Design of a web resource to support Digital Repatriation of Biocultural Collections

Research Background
Sustainable use of plant resources within the Amazon rainforest is a key priority both for human livelihoods and the maintenance of forest biodiversity. Indigenous peoples of Northwest Amazonia practice effective and sophisticated forms of land management, but these practices are under threat from migration, increasing mobility and loss of inter-generational knowledge transmission. Valuable information relevant to this challenge is contained in biocultural collections held both within and outside Brazil. Unlocking this potential requires an integrated, equitable approach to collections research and the capacity to share information with a wide range of end users.

This project brings together an international and interdisciplinary team of indigenous and non-indigenous researchers to provide digital access to biocultural collections. Advancing methods of co-curatorship, including the making of new objects, the project is developing protocols for access to these biocultural heritage materials, designing a proof-of-concept website, and producing a report outlining findings and recommendations for developing multi-institutional, international and interdisciplinary digital repositories of biocultural collections co-curated with indigenous researchers.

Biocultural collections are a vital means of preserving, transmitting and generating environmental knowledge and indigenous knowledge. Historical biocultural collections, inextricably linked with global exploration, colonialism and imperial expansion, are often misrepresented or neglected in terms of research, and their applications to contemporary problems overlooked. While in the last twenty years ethnographic museums (especially in North America and Australia) have made important advances in digital repatriation, biocultural collections have yet to develop specific tools for integrating historical, environmental and indigenous knowledge.

The integration of historical and contemporary biocultural data is key to increase understanding of the current use of plant resources that correlates with these biocultural collections; together with the knowledge of the source communities from which they were originally collected, they provide insights into the nature of socio-environmental change since their collection.

Creating a digital repository of biocultural collections that gives equal weight to these different knowledge systems, including the natural sciences, social sciences and humanities, and indigenous knowledge, is a major challenge.

Research Approach and Results
The Birkbeck Knowledge Lab’s contribution to the research relates particularly to the design of protocols for preparation of the digital materials, and the design, implementation and evaluation of the website. We began with a detailed requirements analysis involving the PI and user stakeholders, in parallel with a technical feasibility study with the college’s IT department to identify appropriate implementation technologies. An initial design for the website structure and individual pages was developed, including a gallery-like collections page, detailed pages on individual artefacts, itineraries pages of routes taken by European explorers showing the artefacts on historical maps, and films pages incorporating videos on the subject matter. This was followed a period of iterative participatory design where pages were constructed, and their style, content and navigation was discussed and augmented in collaboration with the whole project team. A key early outcome was the need for multilingualism to be embedded in the website from the outset, giving users their own choice of gateway into the site.

Once finalised, the website will be presented and evaluated with the wider stakeholder community at a round-table event towards the end of the project that will bring together academics, museum curators, indigenous researchers, staff of heritage organisations, and governmental representatives to discuss the main outcomes of the project; and also at a second event that will be open to the general public.