The library catalog as social glue: Using local data to establish relevance, visibility and transparency in communities

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Abstract

Chicago Underground Library (CUL) has developed a unique cataloging and discovery system using Drupal that we eventually hope to provide as a both a technical and theoretical template that organizations can implement in their own cities. This replicable project uses the lens of an archive to examine the creative, political and intellectual interdependencies of a region, tracing how people have worked together, who influenced whom, where ideas first developed, and how they spread from one publication to another through individuals, creating a highly visible network of primary sources.

This paper will discuss the process for designing our keyword-based, community-driven cataloging system and the catalog itself. Non-professional content receives more respect than in any previous era thanks to the access and findability the internet provides. We can now establish a context for understanding social relationships in cultural production at the grassroots level using relative tags, maps, and other relevancy tools currently in development.

Reframing the Value of Collections

The metaphor of *information ecology* as articulated by Nardi and O'Day is a good way to understand the goals of the Chicago Underground Library. They argue that "ecology suggests diversity in a way that community does not." Chicago is historically fragmented along ethnic and socio-economic lines. Even among what could be considered established, recognized creative communities, artists and writers of different forms and genres don't often cross-communicate. To fully understand the city as a cultural whole, it is necessary to understand how each disparate community forms an overall ecology. And as communities evolve — disappearing, reappearing, relocating, merging, splintering, assimilating, influencing — we can see how the ecology of culture in a city changes, sometimes for the better and sometimes for the worse. While the communities themselves are inherently unstable, many of them have left behind physical byproducts of their existence in the form of independently produced media. These documents help explicate how the communities functioned during the years they were active, but more importantly, they can demonstrate narratives and perspectives from communities whose viewpoints were unknown, on the margins, or ignored at the time.

In recent years, there has been an uptick in interest in recording oral histories and a trend toward teaching with primary sources. While this goes a long way to personalizing the learning process and putting real faces and voices on concepts that may sometimes be difficult to relate to or grasp, there is a huge untapped resource to be found, literally, in the backyards of information seekers. In local publications, such as neighborhood newspapers, collections of

¹ Bonnie O'Day and Vicki L. Nardi, *Information Ecologies* (MIT Press, 2000), 56.

residents' poetry, artist books, zines and photocopied broadsheets, we learn what topics and events were important to a community; how that community related and reacted to events going on in other communities, cities, states, countries; how they chose to communicate with one another; and who the central figures were within them. This information is valuable for researchers, but it's also valuable for "descendants" of those communities. Besides being a direct descendant of a community by being born into it and carrying on its traditions, one can also be a cultural descendant in the abstract sense, inheriting traditions of a community simply by living within a neighborhood or working within an artistic or political practice. The problem is that there is no structure in place for someone to draw upon the broader experience of those who came before them beyond a generation or so, or even navigate very far outside of their own circle of contemporaries. This becomes even more pronounced if they are living or working within a community whose production has been historically excluded from even the local discourse. If people understood and felt more of a connection to their cultural lineage and could actually see the common roots of creation at work the in communities around them, could this produce more stable ecologies?

Without understanding the social context for a publication, we are only perpetuating the disconnectedness within a city. The publications speak to readers about places they've never been, people they never knew, things they were never taught were important, or they speak in a language or form that doesn't produce a familiar experience, taste, or sense of quality. They are strangers to us, something that would be passed by on a shelf without a second glance, or even actively avoided because their aesthetics — or lack thereof — are repellent to those accustomed to only taking seriously professionally produced media. There is no incentive to get to know them better. Taken separately, it's unlikely that any of these individual publications would be seen as "important" or "valuable." Indeed, one of the primary ways the Chicago Underground Library's collection has grown has been through material individuals or other organizations were discarding because they saw no value in them. Making a case for collecting this type of media requires resetting the idea of what's valuable about a publication. Perhaps it's not entirely the publications — the objects — themselves, but what details can be found in the space between them: the social context, the cultural lineage, the connecting threads. The question then becomes, how does one catalog both the content and the context of a publication in a way that fully expresses its value?

