Of stone and pixel
Creating digital mobile tools for interpreting heritage places
Hannah Lewi

Researchers from the Faculty of Architecture, Building and Planning and the School of Computing and Information Systems at the University of Melbourne are leading a collaborative Australian Research Council–funded project, with Deakin University and King’s College London, on the exploration of ‘Citizen Heritage’. We have been investigating new ways in which places and buildings, and their stories, histories and associated memories, are being collected and reinterpreted through digital social media. In particular, we have an interest in the mobile digital delivery of historical and heritage information directed towards local communities, and in ‘citizen-driven’ initiatives, and we are using this knowledge to create a digital tool for collecting histories and memories of the Port Melbourne area.

Our interest in the possibilities of digital media to create interpretation experiences of historical places in new and engaging ways is part of a much larger move towards digital interpretation generally in the fields of museology, history and heritage. ‘Interpretation’ aims to fulfil the age-old longing for ‘walls to speak to us’. The Australian Burra Charter, which guides practice in heritage conservation and interpretation, elaborates: ‘Some sites pass into public ownership as intact, and may be thought to “tell their own story”’. Because the cultural and historical significance of many places may not be readily legible, interpretation can be employed to compensate, explain and enhance. As a reflection of the persuasive turn towards education and curatorial management in heritage over the last two decades, a number of guidelines on interpretation have arisen, including the Ename Charter from ICOMOS (the International Council on Monuments and Sites).

At a material level, the production of interpretation of objects, places and buildings is identifiable through the display of fabric, embedded signs, guidebooks and tours, public art, and other on-site and off-site resources. At a strategic level, techniques and practices of interpretation have received dramatically increased investment by custodial cultural organisations, and they have become highly professionalised and specialised.

At a theoretical level, there exists in heritage management and theory a strongly held (if sometimes problematic) premise that buildings, landscapes and monuments can
indeed ‘speak to us’ collectively and individually through the elaboration of social, design and sensory histories and meanings embodied in constructed places and objects. Interpretative practice has grown greatly over the last two decades, including questioning exclusively ‘top–down’ versions of history, by moving away from the purely canonical and towards more dissonant or disparate themes and connections. There has also been a strong desire to shift towards more participatory co-productions of interpretation, with attention placed on the role of the audience or visitor and not just on the delivery of information.

Given the technological revolution in ubiquitous computing and in the developing ‘internet of things’, we are rapidly coming to accept, and even expect, that many everyday objects and buildings can indeed communicate to us in new ways. Mobile and ubiquitous digital media platforms have promised much by way of delivering tailored and site-specific, participatory and non-intrusive modes of interpretation in innovative ways. The digital can offer vast repositories of information and archives, and can create virtual communities in which memories, stories and experiences can be shared. So if the broad endeavours of architectural interpretation may have once been characterised as the convergence of stone and word, it has rapidly now become that of stone and pixel. This coming together of the material and the digital is potentially very exciting.

In our research we have been looking at the growing array of digital and social media that promises to strengthen people’s connections to heritage places, buildings and artefacts through increased access to information, and through new experiences and forms of participation. After looking at many current online examples of digital heritage and history sites, we selected a small number to analyse more closely—choosing mainly community-based sites that were spatial and place-based. We grouped them into three overlapping but distinctive types:

• Curated sites: These are typically institutional or government-owned sites that allow comments and feedback, with an emphasis on ‘the visitor’. Examples include Melbourne’s Lost 100, launched by the National Trust of Australia (Victoria) in 2012, and Adelaidia, which began in 2014.

• Content-hosting sites: These are typically created on existing social media platforms such as Facebook, with an emphasis on what we have called ‘the conversationalist’ user.

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All three types share some common attributes, in that they are attempting to interpret historical places and things, and to build an appreciation and understanding of community-located—or what we have termed citizen-driven—heritage. Furthermore, all have different potential problems that reflect the more longstanding issues inherent in any cultural institution or heritage custodian, such as questions of moderation and gate-keeping, maintaining use, and the quality and longevity of content.

