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Final Report

British Cartoon Archive Digitisation Project (BCAD)
www.cartoons.ac.uk

University of Kent

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Executive Summary

The main aims of the project were to address the physical inaccessibility of the Carl Giles Archive by digitising all the original artwork plus a selection of his personal archive material; to make the digital images available online by integrating the material into the existing catalogue thereby creating the largest digital cartoon archive in the world; to encourage the use and re-use of cartoon-related content for teaching and research purposes by increasing the quality of material freely accessible, and by making the material available for re-use in teaching and research materials.

It was expected that the project would develop knowledge and capacity and outline best practices for this and future projects.

The project was essentially divided into two strands:

- 1) To augment the British Cartoon Archive's existing catalogue through the addition of material from the Carl Giles Archive by cataloguing the material and digitising 20,000 items thereby allowing it to be cross-searchable with the 124,000 other images already on the database.
- 2) To update the existing website and to create a new worldwide cartoon resource and dynamic portal which would provide the public, academics and researchers with resources to facilitate teaching and learning activities as well as to access, examine and share not only cartoon images but other material from the archive; in this case personal material from Giles such as correspondence, photos and fan letters.

In order to achieve the aims and objectives, appropriate databases and software needed to be selected which could support the archival process as well as robust searching and content delivery on the web. It was decided, where possible, to look at open source options in order to leverage the expertise and enthusiasm of the open source communities but that was not always achievable. The eventual software architecture is based on Calm archival software (a proprietary specialist application), Drupal (as the open source content management system to create and maintain the web pages) and Fedora (to provide flexible and robust search capabilities and to deliver the content in Calm to the web using open source software).

By the conclusion of the project a new website at www.cartoons.ac.uk has been created which greatly enhances the searching options. It is now possible for users to search across the archive and get results returning cartoons, alongside other content such as cartoonist biographies, holdings information, archival material and books. The site incorporates Web 2.0 functionality. Users can add comments to pages allowing them to contribute and share information and stories while, at the same

time, allowing the BCA to moderate the comments and monitor user interest. Global teaching and learning resources can be created with the grouping feature which is based on traditional lightbox functionality. Through the selection and annotation of groups of cartoons, a user can create teaching resources, virtual exhibitions and thematic groups. E-commerce functionality has also been implemented which, in the first instance, will enable the archive to offer its publications for sale. In particular the catalogue of the Giles exhibition in London which ran from November 2008 – February 2009, *Giles on of the Family*, was written by the Head of the BCA and contains information on Giles uncovered during the project. Usage of the site, features and user comments will be monitored with the intention of seeking additional grants, either externally or internally, if enhanced functionality is deemed beneficial.

Figures at the start of the project relating to the old database showed that the site had between 30 and 40 visits each day with users completing more than 3,000 searches a month. Statistics for the new website in the last month shows an average of 285 visits each day from 108 different countries and over 4395 searches were performed (see Appendix A).

The high profile of the project has raised awareness of the BCA both internally and externally and has resulted in a number of new projects within the University which will help support the sustainability of the outcomes and outputs of this project. For example, there is a new JISC-funded project, the VERsatile DIgitisation framework project (VERDI), which will allow the BCAD infrastructure to be used to support digital collections across the University and Drupal has been selected as the new content management system for the entire University of Kent website.

Background

The British Cartoon Archive at the University of Kent was established in 1973 and holds the national collection of British social and political cartoons. The archive of Carl Giles (1916-1995), which includes original cartoons, sketches, letters and documents from the most famous cartoonist of his generation and creator of the much-loved 'Giles Family', was donated to the BCA. This Archive is a key resource for British political and social history but had not been previously available to the public.

The BCA already had an online database of cartoons which was a unique resource, rich in content. It represented the work of some 250 British cartoonists, and was widely used by academics. However, integrating the Giles material into the existing database of cartoons was going to be a difficult task since it did not have the flexibility to adapt to the requirements of cataloguing archival material such as letters and documents and thus the wealth of personal material in the Giles Archive would have been hidden and unknown. The existing database was also separate from the BCA website which prevented the integrated searching of material such as biographies and for the dissemination of events and activities of interest to its users. Furthermore, the BCA could not easily offer its publications for sale; nor could it serve the growing interest in teaching materials. Many of the existing cartoon images which had been scanned from small photographs were not of the quality expected by its users and were hard to decipher. The website was technically hard to update and thus did not contain current information.

Within the University of Kent, the Archive's collections support undergraduate courses in History, Politics and International Relations, Architecture, and History & Theory of Art, and postgraduate research in the Centre for the Study of Propaganda. Additional subject areas supported outside the University of Kent include English Literature, History and Philosophy of Science, History of Medicine, and Refugee Studies. However, the existing website and database could not expose the content for re-use for teaching and learning and did very little to directly support those activities.

Aims and Objectives

The broad aims of the project were to:

- Address the physical inaccessibility of the Carl Giles Archive
- Provide a simple approach to the time consuming process of clearing copyright to use cartoon/visual images in teaching materials
- Increase the quality of the cartoon-related material freely accessible
- Encourage the use and re-use of archive content for teaching and research purposes
- Integrate the Carl Giles Archive into the existing catalogue of cartoons thereby creating the largest digital archive of cartoons in the world.

