to reposition a visit to the museum (in these visitors' minds) as family friendly and a fun way to learn.

10.3 Display delivered complex learning points in a simple way

Visitors who stayed in the room for any length of time were able to clearly articulate some deep learning impacts from the display:

- An understanding of the cross-cultural context and development of the game.
- A sense of connection with people's lives in the past.
- Ability to draw parallels between the exhibits and content of exhibition and their own lives.
- A sense of historical perspective and continuum.
Winning ways

This seems to be because of the contextual information provided. This was easy to understand and key points were repeated on different panels, meaning that visitors had little chance of missing the main points.

Being able to play the game also helped visitors – especially children – to develop a sense of connection with the past.
## Comparison table

<table>
<thead>
<tr>
<th>Measure</th>
<th>Ur</th>
<th>Warren Cup</th>
<th>Rembrandt</th>
<th>Samurai</th>
<th>Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>55%</td>
<td>48%</td>
<td>52%</td>
<td>43%</td>
<td>49%</td>
</tr>
<tr>
<td>Female</td>
<td>45%</td>
<td>53%</td>
<td>48%</td>
<td>57%</td>
<td>51%</td>
</tr>
<tr>
<td>Intentional visit to BM</td>
<td>75%</td>
<td>86%</td>
<td>77%</td>
<td>64%</td>
<td>76%</td>
</tr>
<tr>
<td>Incidental visit to BM</td>
<td>25%</td>
<td>14%</td>
<td>23%</td>
<td>36%</td>
<td>24%</td>
</tr>
<tr>
<td>Specialist</td>
<td>6%</td>
<td>21%</td>
<td>10%</td>
<td>9%</td>
<td>14%</td>
</tr>
<tr>
<td>General</td>
<td>76%</td>
<td>59%</td>
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</tr>
<tr>
<td>Little/ none</td>
<td>18%</td>
<td>20%</td>
<td>19%</td>
<td>18%</td>
<td>22%</td>
</tr>
<tr>
<td>Social</td>
<td>35%</td>
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<td>20%</td>
<td>33%</td>
<td>23%</td>
</tr>
<tr>
<td>Intellectual</td>
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<td>40%</td>
<td>34%</td>
<td>33%</td>
<td>47%</td>
</tr>
<tr>
<td>Emotional</td>
<td>21%</td>
<td>35%</td>
<td>24%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>Spiritual</td>
<td>5%</td>
<td>5%</td>
<td>20%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Average dwell time</td>
<td>4 mins, 3 secs</td>
<td>4 mins, 9 secs</td>
<td>2 mins, 15 secs</td>
<td>3 mins, 42 secs</td>
<td>2 mins, 49 secs</td>
</tr>
<tr>
<td>% total time spent at exhibits</td>
<td>48%</td>
<td>72%</td>
<td>-</td>
<td>71%</td>
<td>59%</td>
</tr>
<tr>
<td>Browser</td>
<td>62%</td>
<td>45%</td>
<td>26%</td>
<td>39%</td>
<td>55%</td>
</tr>
<tr>
<td>Follower</td>
<td>36%</td>
<td>42%</td>
<td>66%</td>
<td>50%</td>
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</tr>
<tr>
<td>Searcher</td>
<td>3%</td>
<td>13%</td>
<td>28%</td>
<td>11%</td>
<td>1%</td>
</tr>
</tbody>
</table>
**Winning ways**

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