Content and Context in Localized Collections

The internet, though paradoxically a system designed to provide global connectivity, is actually an effective model (and argument) for localized, community-based libraries. It provides value-neutral access for content producers and consumers alike; it allows for the formation of communities that are self-moderated and determine their own priorities; it welcomes professionals and non-professionals and gives a clearer picture of cultural details, eccentricities, and shifts as they emerge in real time. Non-professional content receives more attention and respect than in any previous era thanks to the accessibility the internet provides; the notion of what one is allowed to claim in the public sphere as an area of expertise has broadened to the extent that affinity communities now form around even the most minute aspects of cultural phenomena. But these digital communities didn't develop in a vacuum; they too are cultural descendants of communities that existed in some smaller, more isolated form offline. Now that

non-professional contributions to culture as a whole have been legitimized, we can direct this sentiment at print and other ephemeral media that wasn't given its due simply because of the cultural climate of the era in which it was produced. The mission of Chicago Underground Library is two-fold: preserve and contextualize this media, then use the context to encourage new cultural production and a more connected, culturally aware and stable ecology of a city. Chicago's fragmentation presents an excellent challenge for a pilot library of this type, and we believe it could be easily replicated and adapted to other cities.

Rather than just setting up a website where ephemeral media can be uploaded by anyone, anywhere, collecting and cataloging this material on a city-by-city basis has some major advantages. Localized libraries create more opportunities and data points for discerning relevance by adding the local, social context; they allow for the development of different programs and variations on cataloging methods to suit the individual characteristics of ecologies in other cities; and they spread out the burden of storing and disseminating material to the very people who have the most vested interest in ensuring their survival: the communities themselves. Perhaps the single biggest factor for localizing a collection like this is the potential to draw on existing social networks on the ground to gain the information itself; while a publication's community may no longer exist in the same configuration as it did when the item was published, there is still more likelihood of finding or seeking out one of its members within the region who can then either provide the context or reach out to someone else who can. Additionally, because the local network is better equipped to actively reach out to collect material from underrepresented communities including immigrants, youth, and work published in educational settings, we are also able to place typically marginalized voices into the wider creative context of Chicago.

While almost entirely consisting of publications from within the city limits, Chicago Underground Library's collection privileges the potential to develop connections between people and publications over strict regional boundaries. This fluidity is present throughout the collection design; "published" is defined broadly as anything intended for public consumption so it incorporates everything from well-established publications like *Poetry* magazine and University of Chicago Press to zines made by students at a social justice high school to limited-edition handmade artist's books. The collection is 100% inclusive, without making quality or importance judgments. Unlike many collections of small press or independent media, however, we have no specific political ideology or agenda: a library that excludes material based on narrow definitions of "small" or "independent" is just as problematic as libraries that ignore it. Though writing about contemporary art, Johanna Drucker provides a useful argument for critical acceptance of a broader spectrum of cultural production that doesn't deny work with commercial aesthetics or production values the right to claim a unique point of view.

It seems almost naïve to suggest that an attitude based on complicity could be an independent attitude, one that sustains the individual voice within the mainstream. But the experience of creativity as an act and means of intensified perception, one that might create an artifact or memory, should not be circumscribed and qualified. Changing this attitude only requires replacing any lurking, residual attachment to outmoded concepts of avant-garde oppositionality with a viable conception of alternative discourse. Independent culture, individual experience, affirmative vision, critical insight, and

creative imagination — these premises underlie work that that is productive in positive ways, even as they are, as [Robert] Colescott shows, works that exhibit their relation to mainstream and vernacular culture.²

An oppositional stance to mainstream or commercial media ultimately results in excluding most of the media that is actually produced within communities and it is vital that the catalog demonstrate the range of variations within a cultural ecology. When thinking about cultural descendants, it's important to acknowledge that very few of the media producers from Chicago's cultural communities would view themselves as working within the tradition of an avant-garde and may in fact aspire to mainstream readership and visibility. A collection based on oppositional values implicitly imposes a critical narrative that runs counter to ideals of inclusion and diversity. Chicago Underground Library's collection encompasses many publications from commercial publishers and widely read university presses that might be found in other collections. It is a supplement to traditional repositories; an alternative, but parallel, history that is interwoven and even frequently overlaps with other libraries and catalogs.

