Immersive Games:
An Alternative Reality for Museums

ALEX MOSELEY

University of Leicester

Three teenagers are walking through the gallery, chatting about last night's TV, and slowing down to look with passing interest at a bronze-age shield. Suddenly, a mobile phone buzzes: the teenagers cluster around as one reads, urgently whispering: "Talk to no-one. You need to find the door marked *No Entry* and go inside. Hurry. Don't be seen". They're transformed; on edge, scanning the gallery for the door…

You might think this opening vignette comes straight from a TV programme. In fact, it took place regularly, in a museum gallery, and led hundreds of visitors to engage deeply with the gallery contents and themes. This is the world of the alternative reality game, or immersive fiction, which originated in film marketing, but is now used in and across various sectors with some startling results – and with the distinct benefits of low costs, low technology and delivery by small creative teams.

Alternative Reality Games, or ARGs, extend the usual borders of a game by attempting to "enmesh the game within the fabric of the player's real world by harnessing as many media technologies and interfaces as possible… effectively making the entire world the game board." (ARGology, 2011) By gathering clues from a variety of sources, and building up information banks, players work both independently and (more often) together to piece together a story and use the clues to both unlock, and also create, new parts to the tale. These community and knowledge-creation elements are key aspects: in one of the earliest ARG games, *I Love Bees* (created as a marketing campaign for the video game *Halo 2*), designer Jane McGonigal (2008:206) describes how "massively

distributed puzzle pieces were tracked down and documented by individuals, but compiled and analyzed by the group. Once a new piece of content was turned over to the collective, it then would be analyzed by thousands of players on dozens of different community forums". More recently this incredibly strong community was able, through a Corporation for Public Broadcasting funded project to imagine the World Without Oil (worldwithoutoil.org), to bring its power to bear on the future energy crisis with both a "sense of gravitas" and one of "urgency to find solutions" (McGonigal, 2011: 337). And with *Evoke* (www.urgentevoke.com) in 2010, ARG players went a step further, solving and – with funding from the World Bank Institute – now implementing real projects to improve education, farming and environmental conditions, among others, across the African continent.

In 2005-7 an independent ARG called *Perplex City* (by London creative team Mind Candy) saw thousands of players answering secretive calls in newspapers and websites to solve card-based puzzles and wider, media-spanning problems in order to determine where a small silver cube was buried in the UK countryside, who had buried it there, and why. Even after the cube was found, and a sequel had been shelved, hundreds of players were still regularly discussing the game on online forums – and I interviewed fifty of these, most highly engaged, players to see what had motivated them during the game (Moseley, 2008), with a view to capturing these elements for use in an education setting (in Higher Education, where I work, but equally applicable to the museums sector, as will be shown below).

It was interesting to note that a high proportion of players were not heavy users of online networks outside of the game (spending an average of only ten minutes a day on social networks/forums), and preferred face-to-face contact. And yet, whilst the ARG ran, they were spending 1.5 hours each day on the game (both off- and on-line), with many noting that they thought about it far longer, and one describing it as "getting yourself hooked on intellectual crack cocaine": these were extreme levels of engagement. Drilling deeper to find out which elements of the game were most motivating, I found players enjoying the narrative aspects and identifying with the game's characters and themes; solving problems, with players noting that they "encouraged me to think laterally" and "opened up many new areas of interest and research (probably into areas that I would never otherwise have found out about)"; and the communal aspects: "there is a real thrill in communal working... getting nudges and hints from other players", and realising "you were part of something HUGE".

Condensing the most motivating elements into a set of features, I arrived at seven which could be applied to other – education related – contexts:

- Problem solving at varying levels – graded challenge: enable participants to pick their own starting level and work up from there.
- Progress and rewards – leaderboard, small rewards for completing sections, grand prize.
- Narrative devices – characters/plot/story; doesn't have to be fictional: could be histories, themes, news etc.

- Influence on outcomes – participants co-create or influence outcomes.
- Regular delivery of new problems/events – keep things moving without putting extra pressure on staff.
- Potential for a large, active community – which is self-supporting/scaffolding; the potential is less the smaller the group and the narrower the subject interest/specialisation.
- Based on simple, existing technologies/media – perfect for low budgets. (Moseley, 2008).

