

Impact case study (REF3b)

<p>Institution: University of the West of England (UWE), Bristol</p>
<p>Unit of Assessment: 36 – Communication, Cultural and Media Studies, Library and Information Management.</p>
<p>Title of case study: Informing UK Film Policy in the Digital Age; Preserving Cinema Memories in the Mobile World.</p>
<p>1. Summary of the impact</p> <p>UWE research has influenced UK public policy, informing the Department of Culture Media and Sport’s Film Policy Review report recommendations, which shaped the British Film Institute’s policy and strategic priorities. Members of the public have engaged with local cinema heritage as a result of the development of the <i>Curzon Memories App</i>, preserving historical memories for the benefit of the community in Clevedon, a process which has also engaged local schools. Through UWE co-creative research for the <i>City Strata</i> project, technology partner Calvium has increased its product portfolio to include scalable location-aware apps, and heritage partner Bristol City Council, has extended the reach of its <i>Know Your Place</i> platform, directly leading to a joint commission from English Heritage worth £20K.</p> <p>2. Underpinning research</p> <p>The research was undertaken by Dr Charlotte Crofts (Senior Lecturer in Film and Video Production at UWE since Sept 2007). It contributes to the fields of New Cinema History (examining the history of movie-going, exhibition and reception) and the contemporary media ecology (mapping the technological transition to digital cinema), through both scholarly and practice-based outputs.</p> <p>Film Exhibition, Preservation and Sustainability in the Digital Age</p> <p>The research (References 1 & 2, peer reviewed articles) identified two key issues arising from the current transition from 35mm film to digital projection:</p> <ol style="list-style-type: none"> 1) <u>The Digital Dilemma</u> - the potential loss of 35mm film as a preservation medium and the lack of an internationally agreed digital standard as an alternative for future-proofing both celluloid and films that were born digital 2) <u>The Digital Shortfall</u> - the problem of rural and independent cinemas being unable to afford to transfer to digital projection under the VPF (Virtual Print Fee) scheme, and the consequent danger of their closure. <p>Preserving the everyday material practices of cinema-going, its built environment and the cinematic apparatus</p> <p>The above research developed Crofts’ scholarly interest in screen heritage, but there was a growing frustration with the emphasis on film preservation at the expense of the material cultures of cinema: practices of movie-going, community memory and cinema history—which were becoming increasingly pressing as digital technologies rapidly transformed the way in which we produce and consume moving images. At the same time, Crofts became interested in how the location-aware affordances of mobile and smart technologies might enable a new understanding of the particular micro-contexts of cinema history at a specific location. She has explored this through several location-based pervasive media practice projects.</p> <p><i>The Curzon Memories App</i> (Reference 4), which developed out of a collaboration between Charlotte Crofts and Cathy Poole, Education Officer at the Curzon Community Cinema, Clevedon, is a location-based tour of the inside and outside of the cinema and the Curzon Collection of Cinema Heritage Technology. The app uses GPS to automatically trigger oral histories, dramatisations, rephotography and details of the outside building. Inside, QR codes are hidden throughout the auditorium and ‘Living History’ museum exhibits.</p> <p>The <i>Projection Hero</i> installation (Reference 3), which is on permanent display at the Curzon, invites the user to think about the normally invisible labour of projection which secures their viewing pleasure, rendering the technological ‘apparatus’ of cinema visible. The installation provides an opportunity for the visitor to develop a new understanding of the way film and exhibition</p>

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technologies frame their experience of cinema, and how this is changing in the digital age. The installation comprises a miniature cinema which the visitor can control with their smartphone, dimming the lights, opening the curtains and playing the movies, all of which are interviews with retired projectionists. *Projection Hero* situates the user in the role of the projectionist, peering through projection booth windows and as such invites an empathetic, haptic and experiential relation to the subject of projection. Furthermore, the installation draws on the field of smart networked objects, known as 'The Internet of Things', to provide new methods of interpretation – using QR Codes, Arduino circuits, sensors and actuators to enable the visitor to operate the cinema from their own personal mobile device.

Spatialising the Archive: Addressing the Problem of Scalable Heritage Apps

Building on *The Curzon Project*, *The City Strata Project* (Reference 5) was a knowledge exchange collaboration with creative economy partner Calvium Ltd and Bristol City Council. The research sought to address the problem of how to deal with data storage in large-scale heritage apps across multiple points of interest, given the 50MB limit (in the case of Android). *The City Strata* platform innovated by drawing data from the cloud instead of storing it in the app. This was piloted in the *Cinemapping App Prototype*, which pulls data from *Know Your Place* (a geo-referenced GIS map containing the whole of Bristol's historic environment record), drawing records from its Historic Cinemas layer. The project also undertook research and development into users uploading data from the app directly back into the database, exploring crowd-sourcing archive information to feed into the archaeological record used in future planning processes. Another outcome of the research was *The Lost Cinemas of Castle Park App* (Reference 6) which uses GPS triggered audio to bring to life over 100 years of cinema-going in Bristol City Centre.

