Networking heritage - opportunities and challenges

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Abstract:

Reinhold and Georg Forster, the scientific advisers on James Cook’s second voyage round the world in 1772-1775, collected a wide variety of cultural objects and natural history specimens from the Pacific region. These are now scattered, along with their drawings, notes, books, and correspondence among libraries, museums and archives in North America and Europe. Making connections between the items is important for Pacific studies but rendered difficult not only by the physical separation between the items but also by the different ways they are described and made accessible by the three types of “memory institutions” involved. The tools now exist to draw together related material from different domains in a network environment. National libraries can play a key role in this enterprise.
In 1772 as James Cook prepared his ship the ‘Resolution’ for his second voyage around the world, a dispute developed with the expedition’s intended chief scientist, Joseph Banks. Banks demanded various changes to the ship including, we are told, extra cabin space to accommodate his personal horn quartet. Not surprisingly Cook believed the alterations demanded by Banks would make the ship unwieldy at sea. After Banks’s sudden withdrawal, the Admiralty selected Johann Reinhold Forster, a German cleric resident in England who could claim a background in natural history, as the expedition’s scientist. Forster was to be accompanied by his teenage son Johann Georg, normally known, in England at least, as George.

The voyage of the Resolution was of course one of the epic journeys in the history of exploration. Its primary task was to prove - or rather to disprove - the theory that a great southern continent existed in the southern hemisphere to “balance” the land masses in the north. To do this, Cook sailed further into the Polar seas than anyone before. But the voyage also made numerous discoveries about the cultures of the Pacific region, its flora, fauna and natural phenomena of all kinds. Although the Forsters proved unpopular among the English crew, they were almost certainly the most accomplished scientific observers Cook had on any of his expeditions. In addition, George Forster was to prove the man who best understood and articulated Cook’s personal qualities and professional achievement. The Forsters returned to England in 1775 with numerous artifacts and specimens and scientific observations in various media. This material, much of which remains unique, was to form a basis for modern Pacific studies. Of particular importance were the Forster’s many published and unpublished descriptions of the material they collected.

By the time the two Forsters died during the 1790’s they had already given away much of the material collected on the voyage, for example by donating it to museum collections. More material was dispersed at auction after their deaths or by gift by their heirs. During their lifetimes, they had already published a considerable body of work on the natural history and cultures of the Pacific and had acquired considerable personal libraries of published works on the subject. Their own scientific observations continued to be published well into the 19th century while other notes remained in manuscript form. Today, Forster collections are scattered across institutions in Britain, Germany, Australia, New Zealand, the United States and a number of other countries. There are major assemblies of cultural artifacts in Oxford and Göttingen and many smaller holdings elsewhere. The Natural History Museum in London holds a body of natural history material and George Forster’s zoological and botanical illustrations. More material is held in Frankfurt, at Wörlitz in Sachsen-Anhalt, and in Washington, D.C. Reinhold’s library is preserved in Berlin, whereas George’s papers are in the city archives of Mainz. Since George had the unfortunate habit of thanking his hosts for a dinner
invitation by presenting them with a curious Pacific object which he often produced from his pocket, objects from his collection, with or without provenance and description, may be found almost anywhere.

This wide dispersal of Forster material raises a number of obvious problems for those working the fields of Pacific cultures, natural history, climate research and other related topics. But physical separation is compounded by other factors. Firstly, the material is in a wide variety of media, covering collected items (three-dimensional objects such as cultural artifacts and natural history specimens), drawings and paintings, manuscript notes, papers and correspondence and published work. It’s held not only in different countries but also by different kinds of holding institutions, mostly, but not only, museums, archives and libraries. For obvious reasons, museums will tend to hold the objects, libraries the printed books, and archives and libraries the manuscript material. The Natural History Museum, one of the most important holding institutions, has material in all three categories held in the relevant curatorial departments.

