Ghosts in the Garden: locative gameplay and historical interpretation from below

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ABSTRACT
The heritage industry now makes extensive use of digital audioguides and similar interpretation tools to reach new audiences but many remain rooted in authoritative and didactic conservatism. This paper critically evaluates the state of play in the field, from downloadable audio tours and apps, through more complex engagements with theatrically enhanced and affective simulation, to attempts at fuller dialogic visitor participation and the use of GPS or RFID-triggered game mechanics. While ‘armchair’ and home screen-based game and interpretation models are addressed, particular attention is paid to the use of mobile and locative design, where embodiment in place is privileged over less associative or remote experience. The paper takes a research project led by the author as a case study. Ghosts in the Garden was conceived in collaboration with a museum and an experience design SME to test the potential of immersive, affective real world games on public understandings of history. It sought to engage visitors with researched history from below by using a pervasive media soundscape, the ‘ghosts’ of past visitors and a ‘choose-your-own-adventure’ game mechanic in which outcomes are variable, visitor agency is retained and a more radical model of historical knowledge suggested.

Over the last decade, digital mobile technologies have played a leading role in transforming the visitor experience at European sites of heritage (Van Heur 2010). Applications for phone and tablet have facilitated the delivery of interpretative content by triggering audio or visual interventions while simultaneously permitting visitors an impression of greater agency in environments less cluttered with signage and props and less reliant on their ability to find the right page in the guidebook. Apps invite forms of content design in which greater degrees of interactivity and even personalisation are privileged. In the educational sector, this potential is slowly gaining recognition and a number of institutions have begun to experiment with locative app design to change the ways history students, for example, engage with primary evidence (King et al. 2014). However, critical commentary on these processes has been dominated to by reflections on form rather than content and purpose, and little in the way of systematic analysis of locative experiential interpretation at historic sites using mobile devices has been attempted (Talon and Walker 2008; Brown, Saeed, and Knight 2010; Mortara et al. 2014). The question we should in any case be asking perhaps, is not ‘how can we use mobile and digital technologies to get larger and more diverse audiences through the door?’, but ‘how can we use mobile...
and digitally enhanced forms of interpretation to change the questions we ask and the ways in which we engage with historic sites?"

There are, broadly, three main ways in which digital technologies, some mobile and some static, have been considered for use in the heritage environment: as an augmented guidebook and information resource, as a tool for enhanced simulation, and (less frequently) as a tool for changing the rules by which we construct and define historical knowledge at heritage sites. This essay reviews each of these approaches in turn and argues the case for a deeper engagement with the third. Locative mobile technologies, it is suggested, have the potential to positively transform some of the ways in which visitors to heritage sites are addressed, challenging the notion that historical data is best presented for passive consumption, and promoting, as an alternative, an experiential model of knowledge built upon agency, dialogue and informed choice. Ghosts in the Garden, an experimental project in which the author was a researcher and participant, is presented here as a case study. Its rationale was to disrupt both the form and the content of traditional interpretative approaches to the use of mobile, firstly by concealing the technology, secondly by requiring collective evaluation and decision-making, and thirdly by commissioning original historical content ‘from below’.

**Downloadable tour apps**

In the first, phone and tablet apps, freely downloadable from the Apple AppStore and Google Play, dominate the field, and companies like Audio Tours, Treasure Trails and ATS Heritage offering off the peg, modular guides to the heritage attractions of British urban centres, have emerged as market leaders. Typically, apps of this kind use locative GPS software and a simple mapping system to guide users around a town’s historic sites, alerting them on arrival with photographic or graphic reconstructions, and nuggets of ‘factual’ text and/or audio content. In an increasingly competitive marketplace, and a public expectation that downloading apps won’t cost them anything, tight budgets prompt ‘value for money’ offers from producers. A growing number offer an ‘armchair’ mode, enabling content to be explored off-site and without the need for GPS triggering.

Academic historical input is rare in the development of apps like these; they tend to make use of previously published historical knowledge rather than commission new research, and may be put together by local authorities and community organisations whose objectives favour economic regeneration and social cohesion over complex interpretations of the past. Dissonant histories are unlikely to be revealed.

**Enhanced and affective simulation**

In the second approach, developments in surround-sound, 360° film or augmented and virtual reality (AR and VR) have enabled enhanced forms of visual and audio reconstruction, particularly at archaeological sites, and in any historic landscape in which either material remains have not survived, or the desire for an experiential relationship with an historic event prompts virtual reconstruction. These approaches have become steadily more immersive in pursuit of ‘the real’. The National Trust for Scotland’s 2014 motion capture video ‘Battle Room’ at Bannockburn for example, uses ‘cutting edge 3D technology’ that allows visitors to ‘witness the sights and sounds of battle as it would have been in 1314’, and where ‘by means of digital enhancements, the swords and lances are shown striking and penetrating armour and flesh.’ Developed in partnership with design consultants, Bright White, and Glasgow School of Art’s Centre for Digital Documentation, the Bannockburn Battlefield Experience has been showered with industry awards and claims to be ‘the first heritage centre in the world using Hollywood-calibre motion capture to immerse visitors in a realistic and historically accurate 3D medieval battle’. Importantly, although visitors are ‘strongly encouraged’ to sample experiential immersion in this way, more traditional tastes are directed to a recorded commentary from professional historians, Fiona Watson and Tony Pollard, both members of the project’s Academic Advisory Panel, selected ‘to
ensure the new interpretation is strong and academically sound, based on acceptable and authoritative research and thinking’ (National Trust for Scotland 2015).

