The CollectiveAccess Tool

CollectiveAccess is a collaborative born software project developed by Whirl-i-Gig, a New York-based development team. The program is a robust and flexible cataloging platform that is a highly customizable, open-source, software package for managing and publishing archival and museum collections. There are two main components of CollectiveAccess. The "back-end," Providence, is a data management application and cataloging interface, and Pawtucket, an optional "front-end" publication that can be used for access and discovery. Providence provides a relationship-based approach to cataloging that allows users to construct complex associations among multiple item types. The back-end also comes with advanced display and reporting tools, and batch importing and editing abilities. As the software's website page states: "superior media-handling and more enable users to catalogue almost anything. For publicly accessible collections, Pawtucket offers the web presentation tools that can bring an archive to light." (collectiveaccess.org, n.d.) Put more simply, CollectiveAccess is a digital asset management system that an organization can use to build a variety of different types of websites, but specifically focused on websites to display things such as online catalogues, libraries, audiovisual production and broadcast footage, and other special collections.

The CollectiveAccess package is designed for people with little to no programming skills, and makes use of GitHub for free online documentation and support. The software runs on any modern web browser, is pre-configured with multiple library and metadata standards, and comes with both batch upload interfaces and exportable reporting tools. Because the software package combines both front and back-end functionality, it is a highly prized tool for multiple types of organizations that want to not only catalog their collection, but also to share their collection with the world in a digital environment. CollectiveAcess is also particularly useful for collections that have a wide variety of media types and contain unique or unusual items.

Examples of How Projects Are Using CollectiveAccess

Because CollectiveAccess is free and widely distributed, it's hard to say how many different organizations make use of it. But the CollectiveAccess website has a fairly extensive list of academic institutions, arts organizations, corporations, film and audio archives, libraries,

museums, historical societies, research institutions, religious organizations, and social justice organizations. Clearly, the potential for CollectiveAccess is rather unrestrained.

The La MaMa Theater Archive. One such organization is the La MaMa Theater Archives, currently utilizing CollectiveAccess to support their CLIR funded Hidden Collections Project, "The Pushcart Years". According to the blog dedicated to the project, "La MaMa's archival collection includes 10,000 unique items–posters, programs, costumes, puppets, and photographs, and audiovisual materials–that together chronicle the institution's fifty-plus year history." (pushcart.wordpress.com, n.d.) La MaMa is using CollectiveAccess to create an online searchable catalog of their holdings. Due to the nature of the material, finding appropriate descriptive fields and controlled vocabularies has been difficult for La MaMa, so CollectiveAccess has afforded them the flexibility they need to accurately create user-findable access points to varied media and performance related memorabilia. Since the software both comes with pre-defined metadata standards like Dublin Core and allows customized metadata fields to be added, LaMaMa has created a very specific metadata schema that combines the use of Dublin Core, PB Core, and PREMIS. They also make use of LCSH, LC Naming Authorities, and a small in-house vocabulary in their descriptive fields. (Mattson, 2016)

Another tool that is critical to La MaMa's archival mission is the capability of linking people, productions, and objects to one another in clearly denoted relationships. Cataloging live performance is challenging because it is ephemeral by nature, we cannot simply equate, say, the text of a script with the play as it's performed. When someone refers to "the play," they are speaking of the experience of watching the actors, the movement, the set, etc. They aren't "seeing" the text.

La MaMa is relying heavily on CollectiveAccess to accomplish access, use, and preservation of its archival collection. In doing so, the use of this tool furthers the core mission of the La MaMa Archive: to make some of their most in-demand material available to scholars, researchers, students, and the off-off-Broadway community, by utilizing the Pawtucket front-end user interface.

The Fabric of Digital Life Archive. Decimal Lab, a critical media collective affiliated with the University of Ontario Institute of Technology, uses CollectiveAccess in their web-based project, "The Fabric of Digital Life," a digital humanities collection containing concept videos, news media, popular culture, and inventors' writings. Similar to La MaMa's archival needs,

Decimal Lab needed a tool that focused on classification and description while still offering robust discovery and presentation online.

As with the La MaMa Archive, The Fabric of Digital Life collection needed a multi-dimensional approach that allowed Decimal Lab to build a robust archive that contextualized the collections' artifacts in relation to key events during the course of development of an invention. The corpus of material in the collection focuses on "wearable" media and augmented reality based inventions, topics not easily described by traditional ontologies and metadata schemas. The ability to create rich metadata and complicated contextual hierarchal relationships allowed Decimal Lab to bring together inventions, inventors, ontologies, discourses, audiovisual material and more in an easy to navigate user finding aid and research tool.

Decimal Lab's cataloging needs are complex, as they seek to not only show a given invention in the context of it's development but the simultaneous development of changing rhetoric and ontologies in the world of invention and their impacts on digital culture. Similar to the "a script is not the performance" problem of description in La MaMa, The Fabric of Digital Life seeks to convey a "the artifact is not the invention" ideology. As Pedersen & Baarbé explain: "Central to our hierarchy is the Burkian-inspired concept that an invention consists of more than the physical technologies from which it is derived. Inventions are conceptualized and communicated long before they become physical artifacts. For example, the Nokia Morph future-visioning video describes a nanotechnology device that changes shape according to how it is being used. Although it may never be created as a material device, the idea of a morphable electronic device is an invention that has a traceable impact on other emerging technologies, societies, and broader culture. In this way, the idea of an invention provides the motivational impetus for development as an invention takes on multiple forms through its lifetime (from the birth of the idea, through design, implementation, and eventual death)." (Pedersen & Baarbé, 2013, p. 4)

This project, like La MaMa, relies on metadata flexibility to further its mission and purpose by creating contextual relationships between invention, responses to inventions, and "object of an allusion." By doing so, Decimal Lab can fully express the idea that inventions are not simply created by individuals in a vacuum. Rather, they come into being amidst a vast framework of intersecting texts that express the motives of everyday people as much as they do the intentions of inventors.

