‘Concepts have teeth’: capacities and transfers in the digital modelling of Blackfoot material culture

Andrew Meirion Jones, University of Southampton, UK and Louisa Minkin, Central St. Martins, University of the Arts, London, UK.

We present a recent project looking at Blackfoot material culture in UK museums. The project, which began this year, focuses on questions of colonial heritage, representation and access to knowledge. It examines the role of digital imaging and documentation in relation to museum collections of indigenous artefacts. Our focus is on the material culture of the Blackfoot, a First Nations/Native American people whose territory extends across present day Alberta, Canada and Montana, USA.

The project encompasses a group of Blackfoot Knowledge Holders, artists, archaeologists and students working to reunite historical Blackfoot objects held in collections in the UK with their home people and culture. This project utilizes digital imaging technologies, art-based public engagement, and hyperlocal network technologies to improve the ability for Blackfoot people to interact with historical objects and recover and shape their own narratives. The digital artefacts will be stored in the Blackfoot Digital Library, itself hosted on traditional territory at the University of Lethbridge, Alberta, Canada.

The project aims to: create and disseminate highly detailed digital models of historical Blackfoot objects in UK museum collections; to provide access to the knowledge and skills embedded in those objects through virtual interfaces; to explore issues around access, tangibility, materiality, and value as they relate to physical objects and virtual experiences of those objects; to advance efforts to decolonize online spaces and virtual worlds and promote knowledge sharing in both analytical and creative technologies; to build connections between Indigenous and non-Indigenous people and perspectives; and to create best practices for art galleries and museums.

This project will be the first of its kind to use digital imaging techniques and spatial Web technologies to provide immediate virtual access to interactive representations of historical objects from a Blackfoot perspective.

Many of the artefacts were originally collected in the 1820s-40s by members of the Hudson Bay Company. The artefacts were directly exchanged under complex and unequal colonial circumstances, though these collections are a critically important source for Blackfoot history and teaching, and for understanding European-indigenous relations in colonial Canada and for understanding the histories of colonialism more widely. The late Frank Weasel Head, a Blackfoot ceremonialist, emphasised the importance of the objects held in the UK in revitalising traditional knowledge and skillsets. ‘These objects’, he said, ‘are our curriculum’.

The project examines objects from multiple perspectives – from the perspective of Blackfoot peoples, conservator, artist, historian, archaeologist… what is mapped between these positions? How do ontologies shift, and what new objects are produced?

We want to foreground two key theoretical concepts which we believe have purchase in our analysis of the multiple relationships involved in this project. The first of these is diffraction, as discussed by Karen Barad (2007). Diffracting exposes the differences between Blackfoot Elders, archaeologists and artists and foregrounds how their differing practices and approaches enrich and inform each other.

The differential character of the various groups involved in the project also highlights another important concept: affect. In thinking about affect we are drawn to the work of the Mohawk anthropologist Audra Simpson (2007, 69) who writes that 'concepts have teeth and teeth that bite through time'. Simpson is commenting on the way that colonial encounters produced complex entangled networks between Indigenous communities and Euro-Americans. Here she is writing about the differential power of one account over another in establishing the terms of being seen or being present. Another way of thinking about this is in terms of affective capacities, as outlined by Deleuze's (1988) reading of Baruch Spinoza.

Our paper today will focus on digital imaging and diffraction. We consider diffraction between disciplines as a technique of location. We think about how digital assemblages travel, move and work. What are the affective capacities of digital images?

To help us in mapping these problems we present the disciplinary experiences and concerns of an archaeologist and an artist and employ several Blackfoot concepts as aids to thinking. We want to introduce two Blackfoot terms: **amopístaani**:*bound-together-by-wrapping-around*, or medicine bundle. With the direction of Knowledge Holders the project is examining medicine bundles, amongst other artefacts, so this term seems especially pertinent. The second term we introduce is **níípomakii**: *chickadee-ness* which emphasizes the way in which the chickadee darts its eyes out of its body to see from many angles. The relevance of this concept will become apparent as we go on.

We begin by discussing the events that initiated the project and go on to discuss our reflections on this, and how our thinking has in turn been influenced by Blackfoot concepts. In July this year, a group of Blackfoot colleagues and project members visited museum collections in southern England, including the British Museum, the Museum of Archaeology and Anthropology, Cambridge and the Horniman Museum, London.

Both of us have previously worked together on the 'Making a Mark' project which involved museum visits and digital recording of prehistoric artefacts and the protocol we adopted for the present project was derived from that project. The protocol was simple: to visit museum collections and discuss and debate with the artefacts, while selecting artefacts for digital documentation. The major difference with the present project was that first and foremost discussion and debate included the input of Blackfoot Knowledge Holders who decided which artefacts should be digitally recorded.

While examining the artefacts from the Horniman museum store it struck us how different this was from the previous project concerned with prehistoric artefacts. The discipline of archaeology trains individuals to possess and act on knowledge about artefacts. Whereas, in the Horniman museum stores we were discussing artefacts with

people who not only knew much more about the artefacts than archaeologists but were also craftspeople who were examining the manufacture of the artefacts with the knowledgeable eyes of makers and artists. The role of the archaeologist in this situation switched from being knowledgeable professional to that of listener or learner. This change in roles enabled us to reflect on the capacity of archaeology as a discipline.