Immersion techniques which seek to throw visitors into visceral experiences both ‘realistic and historically accurate’ are typical of the increasing trend towards affect in popular approaches to the past, and of an accompanying insistence upon recognised standards of accuracy. The real, in other words, however much it is actually a product of imaginative reconstruction and storytelling, is rhetorically both affective and intellectual; indeed the credentials bestowed by the latter act in vital validation of the former. The use of digital technologies at heritage sites has coincided with the rise of the ‘affective turn’ in the humanities, or, as La Caze and Lloyd have put it, the growth of ideas that have ‘led us to rethink the frameworks of scholarship and research that have separated the mind from the body’. As critics of these re-enacted histories have often pointed out, the idea that we can experience events in other eras with any degree of affective verisimilitude assumes a ‘collapsing of temporalities’ and ‘a privileging of experience over event or structure’ which challenges all notion of the past as essentially different or unknowable. In so doing, it ‘implies forms of historical continuity that are … potentially inaccurate’, highly manipulable and somewhat at odds with the empirical authenticity conferred by academic expertise. Nevertheless, affective and empathic games have sparked the interest of the museum sector for the greater depths of engagement they bring to audiences traditionally ‘hard to reach’ (Agnew 2007, 310; La Caze and Lloyd 2011, 6; Kidd 2015).

How this might best be done remains problematic. As Emma Waterton has put it, ‘given the relative newness of theoretical talk dealing with the politics of affect in the fields of heritage and tourism, little attention to date has been channelled towards figuring out what this might mean empirically’ (2015, 51). This is particularly pertinent to heritage tourism where a ‘spirit of place’ is assumed intrinsic to understanding. For Matthew Cook, ‘The potential for sites of memory to stimulate empathy might appear to be something assumed or expected, but it is a theme that has received limited attention in the scholarship on geographies of memory’ (2016, 292). Cook’s own concern is that attempts to arouse empathy have most often been deployed at sites of extreme historic trauma and injustice such as American slave plantations or European holocaust sites where many people ‘lack the ability to truly empathise because they do not engage with people who are racially or socially different from themselves on a regular basis’ (2016, 296).

Dialogic participation

Tudic histories

The third approach considered here is the most challenging. It concerns the use of mobile and digital technologies to change the nature of historical interpretation at sites of heritage from one in which visitors are encouraged to absorb ‘factual’ information to one in which they are encouraged to participate as interpreters. While the former requires a passive acceptance of the authoritative views of ‘experts’, sometimes without any display of evidence and often without debate, the latter offers visitors a glimpse of the historian’s mental world and requires from them some evaluative thought. Apps that take visitors on a prescribed and guided walking tour of a site are rarely equipped to explore ideas of this kind, and the same is largely true of immersive tools like AR which focus on accurate simulation rather than alternative forms of interpretation. Yet what most sets historical analysis apart from other forms of enquiry in the arts and social sciences is the fragmentary nature of the evidence around which historians build interpretative frameworks, the material irretrievability of past events (and people), and the inevitability of supposition, argument and disagreement. Construction, in other words, is as necessary a concept to historians as reconstruction. Accepting that history is a practice in which knowledge is crafted from often incomplete evidence challenges the authoritative basis on which explanation is conventionally built. Arguably, moreover, presenting the process of making history as a craft rather than the knitting together of a series of factual certainties offers the heritage industry an opportunity to engage audiences in dialogue with the past.
These ideas have sometimes been addressed through play. A number of heritage sites have begun to borrow from the popularity of computer games. Broadly, it has been proposed, ‘video games that employ historical artefacts, characters, settings or events, either as a mode of storytelling or as a function of play, create a unique opportunity to affect historical understanding and improve its conventional interpretation’ (Peterson, Miller, and Fedorko 2013, 34). In educational environments, these principles have been successfully built upon for the teaching of history, and there is much evidence for the positive role games can play in student learning (Kennedy-Clark and Thompson 2011; McCall 2011). Historical themes have long been popular in computer games designed for entertainment, but it has also been generally accepted by both designers and players that too much historical analysis can compromise game-play, make the game unattractive, and historians have been understandably critical of what they see as an over-simplification of complex pasts. Parallel concerns have been aired from the point of view of heritage and its tangible and intangible associations with a site’s ‘sense of place’. Jeff Malpas has argued that simulating an historic environment through the use of non-locative digital media assumes

the idea that what matters to that place is not the actual location but rather the meaning that attaches to the location, a meaning that, as it were, be ‘read from’ the location and then recreated digitally, thereby recreating the place and the sense of place with it.

In this sense, the more we disassociate our understanding of the historic landscape from the embodied experience of the place itself, the more we restrict our appreciation of meaning (Malpas 2008, 204). However much simulations may evoke ‘the real’ through detailed simulation then, the fact that they tend to take place remotely, in the home or the classroom, is disassociative.

