

Institution: University of Bristol
Unit of Assessment: 31 Classics and Ancient History
Title of case study: Bristol research into the Pompeian Court of the Sydenham Crystal Palace helps schools, heritage groups and the wider community gain fresh insights into the past and its interpretation
1. Summary of the impact (indicative maximum 100 words) Hundreds of school students, their teachers, local heritage groups, audiences at live events and thousands of people engaging in online activities have benefited from a University of Bristol research project called Resurrecting the Past: Virtual Antiquities in the Nineteenth Century. The project uses the medium of a 3D online model of the Pompeian Court of the Crystal Palace to promote awareness of the Palace and provide access to knowledge about it. Just as significantly, the project has explored how history is interpreted and inspired innovative ways of teaching. The research has not only illuminated a particular place and period but also investigated the relationships between 19th-century physical and 21st-century virtual reconstruction. Perhaps most importantly, it has given young people a deeper, transferable understanding of the nature of history and historical 'facts'.
2. Underpinning research (indicative maximum 500 words) Background Research conducted by Dr Shelley Hales (Senior Lecturer in Art & Visual Culture in the University of Bristol's Department of Classics & Ancient History) concentrates on Roman houses (most significantly explored in a 2003 monograph [1]) and the reception of Pompeii (examined in a 2011 co-edited volume [3]). Her work on reception focuses particularly on 19th-century reconstructions of Pompeian houses. Dr Hales' work on the 1856 Maison Pompéienne, 'Living with Arria Marcella: Novel Interiors in la Maison Pompéienne' will appear in S. Hales and M. Leander-Touati (eds), <i>Returns to Pompeii</i> (Swedish Institute of Archaeology, 2014). She is also the author of the first article to consider the contents and reception of the Crystal Palace's Pompeian Court [2]. The Sydenham Crystal Palace opened in 1854 as a 'museum to instruct, amuse and interest'. Its greatest innovation was to achieve these aims through reconstruction and as such was an early experiment in the ways in which reconstruction might serve entertainment, education and research and make the past accessible to wide audiences. Its series of courts showcasing past civilizations included a replica Pompeian house which was destroyed when the Palace burnt down in 1936. The research Dr Hales' interest in exploring these values of reconstruction led her to collaborate with Dr Nic Earle (e-Learning Co-ordinator in Bristol's Education Support Unit) to found the research project, Resurrecting the Past: Virtual Antiquities in the Nineteenth Century, in 2008. The project explores reconstruction, both as a Victorian and contemporary practice, through the creation of a 3D, online virtual model of the Pompeian Court. The model interacts with, rather than simply presents, the Victorians' own attempt to visualise Pompeii, by mimicking, critiquing and comparing it with today's technologies, museological attitudes and learning theories. As well as providing an environment in which to conduct research, the model acts as an online archive of the contents of and sources pertaining to the Court and as an interactive environment, populated with information and robot characters, with which to engage audiences. Phase 1 (October 2008-September 2009) was funded by JISC's 'Enhancing Digital Collections' programme. The award of £44,159, matched by institutional contributions, enabled the Bristol team to build the model, launch the website and consult with school students (Bristol Grammar, Clifton High, Chantry High) and heritage groups (Crystal Palace Foundation, Crystal Palace Museum, Joseph Paxton Society), gathering feedback which informed the design of the model and its functionalities. Research papers were presented at the following conferences: Electronic Visualisation in the Arts (British Computing Centre), JISC Digitisation (Cirencester), Digital Resources for the Humanities and Arts (Belfast), Association of Learning Technology (Manchester), Democratic Turn (OU, Milton Keynes); and at these workshops: Innovative Uses of

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Teaching and Learning Space in History, Classics & Archaeology, Subject Centre for Classics, History & Archaeology (Warwick), Democratic Turn (Oxford), What is to be done with the Crystal Palace? (York), as well as the Classics and History of Art research seminars (Bristol). A paper reflecting on this phase, "A copy – or rather a translation...with numerous sparkling emendations." Re-building the Crystal Palace', will appear in a forthcoming edited volume: K. Nichols & S. Turner eds, *What's to be Done with the Crystal Palace?* (Manchester University Press, 2015).

Phase 2 (from August 2010) was funded by a University of Bristol Enterprise and Impact Development Fund award (a competitive award to develop projects demonstrating strong impact) of £14,999, which allows the team to use the model to enhance learning in local secondary schools and improve access and enhance resources in the Palace heritage sector. Simultaneously, the researchers' observations of school trials and collection of feedback informs Bristol's academic research on the role of reconstruction in teaching and learning. The team is working with Dr Sue Timmis (Graduate School of Education) to publish the results in an education journal.

