Digitizing cultural heritage from the “bottom up”

The Cultural Heritage industry is worth £5bn to the UK economy, generating 134,000 jobs, with a multiplier effect that would triple its worth. It is an industry that has even expanded through the recession¹. Yet much of the information and many of the artefacts are held in local museums, curated by local historical associations and therefore not readily accessible to a wider world. Indeed much valuable information is held in people’s memories, photos and recollections and can disappear as people die or move away. Digitization has produced a revolution in the way cultural artefacts and intangible heritage such as music and memories can be stored and preserved. However, many of these items have meaning only in relation to the place where they were produced.

An example of this is the materials collected by Historical Societies (known as Comainn Eachdraidh) on the Outer Hebrides who are keen to collect and interpret materials from their own localities. Historical Societies hold an especially powerful position in these remote communities where history is infused into the landscape, family names and buildings through the Gaelic language which, in the local

context, evokes lineages and connections in ways that English does not. Historical Societies provide a focus for community life and have in many cases taken over former school premises to form local museums, which become hubs of community life. Cafes, guest houses, local shops and even publishing enterprises have sprung up from around these meeting points.

The digitization of these records is performed by local volunteers with a passionate interest in their locality but no particular technological skills, yet they are often the only people to understand the connections between what has happened to families and their places of origin. Hebridean Connections is a digitized platforms that was originally formed to connect the various museums and historical associations scattered around these remote islands. But the members of the associations were unhappy with their platform, which did not provide them with the flexibility they needed and was costly to maintain.


The semantically linked data system means that someone in search of their ancestor on the Outer Hebrides could find out which school they went to, which fishing boat they worked on, which croft they lived in and in which cemetery they were buried. They could find recipe books for the kind of food they ate and look at the kind of work tools they used. They could study photos of their family and school friends in the village and read any poems or letters that they might have written.

Experience with Hebridean Connections shows that people who find out about their ancestors online through the website are stimulated to visit the islands in person, in the context of the broader growth of ancestral tourism worldwide. In fact, this kind of Ancestral Tourism generates huge income for the Scottish economy with an estimated 213,000 trips to Scotland for this reason generating £101 million per year according to research by Visit Scotland in 2013 – and is set to grow

The CURIOS project enables links to be made within and between local collections but also with national and even international archives such as the census, colonial settlements and so on. If the ancestor was not buried on the Outer Hebrides she or he may have been buried somewhere else or will have left some trace of their passing. Digitization platforms mean that the information is accessible not just to local users but to others elsewhere, be they in Manchester or Montreal. With approximately 50 million people of Scottish ancestry in the world and many of them keen to explore

[^2]: [http://www.visitscotland.org/pdf/Ancestral%20Research%202016%20Jan%20vs.org_pptx.pdf](http://www.visitscotland.org/pdf/Ancestral%20Research%202016%20Jan%20vs.org_pptx.pdf)
their roots, this represents a significant potential resource for the future and a way of bringing remote communities from the margins to the mainstream.

The importance of this project goes well beyond the economic, however. Cultural heritage is an important way of stimulating community identity and cohesion, thus ensuring the sustainability of these small remote communities. This topic is explored further in the following Youtube film: https://www.youtube.com/watch?v=XUQslmDORAA&feature=youtu.be. What the CURIOS project does is to empower local communities to create and control their own histories, which is why it is linked to “heritage from below”.

The tourist visiting the Outer Hebrides may have further questions and inquiries that arise as they visit. For this reason the Aberdeen team have developed a mobile App for phones together with a local software company that will provide the information on the move or in the place where it was generated, even if 3G connections are poor (which they often are in remote areas). This is the product named “CURIOS mobile”.

The CURIOS project is not only of relevance to the Outer Hebrides, however. It is a piece of technology that can be used by other cultural heritage projects elsewhere. It was applied in another Scottish community, Portsoy, where the annual traditional boat festival attracting many thousands of visitors, has stimulated an interest in local history. In Portsoy, new dimensions have been explored. The CURIOS database can link to social media sites where much of the discussion and communication of local history information (for example around the discussion of old photographs or reminiscences) takes place. The success of this project has led to many inquiries from other communities keen to preserve and communicate their heritage in ways that are interactive with the public so that the team are currently looking at ways to satisfy this demand beyond the life cycle of the project. One example is the creation of an archive based upon experiences in a prisoner of war camp during the Second World War based upon a collection of artefacts (letters, photos etc.) found in a shoe box and being developed as an online exhibition called POWKist (http://curios.abdn.ac.uk/node/2).

Interest too has come from India where there is a wealth of cultural monuments and heritage, only some of which has been made accessible. The presence of advanced technology hubs in India means that the potentially potent connections between local communities, cultural heritage and digitization are beginning to be made and CURIOS can show the way forward. These kinds of technologies can help to connect people with a new understanding of their past and bring prosperity to poor, rural communities. This suggests that the continuation of CURIOS as a low cost, producer-controlled, user-generated technology could not only be a way of connecting the old with the new world in the global North, but also with the developing world in the global South.

Claire Wallace, David Beel, Gemma Webster and Hai Nyugen, December 2014.