Most popular history simulation games are designed primarily for entertainment and few have attracted more critical discussion than the Assassin’s Creed series (Dow 2013). In Syndicate, the most recent iteration of the game, players inhabit characters in an ambitiously realised London in 1868 and work to rouse the working class, ‘driven to the Boroughs by the rich’, against a syndicate of time-travelling Templars who seek to control the city. Although clearly an ‘alternate’ or counterfactual historical fantasy, the game nevertheless depends on researched contexts in order to appear convincing, so it contains an ‘encyclopaedia’ of buildings and characters, some of whom are ‘real’ (Darwin, Marx, Alexander Graham Bell) and others almost entirely fanciful (the pirate/assassin, Edward Kenway). Inaccuracies include the dating of London’s first major outbreak of cholera to 1831 instead of 1832, and the heavy hand of Wikipedia can be detected in all of the encyclopaedia entries. Although, as Bob Whitaker argues, to criticise what is essentially a game for the shortcomings of its historical content is rather to miss the point, some historians have nevertheless taken the makers to task (Whitaker 2016). Alana Harris was invited to do so by The Guardian. Harris was disappointed by the game’s failure to ‘open out a gendered perspective on political discontent’ in the context of the second Great Reform Act and felt the game’s directive to liberate children from factory work (by removing their means of livelihood and sending them out into the street) betrays ‘a very reductive understanding of what liberation for children might have meant in 1868’. This article provoked 374 public comments, debating the importance of historical accuracy in computer games (Harris 2015). Syndicate is not the only popular computer game to be picked over for its historical inaccuracies. Games set in the ancient world, like Rome: Total War and Shadow of Rome have come under fire for an over-use of iconic buildings like the Colosseum, making them over-representative of a city, a time and a culture. Meanwhile, Roman military adventures featuring realistic portrayals of cavalry and equites are inexplicably augmented by fantasy units like Head-Hurlers and semi-fictional Gaulish Druids. After all, queries Dunstan Lowe, ‘What are the Gauls without Druids?’ (Lowe 2009, 76, 86).

The games industry’s traditional defence against criticisms like these, that ‘a game is just a game’, is somewhat flawed. Pure entertainment requires no historical accuracy at all, and yet, as Whitaker has shown, players of history games actually value scholarly authenticity very highly (Whitaker 2016) and game designers make discernible efforts to achieve it. However, more interesting debates may be had about game design, history and heritage if we move from a critique of graphic immersion to one
of process. In The Oregon Trail, for example, a game which first appeared in the 1970s with the most rudimentary of graphics, players migrate their families to Oregon by waggon, making difficult decisions about resources against historically researched criteria on the way. As William Urrichio has said of it, ‘the complexity of the game appears in historical simulation rather than in the representation of the historical moment’ (Urrichio 2005, 331). Adam Chapman too has tried to steer the critique away from a ‘troubling’ emphasis on historical accuracy towards ‘an analytical framework that privileges analysis of form (i.e. how the particular audio-visual-ludic structures of the game operate to produce meaning and allow the player to playfully explore/configure discourse about the past)’ (Chapman 2012). If we can do this while broadening our understanding of gameplay to encompass ‘real’ social environments rather than their computer screen equivalents, we will go some way towards the theoretical rethinking advocated for heritage interpretation by Emma Waterton and Steve Watson. In a review of heritage practice, and without referring to computer games as an alternative model, they ‘question the assumption that visitors are “recipients”, largely passive, to whom communication is directed and for whom products are designed and encounters controlled’. They are equally sceptical about charges of inauthenticity, a shallow, trivial eclecticism and an over-concern with materiality, the dramatic and the visual. Processes of selection might thus be discerned that have criteria drawn more from the imperatives of effective marketing than genuine engagements with the past. (Waterton and Watson 2013, 549)

Educational institutions like the Smithsonian National Museum of American History have shown what can be done if we transfer some of these ideas about process from computer games like Oregon Trail to apps based on actual collections rather than imaginative stories, designed as i-pad downloads for school and college use. Ripped Apart: A Civil War Mystery allows users to assume the role of a museum intern, tasked with working through a Civil War photographic carte de visite collection to research the impact of war on ordinary individuals from either side. Biographies must be pieced together with help from a virtual curator, manuscripts deciphered and problems solved so that the spirits of the sitters can be freed from boxes in the Smithsonian’s basement (the ‘game’ element). On completion users obtain access to a database of the entire collection and biographical and provenance notes for each photograph. Importantly, the app prioritises evidence based decision-making as well as the absorption of ‘information’, making learning an evaluative process.

These levels of engagement with processes of historical construction are only very occasionally replicated in apps for locative media. One example, Frequency 1550, uses mobile to enable teams of players to explore the mediaeval streetscape of Amsterdam, problem-solving as they go and learning about historical urban space in situ. Another project, Geist, guides visitors around historic Heidelberg with the aid of AR reconstructions delivered to their phones, ‘using history to allow the viewer to experience how it felt to be in that city during the thirty years war in the seventeenth century’. Yet another, Who Killed Hanne Holmgard? engages visitors to Aalborg as it was under Nazi occupation in 1944. Players adopt the characters of real detectives from the period whose experience in policing the city is recorded in a published memoir and this becomes the context for a quest to solve the (fictitious) murder of a Danish nun (Paay and Kjeldskov 2008, 123; Avouris and Yiannoutsou 2012). However, genuine engagements with the past, in place, can also be as much about the process of ‘doing history’ and problematizing the evidence as either being informed about it, or simply trying to empathise.