3. References to the research (indicative maximum of six references)

- [1] S. Hales, *Roman Houses and Social Identity* (Cambridge University Press) 2003 (pbk 2007). Submitted RAE 2008. Can be provided on request
- [2] S. Hales, 'Re-Casting Antiquity in the Crystal Palace' *Arion* 14.1 (2006) 99-133. Submitted RAE 2008. Available on request or at <http://www.jstor.org/stable/29737292>.
- [3] S. Hales & J. Paul (eds), *Pompeii in the Public Imagination from its Rediscovery to Today* (Oxford University Press) 2011. Paper by S. Hales, 'Cities of the Dead', 153-70. Hales REF output 2.

4. Details of the impact (indicative maximum 750 words)

Education: enriching students' appreciation of the interpretative nature of history

Educational impact has always been the main focus of the project [a]. Initial scoping demonstrations in Phase 1 (2008/9) involved five teachers and 100 Year 9 students across three schools. As a result of noting the potential to link the project to the then emerging Personal Learning and Thinking Skills (PLTS) which schools were to be required to assess and blend into the curriculum, Chantry High School, a mid-sized comprehensive in Ipswich, became the team's partners in:

- creating and evaluating a package of learning activities for a ten-hour Humanities programme using Bristol's virtual model to deliver PLTS objectives [b].
- developing a prototype product/service which could be made safe and accessible to all schools and universities through migration from Second Life (SL) to Open Sim.

In phase 2 (2010 onwards), the team has extended the trial, involving demonstrations at two Bristol schools (Cotham and Red Maids', 80-plus students), trials with sample groups at three schools (St Mary Redcliffe and Temple (SMRT), Fairfield High and Redland Green, 60-plus students, 2012/13) and pedagogical discussions with local History and Classics teachers. They have also taken opportunities to promote the project across the country, for example presenting at a teaching-enrichment day at North London Collegiate Schools (2013) and various educational conferences (see section 2). In order to evaluate educational impact, the researchers gather data through observation [b], group discussion with students and teachers during and after sessions [c], written feedback gathered from students and quantitative data collected using voting technology.

The significant impact and benefits to the students have been:

- Helping students grasp the contingent nature of 'interpretations' of the past - that is to say, understanding the part that reception plays in the construction of historical interpretation and narrative. This is particularly demonstrated by class discussions at SMRT, in which students talked about how their concept of history and historical 'fact' had changed, noting, for example, 'I find it quite annoying when someone tells us that this IS what happened'; 'it gives you the challenge to peel back the layers of history... even if it gives you less of an insight into the actual event, it can give you more of an insight on the previous group of people looking at the event': [c]. One student even remarked when realising that what might be presented as historical facts can be unreliable and open to interpretation, 'It's quite scary'. All groups were

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able to transfer this experience to other periods of history they had studied. The SMRT team noted that the project 'was able to facilitate a debate which demonstrated thinking and reasoning skills of a standard I have rarely seen at Key Stage 3' [d]. Commenting straight after the lesson the teacher said 'That activity on its own is brilliant... I can't think of anything else you could use to do it' [c].

- Helping students appreciate how past events impact on the present: students were able to reflect on the ways in which issues they had learned about in the study of Victorian Britain might have been influenced by ancient practice - for instance and in particular, slavery. Students enjoyed the opportunity to find out more about periods they felt they knew little about beforehand, and in this sense particularly, this project's blend of the Victorian and the Roman allowed students to learn more about Classics than would ever be the case on the standard curriculum [b].
- Establishing a 'sense of period' to provide context for larger historical questions, particularly through the walk-through timeline along which students first travel to the model (reckoned to have 'vast potential for the teaching of chronology' [e]) and attitudes and experiences voiced by robot avatars. The behaviour of students adopting the character of the period avatars they were given, included texting in 'Victorian-ese' [b] and inventing informed back stories about characters' relationships. Students particularly identified with experiences of status and gender discrimination their characters suffered at the hand of robot avatars [c] and Fairfield High found this the 'most useful' part of the experience [f].
- Giving enhanced opportunities for self-development through the opportunity to experience a historical context for themselves. Redland Green noted that the model's environment 'lends itself to independent learning brilliantly' [e]. At Chantry, the team noted that the different mode of delivery and familiarity with technology engaged a number of boys who were usually reluctant to get involved in class [b]. One boy at SMRT said, 'this project has allowed me to come out of my shell a bit more and it's given me more confidence' [c]. Another reflected on a life-lesson learned: 'you've got to make your own decision. You can't just let people give it to you and just take it because they might have manipulated it. You need to decide for yourself what you think' [c].