Immersion in museums

A growing number of ARG or ARG-influenced courses have now been used successfully in higher education (see Brookes 2009, Moseley et al 2009) – in each case using some or all of the above features. Clearly there is an obvious case for transfer to museum education, particularly in the older teen to adult age range; however, ARGs and their constituent elements fit with much latest thinking around learning and visitor studies. Nina Simon, in her groundbreaking *Participatory Museum* (2010: 13) notes that "the best experiences are... scaffolded to help people feel comfortable engaging in the activity", need to focus on "empowering visitors" yet in a way which involves the institution (for example, in co-creation); and strong cases have been made for the effectiveness of narrative in engaging visitors (eg. Gottlieb & Simonsson 2006) – all of which fit neatly with the ARG features identified above. There are further advantages for museums too:

- ARGs can be cheap, and relatively easy to create (the main ingredients are imagination and time);
- they can spread physically across as small or wide an area as needed (such as different sites) and also over different media (physical, online, publications, or posters);
- games can run over short or very long timescales (hours to years), and items/clues/narrative can be pervasive and even permanent additions to the gallery or online space;
- advertising can be self-organising (fan forums, word-of-mouth), but may restrict audience to a cult following at odds with desired target;
- players can create things: through the game museums could harness this power to populate databases, produce materials or ideas for a gallery, or produce promotional material;
- there is the possibility for (big) PR: outdoor events particularly (such as a big opening or final event; some in-game activities can be very public).

The main downsides are high up-front development time (effectively, writing a believable story and fitting the mechanics around it) and the fact that although large numbers may show initial interest, the most engaged players – particularly over long ARGs – tend to be small in number, and fiercely engaged. Different levels of complexity therefore tend to be useful: gentle puzzles and narrative for the low engaged, more cryptic, or *meta*, puzzles for the high.

Already immersed: case studies

Practical examples of ARG or ARG-like applications commissioned by, or based mainly within, museums are few to date, but those that do exist are particularly effective examples. Principal amongst these are the games developed for the LUCE Foundation Centre for American Art at the Smithsonian, under the creative guidance of Georgina Goodlander; but I'll also draw on experiences at the Experimentarium in Copenhagen, Klopfer *et al's* work in the Boston Museum of Science, and the involvement of Bletchley Park in a charity ARG I co-produced in 2009.

At LUCE, two full ARGs have been implemented. The first, *Ghosts of a Chance*, was the first of its type in any museum, and ran from July to October 2008. It invited participants to create objects and post them to the museum, but also to unlock a hidden narrative linking these objects with clues, the game culminating in a series of scavenger-hunt quests on the final day – although a more structured scavenger-type activity was embedded as a stand-alone activity in the museum for another two years. The second ARG, *Pheon*, launched in September 2010 and is due to continue at least until late 2011; it includes two platforms: Facebook and a physical exhibit within the museum itself, and has a strong narrative element – carried through comic-book drawings – surrounding the completion of various quests and ultimately capturing the fabled Pheon artefact.

Bletchley Park museum was approached by the team behind the *Operation: Sleeper Cell* charity ARG (which ran for three months in late 2008 to raise money for Cancer Research
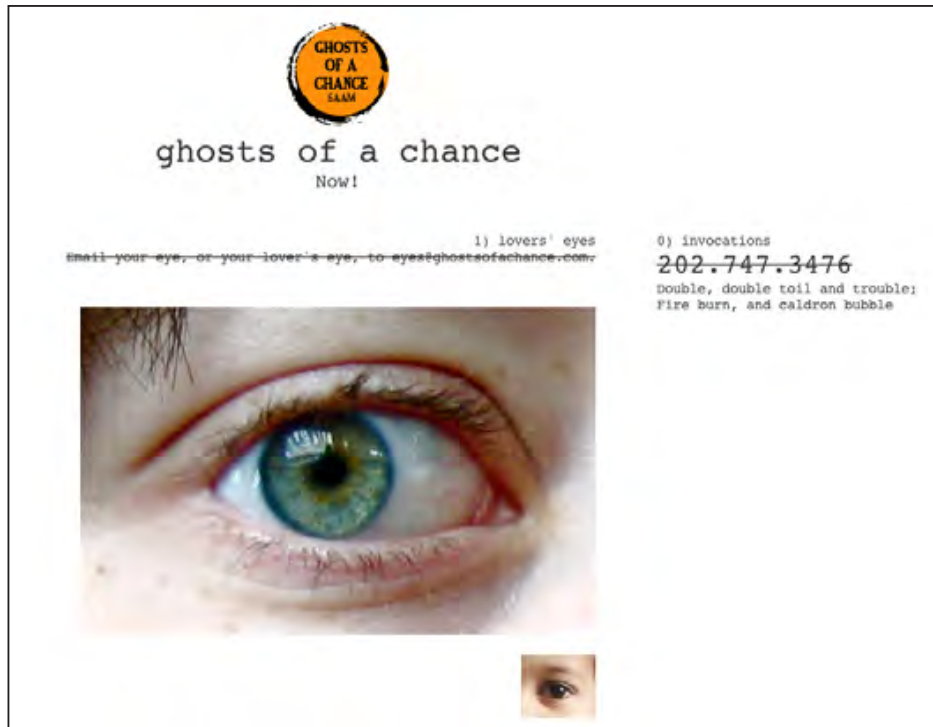
The opening web page, or "rabbit hole", to *Ghosts of a Chance*