**Ludic histories and locative mobile**

If gaming principles can be wrested from remote screens and applied in pervasive and locative form, their potential for engaging visitors to sites of heritage with novel kinds of interpretation is obvious enough, and should have the capacity to move us beyond the concerns about displacement voiced by Malpas. But how useful has it turned out to be in practice? A common characteristic of historically-set computer games is a preponderance of sweeping narratives about warfare, trade, statecraft and nation-building. Indeed, Jerome de Groot’s critical appraisal of them is concerned with these themes to the exclusion of all others. An ‘underlying ludicness’, he concludes, ‘associated with mediated
discourses of knowing, throws history into a complex set of interactions; but his assessment of the phenomena remains ambivalent. ‘Historical knowledge is both concrete – the “right” answer – and something that can be played with, manipulated’ (De Groot 2016, 162). Computer games, as Kevin Schut has pointed out, with their privileging of aggressive and acquisitive behaviours, have preserved masculine approaches to history that are out of step with the formulations of the modern academy. The tendency of older mainstream histories to ‘write marginal social groups out of our cultural historical consciousness’ has been under revision by historians since at least the 1960s, but ‘digital games tend to reinscribe it’ (Schut 2007, 220, 221). Fears like these were enough, a few years earlier, to provoke Eric Champion’s remark that, ‘using typical game interaction for virtual heritage could be encouraging violent and destructive behaviour towards culturally significant artefacts’ (Champion 2008, 216).

On the face of it, the grand, epic and often bloody concerns of computer games set themselves at a considerable distance from those of the average British heritage attraction, the ubiquitous country house, the landscape garden and the royal palace. Moreover, industry statistics confirm an expectation amongst a majority of smartphone and tablet gamers of either gender that downloadable apps will give them opportunities to fight (Lu 2016).

Yet, locative app designers have certainly begun to think in computer-gaming terms, and at the most basic level, to offer incentives and rewards. On the Audio-Tours ‘Welcome To …’ platform, for example, ‘when visitors are at one of the historic sites they can check-in to receive a badge, and if they’re a keen explorer they’ll earn group badges for visiting themed sets of buildings’. Some more bespoke projects have gone further. In 2012, in a bid to persuade more visitors to take a circuit of the city walls, Chester’s ‘Renaissance’ initiative commissioned a specialised phone app called The Walls Quest. The design brief emphasised a conscious departure from conventional audio guides:

Instead of a usual interactive tour guide we looked to the world of video gaming to guide the project. More than 31 million people in the UK play video games and the average young person in the UK will now spend 10,000 h gaming before the age of twenty-one. The video games industry definitely know something about motivating people to take part in an experience.

Advertising for the resulting app emphasised its difference. Blending quizzes with visual reconstructions of key events from a range of periods in the city’s history and a series of collecting games, Walls Quest is more than just a guide – it’s an adventure. You’ll need to be observant, use your imagination and be ready to take part in the Quest Challenges. You’ll be rewarded with Quest Points, be able to unlock special Guild Shields and the best Questers will win special bonus games to play. (Chester Walls Quest 2012)

This was gaming in the service of widening participation, but not necessarily in the service of historical understanding. There are decisions to be made in Walls Quest, but they cannot change the nature of a player’s experience, only help them to accumulate virtual points, badges and shields. The visitor experience remains passive, despite the piling up of activities, and the historical narratives introduced adopt familiar perspectives ‘from above’, denying dissonance, debate or alternative perspectives. Yet games have the potential to do very much more than this, as Greg Costikyan’s influential definition of what makes a game reminds us:

Stories are inherently linear. However much characters may agonise over the decisions they make, they make them the same way every time we re-read the story, and the outcome is always the same … Games are inherently non-linear. They depend on decision making. Decisions have to pose real, plausible alternatives or they aren’t real decisions. It must be entirely reasonable for a player to make a decision one way in one game and a different way in the next. To the degree that you make a game more like a story – more linear, fewer real options – you make it less like a game. (Costikyan 2006, 194)

In what Anja Sisarica and Neil Maiden have termed ‘Creative Game-Based Learning’ (CGBL), gaming principles have more recently been theoretically adapted for real-world problem solving and to ‘rediscover cultural heritage’. The CGBL model prioritises two basic activities, exercising judgement during game play, then reflecting to learn after game play. Game play takes place in an environment that encourages and supports humour, idea support, trust and safety, persistence, freedom and playfulness. The game’s content and environment are designed to encourage players to undertake certain types of creative thinking throughout the play process. (Sisarica and Maiden 2013, 258)
Some designers for outdoor heritage sites have adopted these principles and are using games in mobile applications that subvert the principle of didactic, instructive interpretation very successfully. Jewish Time Jump in which players learn about Jewish and women’s history in New York city by collecting and evaluating evidence about a garment workers’ strike in 1911, on site, is an effective example. ‘What happens,’ the designers ask, ‘when primary sources, available for examination, are placed inside an historically inspired narrative, one that hews closely to the events, but creates drama through dialogues between player and historical figure?’ (Gottlieb 2016, 237). Up River is another. This is an app-based locative game, played in and around the estuary of the St Louis river, in which players follow clues, read maps and meet virtual characters from the estuary’s history while following a real-time quotidian quest. Players will not encounter warfare or collect superfluous badges, but they may meet ‘historical figures, such as Henry Schoolcraft, a nineteenth century geographer and ethnologist, who shares original journal entries describing the harbour area in the early 1800s, long before it was altered by large scale European settlement and industrialisation’. In effect, Up River is environmental history from below. It might have worked as an armchair console game but the advantages to experiential learning of using the actual environment, with its natural soundscape, local smells, changeable weather and passing people, as a backdrop are persuasive (Dikkers 2012; Wagler and Matthews 2012).