Initial objectives for the project included:

- Providing access to the Carl Giles Archive by the digitisation, cataloguing and release of an estimated 20,000 images;
- Improving the 'searchability' and access infrastructure for all the Archive's collections including the existing database of 124,000 cartoon images and information on website;
- Securing IPR permission to allow for educational re-use of the digital images alongside the metadata;
- Enabling the free use and re-use of the collections within an educational context by engaging with the educational community;
- Building on the experience of the BCA staff of providing digital material via the existing British Cartoon Archive website by developing knowledge and capacity for this and future projects;
- Showing the benefits from this unique pictorial resource by depositing in JORUM five "resource packages" and two papers on helping people understand how to read and analyse cartoons
- Contributing to the JISC ethos of knowledge sharing through existing linkages with associated JISC programmes and services.

These aims remained consistent through the course of the project.

Methodology

As stated in the Executive Summary, the project was divided up into two strands:

- 1) Cataloguing and digitisation of the Carl Giles Archive
- 2) Updating and enhancing the website including content and services delivered

A project website was immediately created for the general public which provides details of the project including contact information. Internally, to facilitate collaboration, a project site was set up in SharePoint to allow project-related information such as tasks, issues, metadata schemas, presentations, evaluation studies etc to be disseminated and shared amongst the team. Project meetings were held regularly to ensure the entire project team was aware of progress and had an opportunity to discuss issues and ideas.

Throughout the length of the project, the Steering Group met monthly to discuss progress and to help resolve any issues which may have developed. Informal specialist advisory groups were created to advise on areas such as the system architecture, testing, backup strategies.

Cataloguing and digitisation of the Carl Giles Archive

Due to the importance of the material as well as the type of material, digitisation was carried out with the intent of producing digital surrogates of the physical items which ensured that an image suitable for preservation was created. This not only produced images that can be used and re-used for a variety of purposes but also allows the BCA to more reliably ensure that material lent for exhibitions have not been damaged and to monitor the condition of the original holdings.

Ultimately the majority of the digitisation was done in-house in order to have better control over the process and over the quality of the images produced. The designer was actively involved in providing expertise and support on selecting a scanner, establishing digitising workflow, training the operator and digitising objects owned by Giles. Two versions of the highest resolution image are kept as uncompressed TIFFs: the 'archive master' which is the raw scan and a 'processed master' which is the result of basic processing such as cropping and rotating. Basic metadata is stored in the image headers. The 'processed master' images are then put through an automated batch process to produce suitable images for the web and distribution. OCR is used on archival material, where possible, to allow the content to be searchable as well as to make the material more accessible.

Cataloguing of the material was done in compliance with ISAD(G) (General International Standard Archival Description, second edition) utilizing the industry standard archival software, Calm. Cataloguing included "decoding" a cartoon through the use of keywords and authorities files such as personalities which allows it to be effectively searched for and interpreted. Field mapping to Dublin Core and MODS have been documented to facilitate interoperability.

Metadata related to the existing digitised cartoon images has been mapped to ISAD(G) and imported into Calm at item level, as appropriate, within an archival hierarchy bringing all BCA cataloguing up to similar standards. Many of the previously digitised cartoons represent a small part of existing collections held by the BCA which have not yet been fully catalogued. Importing the cartoons into the appropriate level of an archival hierarchy will allow the various collection structures to be built up when funding for additional cataloguing can be found.

Cartoons need extensive cataloguing and key-wording in order to be searchable and this is a manual process. The cataloguers on the team provided basic catalogue entries which were then reviewed and enhanced with specialist knowledge. Part of the cataloguing processes involved creating links and identifying relationships between records.

The copyright holders of the Carl Giles Archive include Express Newspapers for the majority of the published cartoons, the University of Kent who were assigned any copyright that Carl Giles owned, and organisations and people who corresponded and collaborated with Giles and provided him with information and material. Clearing copyright for the last group was the most challenging and time consuming. An IPR clearance strategy was created along with related guidelines and these were used by the cataloguers to obtain permission to digitise the material. In addition, personal information such as addresses in any material being digitised from an individual (e.g. fan mail) was obscured on the version being made available outside the archive.

Updating and enhancing the website including content and services delivered

Requirements for the new website were developed and an evaluation process was carried out to select appropriate software. It was recognized that the software being evaluated might be of interest to other departments in the University and evaluation presentations were given to suitable staff members. Drupal was selected as the content management system and Fedora was selected to support searching and delivery of the images and related metadata.

The MoSCoW method was employed as a starting point to create a specification analysis document detailing the features to be developed. By tagging features by M(ust) have, S(should) have, C(ould) have, W(on't) have, a prioritised list of requirements was created. Best practices in development were employed including version control of code and the scheduling of uploads. Agile programming techniques were trialled and the results so positive that they were rolled out to the rest of the University's web team. Designs for functionality were produced in an iterative manner that was further informed by user testing (see User Engagement for more details).