UK, through a series of smaller puzzles and an overarching meta-puzzle based around spies, biscuits and drinking tea) for involvement in the final clues of the game, which were placed in a display case within the museum and signposted by grainy photographs of the museum grounds.

The other two case studies are not full ARGs, but use many of the key features in their design. Both used mobile/handheld devices and were repeatable, short activities based within the museum itself. *Ego-Trap*, at the Experimentarium, guided players around the exhibits using messages and text-quizzes on their own mobile phones, but gradually introduced a subversive narrative which eventually guided the players through a door marked *No Entry*, to face a battle with a giant mutated rat! At the Boston Science Museum, *Mystery at the*

Museum provided parent-child teams with preloaded PDA devices, which guided them through a series of challenges to thwart the evil Pink Flamingo Thieves and recover a stolen artefact; central to the game was the allocation of different skills to each team member, so that teams had to pool skills together to solve each problem.

Design and development

The two ARGs at LUCE were developed in partnership with an external game design agency, City Mystery, who provided most of the ideas and strong narrative. The benefit, says Goodlander[1], is that "we often become too familiar with our own museum and do not see the potential for gaming hidden in every artwork, stairwell and plant pot", although she also spent approximately 40% of her time (and some from museum assistants, who suggested artworks or stories) working on the four-five month development phase alongside the agency. External game design partners were also used by the Experimentarium and Bletchley Park games, but in these cases individual consultants were used for particular aspects (creative consultant, exhibition designer and scriptwriter in the case of *Ego Trap*, and enthusiastic unpaid games designers and writers in the case of *Operation: Sleeper Cell*). Both Bletchley Park and Boston (where design and development were owned by the research team of Klopfer *et al.*, with museum educators as consultants) differed in that the museum was not the originator of the need/requirement for a game.

Even before the design phase, there are two obvious hurdles
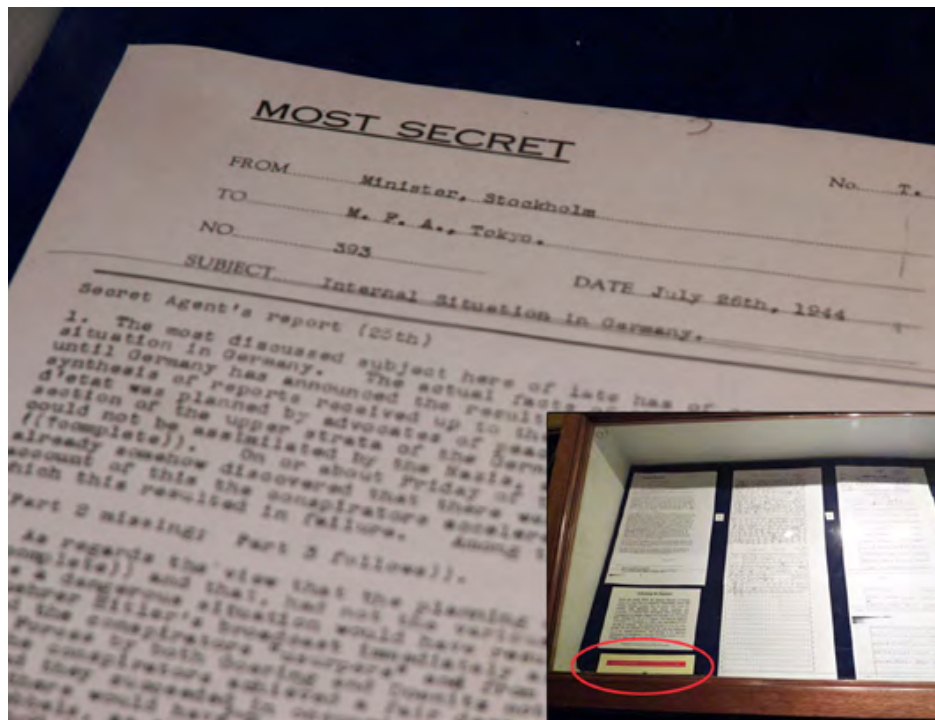
A clue from the Bletchley Park collection, with (inset) a game object placed within the cabinet.