There is more to challenging the authorised heritage discourse in mobile interpretation than shifting content to reflect histories of place that are not dominated by elite narratives. As I have suggested here, history from below embraces not only an alternative approach to content but a dialogical approach to methodology. In essence, this is what Jeff Malpas was expecting of new media in 2008; new ways to enter into existing places – often by drawing upon neglected sensory modalities or by bringing to the fore aspects of the place that may otherwise go unnoticed or be difficult to access – that look to enable new modes of engagement between users or new forms of collective activity. (Malpas 2008, 207)

One very early attempt to engage public audiences with issues of historical disorder is worth considering in this context. In 1831, public anger at the rejection of Lord Grey’s Reform Bill by the House of Lords sparked serious rioting in a number of provincial towns, including Bristol and Nottingham, a great many deaths at the hands of the military and a series of public hangings. As one might expect, the heritage industry in both towns has struggled over the public commemoration of these politically divisive events. In 2004, writers, Liz Crowe and Ralph Hoyte produced 1831 Riot!, an interactive soundscape for Bristol’s Queen Square (the riot epicentre) in which audiences used headphones to navigate their own pathways through dramatically reconstructed scenes. Dubbed the world’s first audio-play for located media in an intelligent environment, the project’s immersive and non-linear framework was developed specifically to address the multi-vocal nature of the events. It imposed no authoritative third-party commentary; on the contrary, it provided a space in which the evaluation and ordering of voices, perspectives and events was a function of audience agency. Users were not addressed personally by historical characters however, or directed where to go (Blyth et al. 2006).

Ghosts in the Garden: an Adventure Heritage manifesto

If we are to reject the authoritative single voice of the guidebook in favour of new forms of evidence-based interpretation, we might agree a set of broad principles under which to proceed. In 2012, REACT, the AHRC’s South Western creative economy hub, funded a research project in Bath that addressed this question directly. Ghosts in the Garden was conceived as a partnership between the Holburne Museum, Splash & Ripple (a Bristol-based experience design company) and myself, an academic historian from the University of the West of England, Bristol (Sisarica and Maiden 2013; Ciolfi 2015). Although now a museum, the Holburne was originally built in 1795 as the grand entrance to Bath’s newest and most fashionable pleasure ground, Sydney Gardens. In their Georgian heyday, the gardens were a monument to light, colour, food, drink, and crowded public entertainments, boasting among their winding walks and shady groves, a set of ‘medicinal’ swings, a maze, a sham ruined castle, a hermit’s cottage, a mechanical cascade and, by 1824, a Cosmorama. Today Sydney Gardens
is a municipal park to the rear of the museum and virtually nothing remains of the original design. The project’s brief then, was to create an innovative GPS-enabled mobile interpretation tool capable of conveying a sense of what was formerly there. The project’s approach to place-making would be participatory and non-didactic.

A number of self-imposed qualifications followed. As a designed elite space in Britain's premier Georgian spa town, the Gardens prompt very traditional interpretation narratives. A large cast of bankable Regency celebrities passed through them, most notably Jane Austen who wrote about her experience there in letters to her sister. Jane is an enduringly popular polite heritage icon in Bath; yet the majority of those who entered the Gardens for daily exercise or on Gala evenings were not drawn from a restricted social elite. The first qualification therefore, was that the gardens would be approached ‘from below’ and that, despite initial misgivings from the museum, neither Jane nor any of her ubiquitous heritage friends would be called upon to make an appearance. It was felt not only that associating the Gardens with a broader social constituency would be more ‘authentic’, but that since doing so would require new research, a number of previously overlooked historical characters, perspectives and narratives might emerge, differentiating the project from the city’s more mainstream Georgian attractions. New research would require the active participation of a professional social historian, and since garden history is rarely approached from a dissonant perspective, the project might also be regarded as an innovative academic ‘publishing’ platform along the lines suggested more recently by Dawn Spring (Spring 2015).