3. References to the research

1. Crofts, C. (2008) 'Digital Decay'. *The Moving Image*, Fall 2008, 8 (2). xiii-35. ISSN 1532-3978 <http://eprints.uwe.ac.uk/7782/> and <http://dx.doi.org/10.1353/mov.0.0015>
2. Crofts, C. (2011) Cinema distribution in the age of digital projection. *Post Script: Essays in Film and the Humanities*, 30 (2). pp. 82-98. ISSN 0277-9897 <http://eprints.uwe.ac.uk/15687/>
3. Crofts, C. (2012) *Projection Hero* installation on permanent display at Curzon Community Cinema, Clevedon, also exhibited at Watershed Media Centre, Bristol <http://curzonproject.wordpress.com/2012/01/03/projection-hero-installation-demo/>
4. Crofts, C. (2012) *The Curzon Memories App*, published on iOS and Android <https://itunes.apple.com/gb/app/curzon-memories-app/id510372362?mt=8>
5. Crofts, C. (2012) *City Strata* project and the *Cinemapping App* prototype <http://www.watershed.co.uk/ished/heritagesandbox/projects/2012/city-strata/>
6. Crofts, C. (2012) *The Lost Cinemas of Castle Park App*, published on iOS only <https://itunes.apple.com/us/app/lost-cinemas-of-castle-park/id577826550?mt=8>

Related Grants

- AHRC REACT 'Heritage Sandbox' Grant for the *City Strata* project, awarded to Dr Charlotte Crofts, April – June 2012, £35,748. Funded by the Arts and Humanities Research Council (AHRC), REACT (Research and Enterprise in Arts and Creative Technology) is one of four UK Knowledge Exchange Hubs for the Creative Economy and is a collaboration between UWE, Watershed and the Universities of Bath, Bristol, Cardiff and Exeter.

4. Details of the impact**Policy making (Informing and influencing policy debate)**

Crofts' research (References 1 and 2 above) enhanced understanding of the transition to digital projection and informed the UK government Department of Culture, Media and Sport's Film Policy Review report (Source 1 below), 'A Future For British Film' (2012) including policy recommendations for new economic models of digital distribution and exhibition (Recommendation

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13, p. 92) and the development of a digital preservation infrastructure and standards (Recommendation 48, p. 94). Recommendation 48 in turn shaped the British Film Institute's policy, 'Film Forever', Strategic Priority 3 on investing in preservation, digitisation, interpretation and access (Source 2), (also corroborated by Sources 3 and 4).

Cultural Life (Preserving, conserving, and presenting cinema heritage)

The legacy of the Curzon research collaboration (Reference 4) is an archive of digital cinema memories kept in the Curzon's records, preserving memories for future generations and presenting them to the public. One-minute extracts are shown routinely as pre-film screeners reaching 57,000 annual cinema visitors. A short compilation of *Curzon Memories* was screened at opening of the 'Living History' exhibition (March 2011), and edited highlights were screened at the Cinema Memories Celebration Day (20 April 2013) (Source 10).

The innovative application of digital technology in the field of heritage interpretation (References 3 & 4) has raised the profile of the Curzon Community Cinema, Clevedon, enabling them to win £4,600 Heritage Lottery Funding, from the 'All Our Stories' strand to curate the Curzon Memories Celebration Day. This included the purchase of three iPads to demonstrate the app and *Projection Hero* to visitors (Source 10). The director of the Curzon Board of Trustees says "This Curzon app is an extraordinary project that is absolutely at the cutting edge of new media technology and puts us way ahead in heritage interpretation. Charlotte has gained us a national reputation by her ground breaking work" (Source 5).

As a result of her research (References 3, 4, 5 & 6), Crofts was invited to speak to the International Museum Theatre Alliance, English Heritage and the Arts Libraries Society of UK and Ireland. This increased awareness, which led directly to further heritage interpretation commissions for Calvium, notably the English Heritage funded *Heritage Eye App* (Source 6) and Heritage Lottery funded *Clifton Suspension Bridge App* (Sources 6 and 9).