The BCA is committed, where possible, to provide open access to its database. To facilitate this, thumbnails, medium resolution images and image detail via zoom technology have been made accessible to everyone. In addition, members of the UK education community, authenticated via Shibboleth, have access to high-resolution images of the Giles material, suitable for use in learning and teaching resources.

The creation of material specifically aimed at the support of teaching including the development of teaching packs and portal functionality targeted at classroom use is possible via the creation of groups of cartoons which can be viewed, annotated and shared. For example, a user can select a group of cartoons relating to coursework, or as a jumping-off point for discussions, homework etc, or create a virtual exhibition based on a theme. This is a very powerful feature and the BCA will be monitoring how it is being used.

User Engagement

The old BCA website had a survey and feedback form and the BCA has been collecting information from users for many years. This information was the starting point for selecting the functionality and features which was to be offered on the new website. Once the functionality had been identified, wireframes of the website were created and formed the basis of the paper-based user testing; the results of which were documented and incorporated into the design.

The primary purpose of the wireframe testing phase was to verify that the information layout and design blueprint were appropriate as well as to ensure the usability of the website. Paper-based wireframes allowed the participants to "feel" what it would be like to use the site and give back critical feedback early in the design process before any significant development work was done. Testing theories assert that it is possible to achieve the same results with 3-5 participants as with 10-15. It was decided to test with four potential users covering the following demographic profiles: student, general web user, academic, person specifically interested in cartoons. Initially five scenarios were designed but preliminary testing with BCA staff indicated that five scenarios were too many. The final areas of activity tested included general navigation/searching and using the grouping functionality to create a teaching/learning resource. Screens were printed off and participants were given two scenarios and a series of questions and were asked to point to where they would click or enter text. After each "click" the facilitator would produce the next "screen". The participants were asked to think aloud where possible and an observer took notes on how and what the participant did based on a list of key areas. One of the main issues apparent across all tests (including the test run) was the use of terminology and it was decided to simplify terminology as much as possible. Browsing/searching was generally fine apart from some minor issues. Our initial plans for the grouping functionality were found to be problematic and the navigation and functionality was re-specified in light of the testing results. Additional testing iterations of the changes were performed as required but on a less formal basis.

The BCAD project did not employ a formal advisory panel, but was nevertheless informed by a wide range of opinions. The BCA is in contact with its regular users, academic, commercial, and general, and has received additional input from new contacts brought by the two Giles exhibitions and the publicity surrounding the BCAD project.

Feedback forms and surveys, and Web 2.0 comments from users are features added to the new website and all feedback is monitored and responded to. Initially the BCA has been conservative with enabling these features since its resources have been focused on the project development tasks. Once all major functionality is bedded down, the BCA will implement additional surveys and user comment options to further test the usability of the site.

The soft launch of the new website in November 2008 included a prominent invitation for users to comment on the new site and the new features, and for the past five months the BCAD project team has carefully monitored all feedback, answering all emails and engaging in a dialogue with users. This has often opened up dialogues between the user and the BCA and has provided invaluable insight into how the material is being used, who is using the material, and the features users are finding helpful. The process has been a positive one, and demonstrates general enthusiasm for the changes being made.

Users are providing a great deal of feedback and comments and have been amenable to discussing their use of the material and thoughts about the website features and design. For example, one user at another UK university has told us how they give a lecture linking to the website and demonstrating to students how to search and obtain information which might be related to the current course module.

This user also plans to ask students to perform a textual analysis of cartoons as an exam question and use the database in subject areas of Comedy and Society and Communication and Cultural history.

The group functionality on the BCAD website is being used to create resource packages to help teachers and researchers use and understand political cartoons. The subjects reflect the strengths of the catalogue, the existing demand from users, and information about the most common search engine queries that bring users to the site. These resources include two general packages, "What is a political cartoon?" and "A cartoonist's career: David Low, 1891-1963", plus five packages on specific topics: "W.K. Haselden and WW1", "David Low and Appeasement", "Images of the unemployed", "Cartoonists and immigration", and "Cartooning the Royal Family, 1953-2003." Draft copies are currently available on our website <http://www.cartoons.ac.uk/available-groups/>, and when the text is finalized the resources will be uploaded to JORUM and the user community will be invited to feedback on their usefulness.

There are plans for additional dissemination activities which should help engage with users by demonstrating how material can be used and interpreted. These include a launch at the University geared toward the Kent academic community as well as participating in the University's open lecture series. Based on the feedback received from users in general, the BCA can be more targeted regarding the academics and departments contacted at Kent.

In order to create a baseline of knowledge about the archive within the University of Kent, two questions were incorporated into the University's 2008 annual staff survey. 36% of the people who responded were aware of the BCA. See Appendix C for further details. The same questions will be included in the 2009 survey to see the effect of the project and related dissemination activities.