A second qualification was a rejection of screen-based delivery. To prioritise locative and affective engagement with period and place, technological presence would be minimised. While it was recognised that innovations in augmented and virtual reality software, together with the continuing spread of personal smartphones, has made screen-based interaction with downloadable apps ubiquitous across the heritage sector, *Ghosts in the Garden* was designed to complement the material reality of space and subjective immersion in place, so tablets and phones were avoided. Rather than attempt visual reconstructions of vanished buildings and past events, audiences would be provoked into imaginative reconstruction through audio alone. Headphones too were rejected as potentially isolating, and obstructive to an appreciation of place and to social interaction between the liminalities of past and present. The most critical qualification concerned agency. Audiences would be required to interact with content by listening to evidence in dramatic re-enactment, making informed decisions and exploring the space as a consequence. There would be no authoritative commentary, but contextual learning about the nature of Georgian pleasure gardens might emerge nevertheless from engagement with researched dramatic content.

Workloads were initially divided between design and development, undertaken by Splash & Ripple, and archival research amongst newspapers, pamphlets, contemporary novels and illustrations, and the records of the police and law courts, by myself. This material produced a cast of historical characters from the 1820s, an important period in the Gardens’ history, in which the spread of disposable income amongst lower middle class and working class audiences broadened the social mix of paying customers and created tensions around the Gardens’ reputation as a haven for peace and politeness. A cast-list of ropedancers, firework impressarios, vagrants, police constables and pick pockets emerged from the sources to furnish a garden history from below. Somerset quarter session depositions recording the arrest and questioning of Sydney Gardens pick pockets revealed the criminal careers of several previously unknown petty thieves and enabled a consideration of polite social space from a non-traditional perspective. Three of them, George Robins, James Wiltshire and Joe Madden, were then built into the project as more developed characters together with an Irish beggar nicknamed Dancing Jerry, well-known at Bath in the 1820s but forgotten today, and a local comic performer of minor reputation, James Woulds.

Most importantly, research revealed that William Bridle, the Garden’s proprietor from 1824–1830, was the man better known to social historians as the former governor of Ilchester Gaol, who had clashed with Henry ‘Orator’ Hunt while Hunt had been Bridle’s prisoner after the Peterloo massacre. In 1824, after a string of allegations of corruption and prisoner mistreatment, pursued by Hunt and
strongly denied by Bridle, the governor was removed from his job, his personal reputation in tatters. Although much has been written about the Ilchester allegations from Hunt's perspective, the disclosure of Bridle’s reinvention as Gardens proprietor in the wake of an enforced retreat from his earlier profession had not previously been made by historians either of prisons or of public gardens (Belchem 1985; Finn 2007). The narrative explored in *Ghosts in the Garden* was consequently concerned with issues of gentlemanly reputation in the period and the ease with which it might be undermined; themes that could never have been predicted before the research was carried out and rarely encountered in interpretation at sites of heritage anywhere (Poole forthcoming). The intention was not to supersede more conventional histories of pleasure gardens but to suggest to visitors that a place has many histories and that our understanding of it is influenced by a process of narrative selection. The essential proposition was that quotidian stories and characters from the historical record can be as engaging to audiences as stories about celebrities and social elites because they reflect more closely the life experiences of modern garden visitors.

Audience evaluation of Hoyte and Crowe's *1831 Riot!* had confirmed that users enjoyed 'the simple interaction model of walking to trigger sounds without the need to interact with a physical user interface', but 'the absence of any temporal sequencing was problematic and confusing.' *Ghosts in the Garden* developed a walk-to-unlock model along the lines pioneered in *1831 Riot!* but rather than leave visitors to stitch the narrative together from randomly placed encounters, it offered them a number of logical alternatives (Blyth et al. 2006, 131, 132). These options were made possible by the addition of a 'choose your own adventure' (CYOA) game mechanic, which required decision-making at each location as content was absorbed and evaluated. Eric Champion's objection, in 2008, that games were 'strategic or physical challenges, not thinking tools', offering 'too few opportunities for reflective thinking', was therefore directly addressed (Champion 2008, 215).

The multi-option structural framework of CYOA ensured not only that audiences effectively curated their own visits in response to content, but that, since narratives and outcomes were dependent on decisions taken, repeat visits and alternative interpretations were encouraged. Importantly then, any objections that intruding a game, by Costikyan's definition, into historical interpretation creates fictions which invalidate educational impact may be countered by arguing that process and methodology are as important to an understanding of history as the 'correct' course of events, and that this is a process privileged by CYOA. Finally and crucially, *Ghosts in the Garden* called for a delivery system that was not reliant on visitors downloading an app or using a smartphone or screen. Here a solution was sought in the creation of a Georgian ‘Time Radio’, an imaginative prop in which a smartphone and speaker could be concealed, but of sufficiently intriguing design to ensure it became an object of playful desire (Figure 1). Moreover, it would require no acquaintance with technology to operate. Visitors were instructed simply to walk into the Gardens with it and listen. Triggered by GPS, historical characters would ‘sense’ their presence, address them, and pull them directly into the narrative. Rather than announce their use for digital interpretation or ‘information’, Holburne museum staff were tasked with asking visitors to take a Time Radio as volunteers testing recently discovered mechanical artefacts from the building's Georgian past, with mysterious but unproven properties. Visitors were very aware, therefore, that they were being asked to take part in something imaginative and playful.