Many people move fluidly between different communities, as well, from self-publishing to commercial publishers and back, from one neighborhood to another, from one level of skill or professional achievement to another. Theoretically, you could begin tracking an individual contributor from the time he first publishes a poem in a Young Chicago Authors chapbook to his college literary journal and his side job copyediting a neighborhood bulletin to his own self-published poetry collection all the way until he's published in *TriQuarterly* and editing his own journal. Along the way, each publication is itself a "social object" and the movements of the individual, his circle, their subjects and ideas, are the connecting threads — the "social glue" that holds a sense of community together. Each object and the stories attached to it tell us something about this individual, where his point of view came from, who his community was at that moment, and who he would go on to work with and influence. And you can do the same tracing with each one of his fellow contributors, learning an incredible amount about how creative ecologies are formed and sustained.

In developing a project that could effectively record these transitions and make an attempt at understanding the links between communities, it was necessary to take the natural instability of cultural ecologies into account in choosing our tools and approaches. To make a truly inclusive system for cataloging and discovery, design had to begin from a place of acknowledged subjectivity, flexibility, and openness and then grow over time, grounded in the needs of the volunteers and visitors to the collection.

Cataloging by and for the Community

It is rare that the ultimate creator of metadata has intimate knowledge of both the content and the circumstances surrounding the creation of an item. Yet both types of information are essential to help the searcher understand whether the item is useful or interesting. Traditionally published materials do some of the work by providing a certain amount of information to aid in classification and cataloging, such as title, author, publisher,

² Johanna Drucker, *Sweet Dreams: Contemporary Art and Complicity*, (University of Chicago Press, 2005), 30.

etc. Even in these cases, a great deal of skill is needed by the cataloger to contextualize the purpose of the item and bring to bear the toolkit of classification schemes that indicate content. Such schemes, for example, Library of Congress Subject Headings, serve mainly to describe items held by libraries. As has been pointed out, most notably by Sanford Berman, they are not ideal for describing non-mainstream or emerging topics, and can fail to give prospective readers an objective sense of the content. Libraries are working to refine their systems that aid in discovery of books or articles. Some libraries encourage visitors to tag or add reviews of books, or to automatically pull in reviews from other sources.

In the cases of personal or corporate records that were not created for public consumption on a library or bookstore shelf, the toolkits are rather different. Archivists and records managers need to understand a great deal of history and context themselves before they can conclusively deal with items in their care. Some materials are relatively easy to understand by anyone, but some require specialized disciplinary knowledge in order to describe the item accurately. In the realm of corporate records management, Steve Bailey suggests that central control of metadata and records management needs to evolve. The creator of the information will be better able to understand why it was created and for what purpose the information is likely to be used again than a central records manager. In this vision, of records management, the content creator and the cataloger work in concert to produce a more valuable record. ³

These scenarios require willingness to trust and cede control to people who ultimately will have more intimate knowledge of the content. Professional catalogers and classifiers take on the role of mentor, either in person or through providing guidance through documentation and interface design. At the Chicago Underground Library, all metadata creation is in the hands of the community who uses the items. Cataloging is performed entirely by volunteers, some of whom are professional librarians and catalogers within traditional institutions, but many more are simply interested community members who want to contribute to the project or view cataloging as a way to get to the know the collection more intimately, a motivation which we encourage. It means that the community is much more familiar with and invested in the collection, and that actual users of items have selected terms and written abstracts that are likely to resonate with others in their communities.