In July 2013, the team met with the teachers involved in the Bristol trials, and some interested future partners, to share experiences and discuss ways to develop a genuinely collaborative teaching and learning package. All teachers thought that their students had benefited from participation and that their own aims had been met. There was great enthusiasm for continued involvement in the project. Some particular avenues for further exploration include:

- Redland Green, SMRT and new partner Cathedral School are especially interested in using the online environment as a space 'for developing opportunities for valuable cross-school collaboration' [d]; a feature that 'other teachers would surely be interested in' [e].
- Red Maids' are predominantly interested in the development of the model specifically to serve the module on Roman domestic space in GCSE Classical Civilisations. They feel that it could serve as an 'excellent learning tool' in helping students explore the space of the Roman house and furthermore better equip them with the skills to answer examination questions which often ask students to 'imagine' life in Pompeii [g].
- Fairfield High have offered ideas for developing material that would help extend the project from its focus audience of school students following Gifted and Talented programmes to meet the needs of the trial group with which the team worked there, predominantly 'pupil premium students' and 'students with English as an additional language', thus extending its impact through the school-age population of the city [f].

Heritage: supporting activities of local heritage groups in promoting awareness of and access to archive material and knowledge pertaining to the Crystal Palace

Since the dissolution of the GLC, there has been little investment in the Crystal Palace Park. In 2008, the London Development Agency produced a white paper on the future of the park, and the Bristol project was named as a possible partner in the development of an interpretation strategy [h]. A much pared-down masterplan was approved in December 2010 but, due to financial concerns, it is yet to be effected.

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As a result, a DVD of Bristol's model for display in the small, volunteer-run and donation-funded Crystal Palace Museum, which attracts 8,000 visitors annually, provides an immediate impact. The video fly-through, installed in 2013, is the only visualisation of the interior of the lost Palace. It will have educational benefit to local schools, who use the Museum as a resource for local history, and to visitors. It will assist local amateur societies in their endeavours to develop the displays at the Park and in other ways (e.g., by a mobile phone app). The Director of the Museum and its trustees wrote that they are 'so impressed with your efforts to date to do something that no one else has achieved'. They have been extremely supportive of the project throughout, sharing archive material and discussing ideas for taking our partnership forward through further collaboration on display material [i].

Online Presence and Dissemination: the presence of the Bristol team's outputs on various online platforms has disseminated awareness of the Palace and of the project's contents and aims to a global audience and has contributed to wider online debates about, for example, the presence of educational sims in Second Life.

The team have endeavoured to extend the reach of the project through dissemination in a number of media. The project has been covered by local press, appearing in the *Bristol Evening Post*, *Ipswich Evening Star* and *Crystal Palace News* (online newsletter). The team has presented its work at a number of public events, including university public engagement activities, talks to special-interest groups, and large-scale public events such as the Crystal Palace Arts Festival 2009 and Discover 2010. In 2012, the researchers were invited to California to speak about their model at the Getty Museum as part of a public engagement day promoting its exhibition, *The Last Days of Pompeii*, to 600 ticket-holders. The model in SL is permanently open to online users and two videos (one of them the video made for the Museum) are available on YouTube and our website. Although the researchers cannot track visitor numbers to the online model per se, the optional virtual guide has been downloaded more than 2,760 times. Interest among the SL community is indicated by repeated reference to Bristol's project in blogs such as *Prim Perfect* (which has featured the project three times), particularly with regard to the debate about the difficulties of sustaining educational presence in a commercial environment like SL, and by the dedication of an episode of *Designing Worlds* on Treet TV (SL TV station) to the Bristol model [j]. Over 8,000 people visited the project blog over three years and 65 engaged comments from readers in the UK, US and Europe were live on the website on 31st July 2013 [a].

5. Sources to corroborate the impact (indicative maximum of 10 references)

- [a] Crystal Palace Project website and blog: <http://sydenhamcrystalpalace.wordpress.com/>: corroborates narrative of project history, visitor numbers and comments.
- [b] Evaluation report on initial trial at Chantry High School: corroborates initial educational findings of Phase 1.
- [c] Transcript of class discussions from Sessions 2 and 4 at St Mary Redcliffe and Temple School (January and February 2013): corroborates impact on students' perceptions of history and sense of achievement from participating in project.
- [d] Letter from Head of History, St Mary Redcliffe and Temple School: corroborates key themes of impact amongst their students and interest in further development.
- [e] Letter from History teacher, Redland Green School: corroborates key themes of impact amongst their students and interest in further development.
- [f] Letter from History teacher, Fairfield High School: corroborates interest in further development.
- [g] Letter from Classics teacher, Red Maids' School: corroborates commitment to further development.
- [h] Crystal Palace Masterplan Interpretation Strategy document: http://www.crystalpalacecampaign.org/MasterPlan/Interpretation_Strategy.pdf: page 45 corroborates awareness of our project and insertion into policy recommendations.
- [i] Email from Director, Crystal Palace Museum: corroborates collaboration with the Museum and contribution of our DVD to the environment.
- [j] Treet TV, *Designing Worlds* Episode (aired 10pm (UK time), 2 February 2010): <http://treet.tv/shows/designingworlds/episodes/ep073-pompeii>: corroborates profile of project and themes of interest to SL community.