To help them navigate modern space as historic space, each group of participants was also given a map of the gardens on which long absent features from the Georgian era, such as the maze, the Cosmorama and the ruined castle were plotted (Figure 2). An initial sound pool positioned at the entrance to the gardens introduced them to the voice of the Georgian inventor, John Joseph Merlin, designer of the Gardens' original mechanical swings, and the supposed creator of the Time Radio, who told them Bridle had organised a gala that evening, but that it was beset by problems, including the threat of sabotage. Merlin enlisted their assistance and gave them two options; either to find a police constable at the Cosmorama, or eavesdrop on some ‘suspicious’ characters near the Swings. Participants then made their choice and found it with the aid of the map. GPS soundpools, triggered on arrival, ensured that the Time Radio immediately ‘tuned into’ and broadcast a fresh snippet of drama at each new location. New characters either addressed participants directly or were overheard, various rumours and perspectives
were offered and further choices presented. The experience was dependent upon participants selecting from the two or three choices offered; it would not work if they walked randomly around the gardens. As decisions were made and the Gardens explored, the conflicting interests of those who sided with or against Bridle gradually became clear and participants were encouraged to make a moral judgement by choosing whose advice to take heed of. Ultimately, their choices would either expose Bridle to further shame and ruin his gala, or exonerate him and restore his fortunes.

The *Ghosts in the Garden* approach to heritage interpretation adapts some elements of first-person computer games like *Call of Duty* and *Medal of Honour*; most notably in its attempt to subjectively immerse visitors in a past reality in which they are called upon to make decisions that impact upon outcomes. As Andrew Salvati and Jonathan Bullinger have pointed out, ‘selective authenticities’ in which ‘feel’ and ‘experience’ matter more than ‘factual fidelity’ may lead to tensions in attempts to simulate major conflicts, the actual outcomes of which are very well known (Salvati and Bullinger 2013, 161, 162). But, unlike *Call of Duty* and its ilk, the key objective behind *Ghosts in the Garden* was to use immersion to convey an everyday social experience that has been either completely lost to most modern audiences or popularly interpreted from a very limited (elite) social perspective. Narrative threads, based around the historical research, were dramatised by script writers and digitally voiced by actors. In a central theme, as Bridle's conflicted back story was slowly revealed visitors were prompted to choose between helping three figures from his past, Robins, Madden and Wiltshire, to avenge his alleged mistreatment of prisoners at Ilchester by sabotaging a Gala firework display or alternatively assisting his efforts to uncover the plot and foil them. Here, the boundaries between empirical fact and creative fiction were deliberately blurred as a number of researched scenarios were elided. The three criminal protagonists were real. In 1828, James Wiltshire was prosecuted at Somerset quarter sessions for selling stolen goods in a bid to raise the entrance fee for one of Bridle's gala nights, George Robins was caught picking pockets at the gala that same evening and Joe Madden was prosecuted earlier in the year for breaking in at night and stealing fifty canaries from the aviary. As accomplished petty thieves in the same city, we conjectured that all three were likely to have been acquainted, not only with one another but with Bridle's notoriety as the abusive former governor at Ilchester. Indeed, after Robins' apprehension, the arresting constable expressly advised the chair of the county bench that, ‘It is the wish of the Bathforum magistrates for me to inform you what a notorious character he has been for the last three years’ (*Bath Chronicle* 14 July 1828; Somerset Heritage Centre, Quarter Session Rolls, Q/SR/449 (1828), Deposition of William Bridle, 28 April 1828; Examination of James Wiltshire, 11 June 1828; Hawkins to Hall, 16 July 1828). The sabotaged firework display actually belongs to an earlier date (1813), but it is equally well documented (*Bath and Cheltenham Gazette* 9 June 1813). Bridle, it should be emphasised, never accepted the charges against him, devoted a great deal of time to a campaign for his own reinstatement, and regarded the malice of Hunt as the instrument of his downfall (Somerset Heritage Centre, DD/AH/63/9, William Bridle to Sir Peregrine Palmer (n.d.); Bridle 1836).

What our anonymous saboteurs and our three petty thieves hold in common is an excluded and marginal historical status and they were brought together in *Ghosts in the Garden* to provoke dialogue about historical epistemology and the construction of dominant historical narratives. The process by which we might identify and evaluate alternative narratives ‘from below’, in other words, in a space from which they have been traditionally excluded, was more important to the project's purpose than using technological gadgetry to retell familiar tales about elite social space. Inevitably, it was difficult to make such a methodology clear to public participants at the start. It was reasoned however, that the intrusion of a clearly ‘inauthentic’ Time Radio as a device through which ghostly voices from the past directly addressed a modern audience, was a sufficient indication that the experience was built as much around an imaginative world as a historically accurate one. While it was important to the project that its narratives were based on researched archival evidence, the stories did not carry the consequential gravitas of those used in World War battle games and there was little danger of any factual inaccuracies compromising public understanding of its objectives.