Material from the BCA is often loaned out to be used in exhibitions and the BCA is trying to ensure people who visit such exhibitions are made aware of the archive and its website. The assistance and support of a designer was critical to the production of good quality posters and dissemination material. Posters about the archive and project have been created to be hung in prominent positions in the museums and galleries hosting exhibitions. Project staff have been involved in poster sessions demonstrating and exhibition the project outputs at conferences including JISC Innovation Form at Keele University (July 2008) and the annual Ja-Sig conference in the United States (March 2009). In addition, the BCA has purchased a branded kiosk that it can loan out allowing access to www.cartoons.ac.uk from within the exhibition space. The kiosk was first used at the Cartoon Museum in London for the major Giles exhibition which ran November 2008 – February 2009 and allowed people visiting the exhibition to find out more information about Carl Giles as well as to search the BCA website and find out about the BCA and its services. It is intended that this kiosk will be available in public areas of the University when it is not situated in exhibitions. Initial feedback has been positive and the BCA will be working on ways of monitoring its usage.

Implementation

The general implementation strategy is outlined in the Methodology and User Engagement sections above. Project work was planned and implemented through the traditional project management methodologies.

A much larger part of the project than originally anticipated was the evaluation and selection of software, and in the end, three different software packages needed to be chosen. Traditional methodologies were employed to identify the requirements and relevant software. The most promising 3-5 applications were identified, evaluated in terms of their ability to meet the requirements and a presentation organised to review the short-list. People outside of the project who were identified as having potential interest in the products or project were invited to the presentation. Members of the University community invited included those who had similar needs, who would have to support the software past the end of the project, and/or who may have had experience in the software or achieving similar requirements. The inclusion of these people in the process proved to be useful because it:

- Publicised the project across the university
- Allowed staff who might be doing similar things to network
- Created buy-in by staff who would be supporting the products
- Exposed staff to products and ideas which they may have been aware of but did not know specific details
- Provided the project with additional expertise

The evaluation process also included the creation of prototypes to test the functionality. This proved to have unexpected results since, in the case of looking at web delivery software, it resulted in changing the decision as to the preferred software. How to get the records from Calm, the archival database, to the Web was being evaluation and the suitable options had been narrowed down to 1) the vendor's XML plug-in to query Calm's proprietary database and 2) exporting the records and using Fedora/Solr to deliver the search results and metadata. Before the prototypes were built it was strongly believed that the XML wrapper was the better choice since it would result in a much more simple architecture which would be easier to support. A prototype of each option was created and tested. The results of benchmarking tests performed with the prototypes made it clear that what was perceived as the simpler and more straightforward choice was not going to be able to support the size and complexity of the dataset and deliver the exact functionality specified. While workarounds existed to the major issues, implementing them was not only going to increase the complexity, but would result in a slower and less scalable solution than the initially more complex Fedora option. A diagram of the final architecture can be found in Appendix B.

The initial project plan assumed that the majority of scanning would be performed by bureaux and that the only scanning the BCA would perform was on the correspondence and other archival documents. However, it was found that the demands of the material being digitised, particularly the colour artwork, was unexpectedly complex. The intention was to produce a digital surrogate of the object so the colour needed to match as closely as possible to the original plus the image needed to capture enough detail to reveal Giles' working habits (e.g. rub-outs, pencil marks etc). Furthermore, some of the pieces of artwork were warped due to the way Giles had stored them. The best results seemed to be via scanner technology (rather than via camera work) and in the end it was decided to purchase a suitable scanner and perform almost all the digitisation in-house to ensure greater control over the quality of the images. Retrospectively, this has the added benefit of leaving the BCA with equipment which can be used for other projects across the University. For example, the Tom Webster cartoons in the VERDI project will be scanned using BCAD-sourced equipment.

Outputs and Results

www.cartoons.ac.uk

The main output of the project is the new website at www.cartoons.ac.uk which includes 20,000 images of Giles original artwork and a selection of correspondence, reference information, and fan mail from the Giles' personal archive as well as 124,000 cartoons which were on the old database.

The new website allows the Carl Giles Archive to be cross-searchable with the existing cartoons in the BCA's catalogue. Delivering the digital images in this information-rich environment ensures the Carl Giles Archive is widely available for research, teaching, and learning. More than 75,000 cartoons in the BCA's catalogue date from the period covered by the Carl Giles Archive, and over 6,000 of them are by Giles's cartoonist colleagues on the Daily Express and Sunday Express.

In the past, higher resolution images were watermarked in an attempt to allow users to see details while still protecting the copyright holder's interests. Because of the level of detail in the Giles images, detailed examination is now being made possible via zoom functionality.

Registered users can create groups of cartoons (similar to the functionality often called "lightbox" or "favourites") which can be used as a teaching aid, be a themed project, a research project, an online exhibition, or merely shared with others. Each group has a unique URL and the initial page will show thumbnails of cartoons. Clicking on the thumbnails will take you to the full record view offering full metadata and zoom functionality. Groups will be able to be named, and given a description as well as

introductory text. In addition, each image can be individually annotated and the order in which the images appear specified. Groups, including the images, can be downloaded for use in other software.