Forster material is therefore curated, described and made available by curatorial staff in museums, libraries and archives or in individual departments of large institutions such as the Natural History Museum, according to their own curatorial traditions and practice. These traditions determine how the user can access the collection. Libraries tend to create catalogues on an item-by-item level, ignoring the context in which the items were created, while archives will often list material at a group level placing greater emphasis on how the papers relate to each other. Museums may well tend to place more emphasis on conservation and presentation rather than making material available for users. They may well need to rely on inventory data that is outdated or inaccurate. In other words collections tend to be made accessible by means of tools that were developed because they we felt to be appropriate for particular kinds of material. This is not necessarily helpful to the researcher who, as in the case of Forster collections, may not be primarily interested in the medium of the material but rather in its content and significance.

The results of these disjunctions for those researching Pacific cultures and natural history are, to say the least, unsatisfactory. It is not only the wide geographical dispersal that impedes research. During some recent work on George Forster’s legacy I discovered that individual holding institutions (for which Forster material is of course only one collection among many) are often unaware of the scope or significance of related material in other institutions. As a result, institutional guides or websites may make great play of having a “Forster Collection” without placing it in the context of related material in other institutions or in other media. An example could be the Pitt Rivers Museum in Oxford which makes on its website pages about its Forster material very few references to other collections of Forster
material\textsuperscript{1} or the Natural History Museum itself, where some published guides, including the website, refer to Forster as a natural history artist, because most of his graphic work is held there, without making much mention of his other work.\textsuperscript{2} In fact Forster’s artistic works on paper are not an especially prominent aspect of his work overall and cannot in my view be fully understood except in the wider context of his published and unpublished writings. It’s the context that is missing from the Natural History Museum’s treatment.

Accessing disparate material in a variety of formats and across institutions but relating to a common theme proves extremely difficult in practice. The problem at the Natural History Museum, for example, was presumably that the curators of prints & drawings were not expected to think contextually in the way a Forster researcher might find useful. Neither, frankly, are most other museum curators, librarians or archivists, or at least not until very recently. And this is a special problem with Forster material because, in my view, the medium is definitely not the message: the significance of any single object, depiction, manuscript or published description can only be understood when it is related to other relevant material regardless of the medium in which it was created. As Lorcan Dempsey pointed out in a report\textsuperscript{3} submitted to the Information Society Directorate of the European Commission in 1999:

“The user wants resources bundled in terms of their own interests and needs, not determined by the constraints of the media, the capabilities of the supplier, or by arbitrary historical practices”.

Dempsey pointed out that the different curatorial traditions and organisational arrangements of the “memory institutions” (museums, archives, libraries) were obstacles to their cooperation in a “shared network space”. New access tools orientated to the needs of users would need to be developed in order to overcome these obstacles. A “multidisciplinary approach to collection interpretation” was needed. At the same time it would be necessary “to develop practices appropriate to upholding the values and purposes of the library, archival and museum traditions in a digital environment”.

What we need then, in the case of the Forster legacy, and doubtless myriads of other similar cases, is to create maps of related material in holding collections regardless of their physical location and, most importantly, of their physical format. In 2002 I was asked by the President of the Stiftung Preußischer

\textsuperscript{1} http://projects.prm.ox.ac.uk/forster/forsters.html.
\textsuperscript{2} http://www.nhm.ac.uk/library/art/drawingconclusions/more/penguin_more_info.htm\#coll.
Kulturbesitz, the umbrella organisation for the cultural legacy of the former state of Prussia, to investigate the practical possibility for creating such a map for the disparate collections in the Foundation’s care. I was also to investigate opportunities for initiatives at the European level. The tools already available for the Foundation included catalogues, usually in a retro-converted form, finding lists, and aids and other descriptions, both published and unpublished. Each description of an item had been created according to the curatorial practices of the holding institution so that there was no easy way of tracking related material across collections. There were few if any agreed standards across curatorial disciplines, differing name authority standards being one notorious example. Cross-searching across the collections of holding institutions was simply not catered for. What was clear was that the situation in Berlin was far from unique and that much of the problem related to curatorial traditions and an apparent reluctance to take a wider view.