As part of the Citizen Heritage project, and inspired by the work of HistoryPin and others, as part of our research we designed our own digital mobile tool. This served as a platform...
on which we could learn about designing, curating and managing digital interpretation, reception and usability issues, and user experience. Our next step was to create our own web-based application, PastPort, modelled in part on the conventions of HistoryPin, using a generic Google mapping base. Rather than being international and place-less, however, PastPort is dedicated to one particular local area, in this case Port Melbourne, as a historically rich and rapidly changing part of the city. The strength of attachment to this particular place, we hope, invites involvement and ownership by its citizens, who include the Port Melbourne Historical and Preservation Society and the Emerald Hill Heritage Centre. And we are currently working to involve other groups and local citizens in creating material for the application.

PastPort is easy to use, and allows people to add their own icons to the orientation map in order to mark sites of interpretation that can display images, text, audio and video. We have also repurposed a simple then-and-now re-photography device that allows comparison between matching archival and contemporary images of particular sites. Another important idea for us was to design the application primarily, although not exclusively, for mobile devices, so as to encourage users of PastPort to test their experience of places with enhanced interpretation. We have therefore worked with a simple, scalable interface for all platforms, and have added a walking tour function that links together posted items into a curated tour.

Along the way, we faced many challenges and questions regarding usability, moderation and content, as part of our design research process. And we have been exploring how best to involve people in co-creating entries on their own memories and stories of the Port Melbourne area. We are now in the process of observing and interviewing users of the app over a lengthy period of evaluation.

In conclusion, it seems demonstrable that these kinds of heritage interpretation apps and sites—when done well—can mark, and bring added meaning, information or enjoyment to, people’s encounters with sometimes forgotten local and everyday places and their histories. Such sites of interpretation may, we hope, encourage meaningful experiences that mediate between tangible places, buildings, objects and digital information and artefacts. They may also create an arena for community heritage contributions, of both an ephemeral and a possibly lasting nature.

However, there are obvious issues and trade-offs at stake in their design, implementation and maintenance. Fundamental questions arise for the future of digital interpretation that aims to be open, community-orientated and localised, yet also sustainable and engaging, while collecting valuable content. These issues are faced by all cultural and heritage institutions that wish to be relevant to the community, yet are subject to institutional and curatorial expectations of some level of authority and control over custody, collections, dissemination and advice.

Therefore, as José van Dijk has suggested, digital media does not constitute a ‘passive go-between’ that simply disseminates any amount of content and dialogue, but rather, like any other organising structure, it mediates and ‘intrinsically shapes the way we build up and retain a sense of individuality and community, or identity and history’. Digital interpretation platforms thereby share the basic conflicts of traditional forms of history-making and curation, and they can even amplify the anxieties expressed in large heritage organisations like UNESCO and ICOMOS about who owns, maintains and controls heritage information and experience.
Hannah Lewi, ‘Of stone and pixel’

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1 The research is supported by an Australian Research Council Discovery Project Grant, ‘Citizen Heritage’, 2014–17. Investigators are Hannah Lewi, Wally Smith, David Nichols, Steven Cooke, Andrew Murray and Dirk von Lehn. See www.citizenheritage.com.


6 For a detailed elaboration of this study, see Hannah Lewi et al., ‘Visitor, contributor and conversationalist: Multiple digital identities of the heritage citizen’, in Historic Environment, vol. 28, no. 2, 2016, pp. 12–24.


10 www.timera.com/Explore.

11 For example, the ‘Born and bred Port Melbourne’ Facebook page: www.facebook.com/portmelbournehistory. See also Jenny Gregory, ‘Connecting with the past through social media: The “Beautiful buildings and cool places Perth has lost” Facebook group’, International Journal of Heritage Studies, vol. 21, no. 1, 2015, pp. 22–45.