Initially the BCA created five "resource packages" which will be developed on themes consistent with the current curriculum but that is only a start. As more people start to develop and share their groups it should be possible to see not only how other people are using cartoons in their learning and teaching but to get ideas and new insights. In addition resources are available to help people understand how to read and analyse cartoons. These include two papers written by the Head of the BCA: "Biographical Survey of a Cartoonist (David Low)", and "What is a Political Cartoon?"

In addition to these formal assets, there is a great deal of useful information and resources throughout this site including:

- Biographies of cartoonists
- Metadata/catalogue entries providing insight into what was happening at the time the cartoon was produced.
- Flexible and sophisticated searching enables users to find out much more than a specific cartoon. Searching enables the user to find a variety of information such as:
 - what was happening on a specific day in history by seeing all the cartoons produced for major newspapers on that day
 - how well-known politicians and important personalities were perceived and how their images changed over time
 - how major events were presented and criticized
 - when topics or events were of concern
 - presentations and talks given by archive staff at seminars
 - cartoon-related events sponsored by the BCA as well as other organisations

Dissemination portfolio

To support the dissemination activities of the project various materials have been produced and the BCA now has a portfolio of promotional material making further dissemination much more straightforward. This includes posters, leaflets, a blog and the kiosk which will be lent to exhibitions displaying content from the BCA so that people viewing the material will also be aware of the website and the wealth of additional material available online.

Enhanced cataloguing of BCA resources

New cataloguing software has been implemented which should allow the BCA to expose much more detail about its holdings. This software will also open up new ways for the BCA to manage its archive and collections and ultimately be in a better position to obtain more external funding.

Outcomes

The main aims of the project were to provide access to the wealth of material in the Carl Giles Archive and to create the world's largest digital archive of British political and social cartoons thereby increasing quality and variety of material freely available and enabling this material to be used for teaching and research purposes. It is very easy to say that those aims have been achieved since the new website contains over 144,000 catalogued cartoon images and a wealth of Giles material and information. The new website allows metadata to be viewed and flexibly searched including faceted searching and the content can be easily updated by the BCA so that metadata and other content can be linked together. Users are able to provide comments and create grouping of cartoons to share with others. These shared resources can be used for learning and teaching. The project staff have developed expertise and produced guidelines and documentation related to digitisation workflow and standards as well as guidelines on how to clear IPR.

However, the criteria for evaluating a project such as this one needs to consider not only product creation but value creation as well. While the website and resources provided are important, the project created a great deal of momentum which is benefiting the University community by demonstrating:

- The advantages of managing projects more formally - JISC's encouragement to have a dedicated project manager was supported by the conclusions of the University's external auditors who looked at this project in the course of their audit of project methodology employed in the Information Services department.
- The benefits of evaluating and testing software on pilot projects - Drupal CMS software selected by the project is now being rolled out to the entire University after staff were able to compare what was being accomplished by the project with other systems under consideration.
- The importance of dissemination internally - Disparate departments have already joined together to apply for and win funding which will not only make additional resources available for learning and teaching but is ensuring sustainability of the architecture. In addition, the project has raised the internal profile of the BCA. For example, its press coverage is now being formally tracked and quantified by the University and members of the University are approaching the BCA for advice regarding digitisation standards, how to organise and hang exhibitions and asking for contributions of material for inclusion in exhibitions and conference presentations.
- New ways of working together – Various methodologies including collaborative working via Web 2.0 technologies, rapid prototyping and agile programming development were used during the project and their success has encouraged the methodologies to be rolled out more widely.
- Precedence for copyright holders to extend permission for learning and teaching re-use – Copyright holders of other material in the archive have been, and will continue to be approached with new agreements which will allow their material to be used under similar terms as the Carl Giles Archive. So far, in addition to the Giles material, over 41,000 existing cartoon images covering over 83 artists are also available for re-use in learning and teaching.
- Providing hardware infrastructure which can be used to support additional activities - scanners, PCs and other hardware have been purchased which are already being booked for other digitisation activities.
- Creating contacts and linkages with associated programs and organisations - Not only have the JISC programme events created important and useful contacts but the staff brought in as part of the team have shared their knowledge and experiences.

While it is too early to adequately comment on the impact the project will have on learning and teaching since the functionality and content to support those activities is just being rolled out, nevertheless a number of observations can already be made:

- The BCA is getting more enquiries from academics regarding the Giles Archive material because they can now get a sense of the content in the holdings. In fact the BCA is helping an academic in the History department put in a funding application for research into media history based on the Carl Giles Archive which will explore the linkages between history and journalism.
- The Head of the Archive is recording a rise in invitations received to give talks
- There is increased contact with users of the site which is opening up dialogues to understand how they are using cartoons and creating relationships which hopefully can be used going forward to add content and tutorials.
- Interest from other JISC projects in using and/or linking to cartoon material. To some extent it is believed that a lot of these ideas can be realized through the group functionality.