The Bruce High Quality Foundation University Archive. The Bruce High Quality Foundation, a New York-based artist collective, is a third example of CollectiveAccess in use. This project sought to "implement a one-interface collection management system that could serve as an OPAC as well as a fully Web-hosted digital archive of the digitized ephemera, drawings, photographs, realia, unpublished essays, sound files, and video clips that were being produced." (Weist, 2010, p. 23) The BHQF chose this tool for many of the same reasons that La MaMa and Decimal Lab did, namely its abilities to be highly customized and its user friendliness toward a volunteer staff with limited technological know-how.

Like La MaMa and The Fabric of Digital Life collections, the BHQF corpus was a complex collection, including video, audio, photographs, drawings, unpublished papers, and digitized ephemera and realia. The project made extensive use of not only cataloging tools, but additional features inherent in CollectiveAccess, "namely geo-spatial cataloging, a pan-and-zoom image viewer, and hypertext attribute system for locations and collection sets." (Weist, 2010, p. 23)

As the corpus of this collection is heavily image based, one of the things that made CollectiveAccess the top choice for BHQF was its image viewer, "Tilepic." CollectiveAccess automates image placement within the directory, and does not require specialized filenames. As a result, the catalogers working on the project only ever needed to alter the image resolution during upload. Since the collection is international, two other features of CollectiveAccess the BHQF really wanted to utilize were the geo-referencing of objects and the front-end interface translator. As Weist states, "When a user navigates to an object with geo-reference(s), he/she can choose to pan and zoom within the location square or see Map, Satellite, or Hybrid views. A location description field allowed us to identify a location's relevance…We installed a German font-end interface translator, which is one of several languages available." (Weist, 2010, p. 25)

The BHQF project's primary mission was a desire to preserve, document, and grant access to the work of the facilitators, students, and visiting artists of The Bruce High Quality Foundation University, an un-accredited University in Tribeca. CollectiveAccess allows them to accomplish this goal in a cost effective manner while utilizing its inherent user-friendliness to allow both local and remote inexperienced volunteers to do the actual cataloging work.

CollectiveAccess Meets the Challenges of Non-Traditional Archival Needs

These three projects are but a limited view of the possibilities of CollectiveAccess. However they do point out some common traits of why this open source tool has become wildly popular among archivists of all stripes, in particular those working in non-traditional archival settings with highly unique and diversified material.

First, it's free. One of the primary challenges of community based archival collections is budgetary concern. Many projects operate on both a slim budget and a volunteer workforce, so having a no cost tool at their disposal quickly becomes paramount when setting out to achieve a major cataloging initiative.

Secondly, CollectiveAccess is very user-friendly, both for the cataloging expert and the enthusiastic but tech limited volunteer. Because the product is web-based, no programming skills of any kind are required to use it. As community driven collections are often faced with the hurdles of staff and time, the easier the software is to use, the more quickly it can be taught to a worker who is interning or volunteering for a month, a week, or a day. Additionally, by the time many community archival collections reach a point where an online database is needed, the collection has never been curated or under the control of professional archivists. So beginning cataloging at a simple, non-technical level becomes vital.

Customization, though, is likely the most appealing aspect. One of the greatest challenges to community based archival collections is description in a cataloging context, whether because the materials are simply obscure and uncommon, or because what the project seeks to convey is difficult to put into common language, as shown in the examples above. The flexibility inherent in CollectiveAccess allows community archivists to be innovative, creating local controlled vocabularies and metadata elements on the fly, and establish contextual relationships that create a full view of how one item can be connected to multiple other items, documents, people, audiovisual material, and places.

CollectiveAccess, of course, has its faults, no tool is perfect. The installation process of CollectiveAccess and getting it up and running does require some technical knowledge, and troubleshooting and highly advanced code modification does *not* happen out-of-the-box, unfortunately. Additionally, to take advantage of Pawtucket requires a dedicated server, which in turn requires knowledge of web server technology (XML, database architecture, etc.) (Surle, 2015) So for the case of community archivists, CollectiveAccess can be a bit of a double-edged

sword. One the one hand, the software gives the users an enormous amount of control, a particularly appealing aspect for community based archives who want their digital assets to be in the hands of the community members themselves. On the other, unless an organization can afford to hire programmers or have volunteers with programming knowledge, the initial phases of a project can fail right out of the gate. Still, as evidenced from the projects in this essay, archivists can often find the resources they need, sometimes through outreach or partnerships, in order to overcome the technology hurdle.

Non traditional archives need non traditional tools. There is no one-size-fits all cataloging and front end user interface package that can meet the needs of all archives. CollectiveAccess, however, comes pretty close. With its malleability it can conform to virtually any descriptive, item driven database and transform it into a magnificent and easily searchable open access catalog. CollectiveAccess' power and popularity is evidenced by the growing list of archives, institutions, museums, and organizations that use it, and the scholarly literature that continues to arise to support it. (Surles, 2015)

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