*Ghosts in the Garden* ran from a base in the Holburne Museum for two months over the summer of 2012. Simple evaluation was carried out in the form of questionnaires and one to one conversations with participants. Visitors were asked what, if anything, they had learned about Georgian pleasure
gardens simply by taking part in the experience. Seventy three percent agreed that it had been ‘in some way educational’ and, as expected, given that there was no prior directive given to ‘learn’, answers were varied: ‘music of different kinds was played in different parts of the park’; ‘we learned about the Cosmorama’; ‘they needed police to stop pick pockets’; and ‘they organised really expensive and massive firework displays’, are indicative examples. These gleanings were not essential components of the narratives visitors had been following, but were picked up contextually from conversations between characters. Importantly then, a degree of learning had taken place without visitors knowingly signing up to ‘education’. Nineteen percent of visitors asked, unprompted, whether what they had just heard was ‘true’ or not. Given an awareness that the choices they had made in the gardens must have materially affected the course of the narrative, they were clearly not asking whether the story they had heard was ‘correct’ but whether the overall experience was historically accurate in a broader sense. This is not a concern visitors would be expected to have at sites of heritage where the presentation of information and the manner of its interpretation appears unquestionable, but it is perhaps understandable in a situation where visitors have been interacting with scripted characters through a Time Radio. Whether they asked this question or not however, at the conclusion of each visit, players were given a ‘Character Booklet’ containing short biographies of all the individuals encountered, outlines of the events and scenarios on which the scripts were based, and notes on the archival sources from which they had been drawn. Since it was important to the project that it enabled an understanding of historical methodology, revealing sources and confirming the relationship between empirical research and imaginative fiction was integral, but it was equally important that the authoritative voice of the Historian should intervene only at the end of a process in which participants and historical actors had been in unmediated dialogue.

As a funded research and development project, Ghosts in the Garden was not designed for permanent installation at Sydney Gardens. The elaborate and bespoke Time Radios were expensive to manufacture and the Holburne Museum did not have the budget to adopt the project after its initial testing. However, the basic tenets of the design brief were developed by Splash and Ripple into an ‘Adventure Heritage Manifesto’ and tested commercially through an installation for the National Trust who commissioned a mediaeval variant in 2013 (A Knight’s Peril, using Echo Horns instead of Time Radios) at Bodiam Castle in Sussex. Was the project successful? The relatively light visitor evaluation and short test period make a definitive critique difficult. Nearly a quarter of surveyed participants thought the experience had taken too long (the average time to complete it was 40 min), some found parts of the dialogue difficult to follow and had not understood the outcome their decision-making had led them to. Unsurprisingly, some were unhappy with the more imaginative aspects, didn’t like making decisions and would have preferred a more conventional and didactic audio-guide. One respondent was annoyed because he thought the experience was really for children and was insufficiently serious for an adult audience. An elderly couple admitted they had made most of their latter choices on the grounds that they were tired and didn’t want to walk too far between sound pools, rather than as a result of evaluating evidence. Clearly, and equally unsurprisingly, public tolerance towards immersive and playful approaches to interpretation does have its limits and audiences in search of entertainment cannot necessarily be expected to acknowledge the benefit of spending 40 min considering the way history is conventionally made or learning about perspectives ‘from below’. This was a prototype research and development project however and criticisms about the clarity of the dialogue, the length of individual scenes and the timeframe of the experience as a whole could be effectively addressed in the follow-on National Trust commission at Bodiam. Critics from inside the creative digital economy were broadly enthusiastic. For the EU-funded RICHES project for example, although it was noted that ‘the material is created in advance with only a limited number of options, so that there is a question around the limits of active agency, as is the case with most interactive work’, Ghosts in the Garden was nevertheless cited for ‘best practice’, because of the unique ways in which it ‘recalibrates the relationship between the Cultural Heritage institutions and their visitors’ (Cummings and Waelde 2015, 6, 95). Moreover, the positive responses recorded in audience evaluation, together with the interest
demonstrated by industry stakeholders like the National Trust in commissioning similar approaches at other sites, indicated an appetite for the overall concept.

Ultimately, *Ghosts in the Garden* is best understood as a set of principles to guide future interpretation. As Luigina Ciolfi has argued, the current affective, individualistic and interactive trend in planning the visitor experience at heritage sites closely complements parallel developments in human-centred computing and the two tend to advance in tandem. Ciolfi’s practice-based research, which focusses on ‘experiences of place, embodiment and materiality’ at outdoor sites of heritage, has explored the
potential for enhanced mobile intervention at two contrasting sites; a purpose-built attraction, Bunratty Folk Park in Ireland, and a municipal site that has unintentionally become one, the Sheffield General Cemetery. Non-intrusive prototypes were produced for each site, ranging from an interactive digital book to a set of binoculars through which to view AR slides, each driven by notions of playfulness and concealment. The binoculars, for example, like Splash and Ripple’s Time Radios, were designed to hide the technology that actually delivered the experience. Ciolfi’s research is unique in its attention to the affective relationship between technology, place and outdoor heritage but further evaluative work is called for (Ciolfi 2015).

As argued above, affective interpretation that privileges emotion, personal response and feeling as essential components of heritage can be a source of conflict amongst audiences for whom dispassionate factual rigour is essential to the understanding of history. For these audiences indeed, the very notion of playing games with historical evidence may be anathema. Ghosts in the Garden was an attempt to square the circle by presenting the process of narrative construction in history as simultaneously rigorous and creative and to use game as a tool for building understanding. It was rooted in place and, given a landscape with no tangible remaining reference points, intimately involved in place-making. Future research might profitably continue this investigation, because the potential for using mobile locative technologies for unlocking not only the history of a place but the process by which we construct and question that history, has been overlooked for too long (Figure 3).

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