The original project plan included the commitment to Web 2.0 technologies and this has been met them by allowing user comments and the building and sharing of groups of cartoons. While there is ongoing debate about the value and control relating to user-generated content, it should be pointed out that part of the reason the new website does not allow users to directly edit catalogue entries is

due to the complexity of where and how the updated entries should be stored. While it is relatively straightforward to get data out of the cataloguing database, putting data back in is problematic, especially when one should also be considering moderation, versioning etc all of which is not natively supported by the cataloguing software.

Conclusions

A great deal of interest and enthusiasm about the digital database from a variety of stakeholders including academics, cartoon enthusiasts, and teachers has been seen. The importance of finding ways to reach users and to make it easy for them to contact us cannot be emphasised enough. The new website is making it much easier to find out how users are utilizing the database. For example, the BCA is finding out the subjects/departments which are utilizing the database. This information will not only inform future development plans but the feedback is also providing insight into how people in our own institution may want to use the material.

Project management guidelines always refer to the importance of having a committed sponsor and the structure of this project has proven very effective in raising and resolving the various issues which inevitably arise during the lifecycle of a project. The project sponsor also chaired the Steering Group and is responsible for the management of most of the departments involved in the project. The other members of the Steering Group manage the areas involved in the major strands of the project. Thus, when issues were raised at a Steering Group meeting, there was generally someone with sufficient authority to decide on the best way forward and to ensure that the proposed action would have full institutional support. In many instances, this would relate to something that might seem trivial but could cause significant problems. For example, while BCAD could independently buy the necessary computer hardware it was better if it used the standard University configuration and integrated into the standard University server farms and backup strategies. When the nature of the material we were proposing to digitise raised some issues which we decided could be better tackled by bringing the scanning in-house, we had support and advice every step of the way, from quality analysis, justifying the expenditure, to finding suitable space in the building to situate the scanner.

The fact that there was buy-in by senior management with ownership of the project meant that it was possible to bid on and run a much larger project. This greater critical mass meant that the project was more visible throughout the University – from purchasing to systems to academics and the more exposure the project gets the better. In fact the BCA has been approached by finance officers to use cartoons in conferences with other higher-education finance officers.

It is also worth mentioning that the great enthusiasm and support provided by JISC has been noticeable and very much appreciated by the in-house team. JISC programme meetings, workshops and other events have been very useful in not only providing knowledge and skills but also in offering the opportunity to begin creating a network of people with similar interests which creates the possibility of future collaborations

Implications

The BCAD project has changed the way the material in the archive is viewed. Previously the emphasis was on including cartoon images at item level. However, contact with an archivist and the availability of features offered in archival software has demonstrated that it is possible and desirable to make available much more than the cartoon image available. Records from the existing database have been imported into the new BCA catalogue at item level but there is an “archival hierarchy” in the boxes of correspondence and other material in the BCA’s collection which relates to other collections and could be exposed. However, the new vision of what could be achieved has serious funding implications in that it requires an archivist, cataloguer and digitiser to make the material available in a useful and meaningful manner.

Material in the Carl Giles Archive has introduced new standards to BCA cataloguing and digitisation and has provided the infrastructure to support those standards. Giles material has been catalogued

using ISAG(G) and organised in a standard archival hierarchy and the quality of the images produced is significantly better than any other images in the existing catalogued. The higher quality images have required new workflows, hardware and knowledge and have raised issues about the quality of some of the older, existing images which have been digitised over the last 15 years. These images will have to be brought to the same standard, and in the first instance better quality digital images obtained from existing microfilm will replace the existing poor quality images, but since all of the images in the catalogue are under copyright these higher quality images will have to be protected by only allowing general access to the medium size image and zoom functionality to the high quality image.

One interesting aspect of the material in the Carl Giles Archive is that it contains multiple versions of the cartoon for scholars and academics to study and use. For example, one can view the original artwork which often does not include the caption, the cutting, the proof and the cartoon as it was reproduced in an annual. Certainly, from a preservation perspective, it is important to have surrogates of each of the items. However, it is not clear at this point what are the overall advantages and disadvantages of providing similar images of the various formats other than providing additional information such as publication dates and captions and a more complete representation of the artist's work. The BCA will be monitoring how people use the material to better understand whether, when possible, this should be a model for the future.

The infrastructure created with Fedora and Drupal has started some interesting discussions regarding the storage and preservation of the resources created such as cartoonists biography information, copies of presentations and seminars given by BCA staff, groupings of cartoons created as teaching tools and virtual exhibitions etc. This is all material which is being shared and made available but the format and location of the preservation copy of this material is not automatic or intuitive or necessarily standards based; in many cases it is just a web page. Questions are being raised such as should the majority of this content currently on the website, including basic HTML pages, be preserved and managed in some form of repository? If so, what is the most appropriate mechanism to do this?

The project has created some interesting tools and functionality such as the grouping functionality. At this point it is too early to draw conclusions about how it will be used by the various stakeholders such as academics and researchers, both in HE and FE, along with the general public but the use of the tools should be monitored and evaluated to understand their value and what could be done to increase their usefulness. Unfortunately there will not be sufficient resources to do so in the immediate future. If the group functionality is taken up as a useful teaching tool but users are not providing content, it may be necessary to engage with teachers on a different level and to buy-in resources and expertise in the curriculum. Given the time-frame of the project, the take-up and usefulness of this functionality will not be apparent for a while, by which time there will be no funding to address issues and suggestions that arise.