which all those who have pitched ideas for events/exhibitions (particularly education-based events) will be acutely aware of: the perception of games as frivolous for older children or adult education; and the difficulty in getting new ideas – particularly those involving strange activities or underground messages – past the director or management board. Surprisingly, though, both LUCE and Bletchley Park directorship agreed quickly and were, notes Juliette Culver, project lead for *Operation: Sleeper Cell*, "very open and quite excited about the idea… I was surprised how willing they were for something to be put in one of their display cases".[2] Where problems did occur, notes Goodlander, they were in such areas as contracting and intellectual property, due to the differences in approach to usual museum events. The PR and outreach potential of ARGs

would provide a good argument in cases where directors are not quite so open-minded.

Let's go!

Testing a full ARG before launch is near-impossible, as the game flows and changes depending on player actions, although games using a subset of ARG-elements are able to put some elements (such as web sites, technologies, or puzzles) to test with pilot participants before a full launch. *Ego-trap*, for example, was tested by over 300 students at "different stages of the iterative design process" (Kahr-Højland 2010: 502).

When the game actually launches, the real work on an ARG begins. If the design has been contracted-in, then most of the in-game activity will be handled by the game designers – but well-designed games will also involve museum staff as characters, actors or decision-makers in the story (the fun part!), and any live events in museums will, of course, require museum staff involvement. *Ghosts of a Chance* required 40% of Goodlander's time, with three or four other staff contributing 10-15% of theirs; and some activities (such as running regular events) became part of regular duties.

Story and society

In all case studies, a well-developed narrative or story was a key feature of both the design, and the success, of the games. Whilst some tracked a developing story of secret societies or art thieves, *Ego-trap* used female and male protagonists, whose voices drove the narrative and provided choices for

the participant. Kahr-Højland found that it was "possible to develop digital narratives that support both individual and social learning processes at… the same time", and a good drip-fed narrative will often cause high levels of discussion amongst participants. This, and any live events or larger, meta-puzzles, led to high levels of collaboration in all the games mentioned here: for *Operation: Sleeper Cell*, only a handful of players could actually visit the museum but they collected clues to share and analyse with the larger, online, group. In *Mad City Mystery*, players reported the "sense of a unique contribution in addition to promoting collaboration" – the idea of individual specialisms contributing to a combined whole which typifies ARG communities.

Effecting change in the gallery

All the case studies made a lasting change to the gallery space. Some, like *Ghosts of a Chance* and *Operation: Sleeper Cell*, actually placed new user-created objects or clues within the display cases or museum's databases; whilst others created pervasive activities (scavenger hunts or the full games themselves) as long-term open activities within the normal museum programme. The latter, of course, extends the value-for-money for the institution and provides valuable input to education and outreach programmes.

First steps

Hopefully, this short chapter has provided a flavour of what ARGs are, and why they could provide compelling

and rewarding options for museum activities, education programmes and outreach. Whilst some of the case studies detailed took large amounts of time and money to develop, the costs are far lower than many gallery refits, online interactives or new websites; and others were far more sleek, the main requirement being a specialist or enthusiast in games or storytelling. As Goodlander asserts:

> *Every museum staff member should take a tour of their... collections with game designers. Even if you cannot afford the time, money or resources to implement an ARG, seeing your galleries and objects through the eyes of a game designer can be incredibly illuminating.*

Explore some of the links below for more detail on the case studies and ARGs in general, and see where your imagination can take you.

Acknowledgement

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Notes

1. Personal communication, 2011.

2. ibid

Links to case studies and ARG information

Ghosts of a Chance http://ghostsofachance.com/

Pheon http://pheon.org/

Operation: Sleeper Cell http://www.operationsleepercell.com/

Overview http://www.law37.com/summary.html

Ego-Trap and *Mystery at the Museum* see references below.

Unfiction ARG forums http://forums.unfiction.com/forums/

ARGology http://www.argology.org/

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