What was also clear from my survey was that tools for creating a better map of collections and for making connections between related materials were already available. In North America and in Europe a number of projects were addressing the key issues and testing appropriate solutions. I also opined in my final report that developing and maintaining such cross-sector tools should be regarded as an obligation by holding institutions particularly if they expected to be focusing their services on the needs of users. Although I completed my study in 2003 I am not sure that much practical progress has been made in Europe beyond further discussions and the development of contacts under the EU umbrella but perhaps our tour d’horizon of current developments today will correct that impression.

So what is the problem to which I’m seeking a solution? Let me be specific and propose the Forsters as a test question. Anyone interested in aspects of their work and significance must surely wish for something that gave them convenient access to as many sources of information as possible. The holding institution and physical format of the material retrieved will not be of primary significance if they are serious scholars (let us hope that the days of those readers that won’t move out of the manuscripts room are numbered). They may wish to locate unique material of a particular kind collected by the Forsters and then see how the Forsters depicted or described it. They may be doing this because of the current importance of a rare species or the importance of understanding a cultural object the precise significance of which is now unclear. They may be researching the ecological development of a particular location or collating the evidence for climate change. What tools would enable them to do this?

In his report, Dempsey mentioned a variety of traditional or at least established solutions, including “disclosure services” (for example catalogues, search engines and “subject gateways”) and “content delivery services“, such as databases which
would be “increasingly presented within interpretative environments”. He placed a particular emphasis on the methodology of “collection-level description”. Common metadata schemes should be developed to allow researchers convenient access to relevant resources independent of their original format or of the type of “memory institution” in which they were held. According to Dempsey “libraries have to become more like archives and museums as they move towards making their ‘special collections’ more accessible, and as they provide greater support for campus learning and research outputs”.

My report to the Prussian Cultural Foundation came to a number of challenging conclusions. First, I stressed that I considered the networking of the various memory institutions a high priority. Secondly, I argued that the user should be placed at the centre of any developments. Thirdly, I called for barriers between the presentations of the memory institutions on the net to be removed. In my fourth point I argued that many of the tools necessary for developing useful services were in fact already being used; I cited as examples protocols such as the Open Archives Initiative-PMH, metadata formats such as Electronic Archival Description and Dublin Core, and methodologies such as collection-level description, harvesting and mapping. Developments such as the semantic web would need to be taken into account. Next I argued that international – and particularly European - cooperation was necessary and finally that such cooperation should be tested in the context of a pilot project.

For Forster collections, as an example, this could all add up to a rich, multi-layered resource. At the highest level we might find a suite of standardised collection-level descriptions, perhaps using the schema devised for the Research Libraries Programme in the UK. This could give top-level access to the totality of Forster materials in collections across the world. At a second level, institutional catalogues and inventories could be made searchable through a single interface, perhaps using Z39.50 or a similar protocol. The whole could be enriched by providing access to digital representations of material objects and texts, both primary and related secondary resources, using the OAI or a similar protocol. It would be important to draw on the experience and needs of users and potential users and to ensure that the service provided real opportunities to make connections across physical and institutional barriers. The sum must be more than the parts.

What role can or should national libraries play in the creation of networked resources spanning memory institutions? It seems to me that, as established centres setting bibliographical standards and compiling national bibliographies, they could well assume an effective coordinating role. At the international level, in Europe at least, projects like TEL demonstrate that they are used to operating in international,

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4 In an email to the author, January 2003.
collaborative environments. They are also increasingly working with other national memory institutions in presenting cultural heritage. A first step might be to agree some international level standards for the creation of cross-domain environments. I cannot see that this should present any profound difficulty. Demonstration projects in the US, Canada, UK, Germany and the Nordic countries have already used a wide range of tools to obtain very creditable results. The European Commission and other national or supra-national bodies have shown an active interest in the subject, at least at the policy level.

My own investigations ended about two years ago, so I shall be fascinated to hear today what progress has been made since then in tour d’horizon that follows. The opportunity remains clear: to use this still relatively young medium, the network environment, to open up access to disparate materials across knowledge domains, memory institutions and other barriers of time and space. National libraries might well play a crucial role in the creation of such environments. The prize in terms of a knowledge gain should be considerable. If a project were to be started opening up access to Forster-related materials, it might allow us to re-live their voyage of discovery and to win valuable new insights.