Finally, while the BCA gathers and maintains a collection of cartoon cuttings from newspapers, there is a noticeable gap in the digital catalogue of cartoons from the present day. Many cartoons produced now are submitted to the newspaper in digital form and while they are often included on the newspapers' websites they are not catalogued and searchable in that context. It would be interesting to explore how recent cartoons can be incorporated into the database, including some basic metadata without too much manual intervention, as well as to explore how cartoons found on our website can be put into the context of the newspapers in which they were originally found and which are now being digitised.

Recommendations

We feel quite strongly that the success of projects such as this is dependent on their relevance to the objectives of the organisation in which they are based and that responses to funding calls must be driven by the required outputs of that organisation; a project that lacks relevance to the organisation will be much harder to sustain. In addition, even in well planned and funded projects, the ability to add resources locally, the enthusiasm and buy-in from management and the commitment of staff who already have a wide range of ongoing work is critical and this comes more easily if the project is going to benefit the organisation directly.

Discussing projects and material at conferences and seminars often results in a lot of interesting ideas regarding collaborative projects between digital archives, both in terms of combining/sharing general information (e.g. mash-ups) as well as addressing or exploring specific topics and it would be beneficial if funding was available to develop these ideas.

A well-known problem in digitisation projects is clearing rights. It would be very useful if an organisation took over the clearance of rights in significant un-digitised archives on behalf of HE, where the rights are hampering the development of those resources, perhaps because they are held by commercial organisations, or are orphan works.

References

BCA Website: <http://www.cartoons.ac.uk/>

BCAD project site: <http://www.kent.ac.uk/is/projects/bcad/>

BCAD Blog: <http://bcad.wordpress.org>

Fedora Commons <http://www.fedora-commons.org/>

Drupal content management platform <http://drupal.org/>

Calm archive system <http://www.axiell.co.uk/382>

VERDI project site: <http://www.kent.ac.uk/is/projects/bcad/>

Appendix A – Website analytics (22 Feb 2009 – 24 Mar 2009)





Map Overlay



Feb 22, 2009 - Mar 24, 2009



8,848 visits came from 108 countries/territories

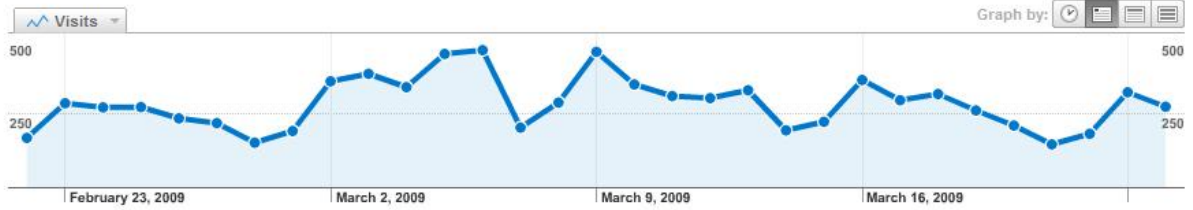
Detail Level: [City](#) | [Country/Territory](#) | [Sub Continent Region](#) | [Continent](#) Dimension: [None](#)

Site Usage		Goal Conversion		Views:    		
Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate		
8,848 % of Site Total: 100.00%	9.37 Site Avg: 9.37 (0.00%)	00:05:06 Site Avg: 00:05:06 (0.00%)	77.34% Site Avg: 77.25% (0.12%)	38.78% Site Avg: 38.78% (0.00%)		
Detail Level: Country/Territory		Visits ↓	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
1.	United Kingdom	4,873	10.13	00:04:43	76.87%	35.19%
2.	United States	1,223	6.98	00:03:17	87.08%	48.16%
3.	France	350	8.74	00:04:50	72.00%	39.43%
4.	Canada	312	12.20	00:06:22	69.55%	36.22%
5.	Germany	259	8.79	00:03:42	87.64%	40.15%
6.	Netherlands	207	14.57	00:10:05	67.15%	24.15%
7.	Australia	137	5.77	00:02:50	89.05%	44.53%
8.	Bolivia	123	21.63	00:49:24	0.81%	17.07%
9.	Ireland	93	7.70	00:02:52	84.95%	43.01%
10.	Spain	88	5.52	00:03:37	61.36%	39.77%