As a knowledge regime archaeology is concerned with the systematic ordering of artefactual data, and much archaeological knowledge is derived from the study of artefacts. The fidelity and accuracy of digital imaging methods developed within archaeology and cultural heritage are closely tied to the need for the systematic and accurate knowledge of past artefacts; as media theorist Sean Cubitt (2014) shows the logic of disciplinary ways of seeing are built into our digital technologies.

Many commentators in the fields of indigenous studies and the archaeology of colonialism have pointed out the inequality and disjuncture in knowledge in colonial encounters. In many ways, archaeology seems to be the epitome of a colonial knowledge regime imposed upon the colonized. Having said this, we want to think more positively about the capacity of the techniques and methods associated with archaeology. In past projects we have been duly critical of digital imaging technologies like photogrammetry and Reflectance Transformation Imaging (RTI) as conveyors of accuracy and fidelity. Paradoxically, in the context of this project the in-built accuracy of digital images comes to have a positive impact; the differing affective capacities of digital imaging technologies appear to alter as they shift across disciplinary, national and cultural boundaries precisely because of this fidelity.

While digital images are constructed and presented as accurate portrayals of indigenous artefacts, from an indigenous perspective we can also consider digital images as composites or bundles. For Blackfoot peoples' bundles are involved in processes of exchange; as such they produce relationships and affiliations which are similar to blood ties as they are transferred from hand to hand (Lokensgard 2010). Just as the structure-from-motion method of photogrammetry involves building up a digital image through fragmentary and shifting images, so bundling encompass a method of building of fragmentary knowledge as contract or obligation. Our bundled digital images therefore have the capacity to reveal techniques, materials and cultural knowledge relating to a diversity of social actors and are associated with demands for citizenship and public policies of education, health and land. The digital image is not one, it is many. In that sense, the method of digital imaging also borrows from our little friend: the chickadee. The visual capacities of chickadees relate to both embodied and disembodied viewpoints; they also key into the notion of the dream or vision as a method of social knowledge.

The digital image is multistable. It embodies what Paul Reilly (2019) describes as the 'Phygital Nexus'. The 'Phygital' is a neologism which describes where the physical and the digital meet and highlights the ontological shifts that may occur as digital objects are re-instantiated and assemblages meet and mingle. Our Blackfoot collaborators favour epistemologies that emphasize the relational and animate. Such perspectives arise from the knowledge embodies in particular places, species and objects, and the ceremony and

narrative which articulate and guide. Alongside this the digital image seems to exemplify the kind of Western knowledge system Bruno Latour (1987) describes as *immutable mobiles*: systems of knowledge that can pass between one cultural situation and another without being substantially transformed. What interests us in this project is how these two different knowledge systems meet and the outcomes and the affective potential released by their co-mingling.

We want to return to the theme of the gift - embodied by the Blackfoot medicine bundle – and consider the series of transfers that occur as Blackfoot artefacts are digitised.

The digital images produced during this project appear to trace in reverse order the paths taken by the Blackfoot artefacts as they were transferred via the colonial exchanges of the Hudson Bay Company's agents back to museum collections in Britain. These estranged artefacts - now accessioned as part of museum collections – were collected as they appeared to transmit knowledge concerning the 'curious' customs of indigenous Canadians and Americans. So too, the digital artefacts we are producing as part of this project also appear to transmit or transfer knowledge back across the Atlantic with accuracy and verity. These two historic moments of transaction perform a kind of diffractive process, and as such produce different kinds of affects.

On the face of it, both transactions – the colonial appropriation of Blackfoot material culture, and the digital documentation of Blackfoot material culture – seem to convey knowledge with accuracy and fidelity. The transfer of Blackfoot material culture to UK museums reduces the capacity of the artefacts to continue to engage in relationships with Blackfoot people, while simultaneously opening up a certain knowledge of distant cultural groups to European audiences. How are the capacities of these artefacts affected by their presentation as digital images?

As we have shown in this paper, the complex series of intra-actions involved by the participants of the project mean that we are not simply re-presenting European knowledge to our indigenous collaborators, rather the composition of digital technologies, and their intra-action with Blackfoot epistemologies allows for new ways of imagining images. Here we can introduce another Blackfoot term, **iihtaisinaakio'pi**: *means-of-making-visible.* Digital images are a means of making visible, a means of digital capture. In that sense, like anthropologist Alfred Gell (1999), we could consider digital images as akin to traps. By entrapping us images could be regarded as synanthropes, living alongside and in our environs.

Another way of considering this process of making visible is to think of digital images as components of stories. For the Blackfoot stories are much more than methods, they are agents. Stories are described as living entities, and humans are the modes that the story passes through as it perpetuates itself. For example, it is a rock that first teaches the Niitsitapi woman how to communicate with buffalo, and the animals themselves who transfer to humankind the right to hunt.

A series of transfers have occurred. Blackfoot artefacts, transferred under the regime of colonialism, have been digitally rendered. Under the guise of digital accuracy, and with the scientific authority that this confers, these images have been transferred back to the

Blackfoot Digital Library. In turn, we have been gifted with the image-as-story; the notion of the living image that at an unconscious level dwells amongst our thoughts. We conclude with this point, an apt theme for our posthuman age (see e.g. Hayles 2017), and a fitting outcome for a project informed by both contemporary epistemologies and indigenous ontologies.