Educational form and content

The *Curzon Memories App* demonstrates innovation in educational form, having won the British Universities Film and Video Council (BUFVC) Learning on Screen Award for best non-broadcast, general education multimedia production (April 2013) for its "impressive and innovative use of app technology, with strong educational insight into the cinema" (Source 8). Winning the award also impacted on both the Curzon's reputation (Source 5) and Calvium's (Source 6).

The Curzon Youth Panel were involved in evaluating the app, providing them with a new sense of community, "one in which they were empowered through having their opinions taken seriously on a new resource for and about the Curzon. It enabled them to engage with memories of the Curzon in a different way" (Source 5). One of the features of the app—that it can be accessed remotely as well as 'on location'—has helped raised the profile of the Curzon's educational activities, with Further Education college tutors, who accessed the app remotely, subsequently bringing students to the Curzon.

In addition, the research has informed educational content. The memories collected as part of the collaboration have been used regularly in educational activities by Curzon's Education Officer (Source 5). This included a selection of war memories used with two hundred 5-6 year olds as part of the Prince's Foundation for Children and the Arts Start Programme in 8 schools. The Start programme gives schools in deprived areas the motivation, means and opportunity to engage their pupils in a series of creative experiences with arts venues outside of the school environment. As part of memory collecting, Crofts also documented a visit by *Yeo Moor Primary School*, which resulted in a 10-minute film screened to staff, pupils and parents at the Curzon (6 April 2011). Curzon's Education Officer stated, "This has been beneficial in enabling the Curzon to demonstrate to prospective schools what educational activity at the Curzon looks like, and also for evaluative purposes for the organisation" (Source 5).

Creativity and innovation (contributing to innovation and entrepreneurial activity through the design and delivery of new products or services).

The *Curzon Memories App* was selected to pitch before prestigious industry judges at *AppCircus*, Google Campus, London 2012. The event spread awareness of Calvium's AppFurnace development software and was featured on Twitter and BBC Radio 4's 'You and Yours' (30 July 2012, 19 minutes in). The app was featured in several key technology publications, including the *Guardian's App's Rush* (27 March 2012) and *Wired UK Magazine* (3 May 2012). Calvium's Creative Director commented that "The subsequent presentations and social media helped to raise awareness of Calvium and the potential of AppFurnace for creating location aware apps ... These communication activities helped maintain visitors to the Calvium sites which averages 14,000 per month" (Source 6).

The *City Strata* collaboration enabled creative economy partner, Calvium, to develop a new capability, making scalable apps which draw from a remote database rather than storing the content within an app, increasing the product portfolio of the company. Heritage partner, Bristol City Council's City Design Group benefited by reaching a wider community audience for their interactive geo-referenced map, *Know Your Place*, as a result of the collaboration. It also enhanced their national reputation, generating "wide interest from local authorities, communities, data managers and web developers". Jo Reid (Creative Director of Calvium) and Charlotte Crofts were invited to speak at Bristol City Council to "Historic Environment Record officers from various local authorities and Jane Golding from English Heritage" (Source 7). Bristol City Council have since gone on to win £20K English Heritage funding to further develop *Heritage Eye App* with Calvium based on the *City Strata* system (Source 7).

5. Sources to corroborate the impact

Testimonials listed below are available from UWE, Bristol.

1. UK government Department of Culture, Media and Sport (2012) Film Policy Review report, 'A Future For British Film' (acknowledges Crofts' research 'Cinema Distribution in the Age of Digital Projection' at p. 100):
http://www.culture.gov.uk/images/publications/DCMS_film_policy_review_report-2012_update.pdf
2. British Film Institute, *Film Forever* <http://www.bfi.org.uk/about-bfi/policy-strategy/film-forever/strategic-priority-three>
3. **Testimonial** [1 on REF system] from Senior Policy Advisor - Film & Video Games, Department for Culture, Media & Sport
4. **Testimonial** [2 on REF system] from former Senior Policy Advisor – Creative Industries Division, Department of Culture, Media & Sport (now Head of Strategic Projects, BFI)
5. **Testimonial** [3 on REF system] from Education Officer, Curzon Community Cinema, Clevedon
6. **Testimonial** [4 on REF system] from Creative Director, Calvium (Creative Economy Partner on AHRC REACT project)
7. **Testimonial** [5 on REF system] from Archaeological Officer, Bristol City Council (Heritage Partner on AHRC REACT project)
8. BUFVC Learning on Screen press release [*available from UWE, Bristol*]
9. Clifton Suspension Bridge (CSB) Activity Plan – Heritage Lottery Funding Application [*available from UWE, Bristol*]
10. "All Our Stories" Heritage Lottery Report on Curzon Memories Celebration Day [*available from UWE, Bristol*]