Find Country/Territory: [containing](#) Go to: Show rows: 1 - 10 of 108  

Visits for all visitors

Feb 22, 2009 - Mar 24, 2009

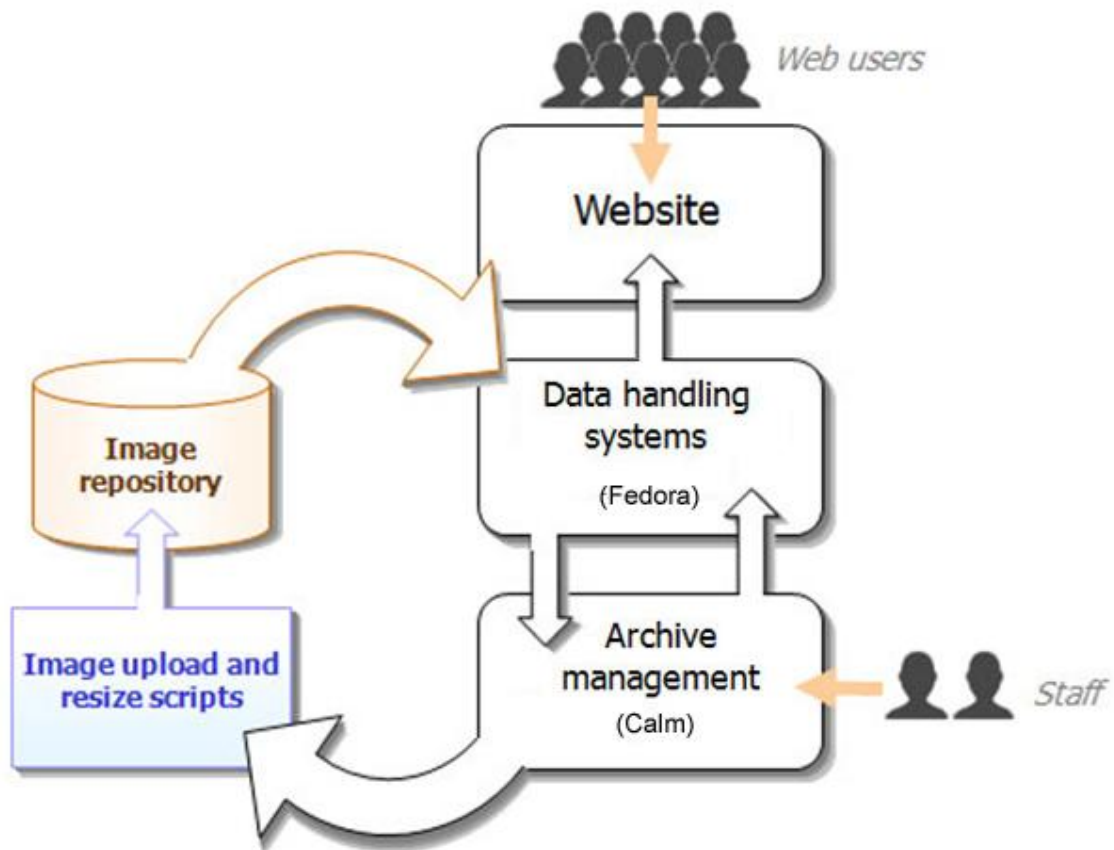


8,848 Visits | **285.42 Visits / Day**

	Page	Pageviews ↓	Unique Pageviews
1.	/	7,066	5,338
2.	/search-catalogue	4,395	2,183
3.	/about-archive	621	464
4.	/artists/carlgiles/biography	528	300
5.	/search/advanced/cartoon	451	264
6.	/giles-2008	445	349
7.	/items-sale	383	305
8.	/cartoonhub-links	339	253
9.	/teaching-aids	322	272
10.	/artists	307	231

Appendix B – BCAD Architecture

The following diagram illustrates the BCAD architecture which forms the basis of the VERDI project under the Enriching Digital Resources strand of the JISC Digitisation Programme. See Resources for further information about VERDI.



Appendix C – 2008 Staff Survey Results

37. Did you know that the British Cartoon Archive in the Templeman Library has an online database of cartoons?			
Yes:		36.4%	121
No:		63.6%	211

38. We are interested to know if you have ever used the British Cartoon Archive (located in the Templeman Library) for any of the following?			
Teaching:		15.6%	5
Research:		18.8%	6
Other (please specify):		65.6%	21

[View All Responses](#) - There are too many responses to display on this page and so all the responses to this question are available on a separate page.

Summary of responses to Question 38: Other

- ALL 3 of the above, including much needed comic relief on hectic days.
- BOTH!!!
- For illustrating Open Lectures etc.
- I enjoy the exhibitions and would use the archive if I was running a course.
- Interest.
- No, and I don't understand how to access the film archive either.
- No
- Out of interest.
- Pleasure.
- Self interest.
- Sheer enjoyment and reflection! Have enjoyed a number of exhibitions. It feels very cramped now, though. Can you give more space? It's a great collection and resource.
- Teaching: teaching and research.
- Teaching and Research.
- To illustrate a conference programme and a report.
- Years ago - to provide subject-relevant corridor decorations.

A total of 32 people responded to Question 38 and the demographics of the responses can be broken down as follows:

- Teaching: 5 + 1 (illustrating open lecture) in History, Psychology, SSRSSR, Politics and International Relations
- Research: 6 in SSPSSR, Politics and International Relations
- Both: 5
- Other: 2 (illustrate conference programme + subject relevant corridor decorations) + 13 who said they accessed 'out of interest'