Besides the standard data, such as publisher, date of publication, and format, catalogers are instructed to record every contributor (authors, editors, typesetters, illustrators, etc.) and choose from a list of 14 subjects that can be used in any combination, resulting in a Boolean structure where a publication can be *politics*, *art*, and *music* at the same time, rather than attempting to force the publication into a hierarchy of headings into which it may not fit. Catalogers also compile lists of keywords based on what they believe may be important to others seeking the publication, like names of public figures, neighborhoods, organizations or what might otherwise be considered subheadings, like a particular artistic style, literary genre, or school of political thought.

If information is not immediately apparent, there is a responsive, human system in place during Cataloging Socials who can take over for a cataloger who feels unqualified to make

³ Steve Bailey, Managing the Crowd, (London: Facets, 2008), 72.

judgments on the important data within a publication or who can add new data when it becomes available. Cataloging Socials are weekly occurrences when volunteers come together to catalog individual items with the support of a larger group of catalogers who ask one another questions or work together when they feel their personal perspective may be too limited. Oftentimes, an item will be gone over twice by two different catalogers or set aside for someone with a particular expertise in a subject. However, if no experts are available, that doesn't mean that the item remains uncataloged. Information is gathered to the best of the catalogers' abilities, knowing that it is subject to change. Even among well-documented materials where catalog entries exist in other library catalogs, there really is no such thing as a "complete" catalog entry within the Chicago Underground Library catalog. In treating publications as social objects, there are always more stories to be told about each that help users look at them and understand their creation in a new light.

This is particularly important when considering the large role that subcultures and minority communities play within the evolution of a city's overall culture — though representing small groups of people, taken together these communities form the bulk of Chicago Underground Library's collection. A collection that is truly representative of Chicago's plural ecologies requires that the catalog be flexible enough to accept specific terminology that these communities use to define themselves and their work, a longstanding issue in rigid and slow-toadapt organizational structures. By acknowledging that our cataloging process stems from a position of subjectivity, we leave ourselves open to correction from those who have a stake in ensuring the proper representation of their own identities, whether race, ethnicity, language, sexuality or ability. Just as we say that "community is self-defining" for inclusion in the collection in terms of geographic region - i.e., if you think your work belongs in a collection about Chicago, then it probably does — so too is community self-defining in terms of how a community chooses to represent itself; taken in aggregate, a bigger picture emerges where there are many threads within their ecologies that connect each community, but many will have unique descriptors not found elsewhere in the catalog. That doesn't mean the descriptor or keyword shouldn't exist. The catalog's internal organizational logic and limitations should not dictate or define the identifiers of a publication; it should accommodate them, especially if it can rely on external findability of unique terms through search engines.

Both in our collection development and in the creation of corresponding records, we recognize that we have to actively reach out to publishers, organizations, and content creators because they won't necessarily seek out an external, public forum for their content. Creating publications with the intention of only sharing them among one's own community members is a direct result of historic exclusion in media, playing a large role in the development of alternative press strategies in the first place. Over the years, many media communities have already created their own distribution channels and organizational strategies that don't overlap with other communities. Many might not feel the need or even want to open up their media to an outside audience at all, preferring a safe space where they can control the discourse around issues that affect them. If we are going to convince members of these communities that we are going to place their publications in the proper context and not further marginalize the content with improper classification (or classification that means nothing to the community itself), then we need to leave room for multiple versions of terms and the ability to change them as sensibilities

evolve.

This is a slow and less than precise process, by design. The problems with this approach are similar to those that occur with professional catalogers, classifiers, and archivists, but on a different scale. First, just because someone is part of a community who uses a collection does not give him any particular knowledge into the context of an item's creation. As a non-professional he may lack the skills for this type of research and certainly as a small institution Chicago Underground Library lacks the resources to support research into every individual's personal background and subculture. We might argue that the context of creation and the creators are not as important as the content. Yet for a community archive/collection such as the Chicago Underground Library, part of the value of the collection is that it illustrates a web of connections between content creators and communities. Ultimately, this is as valuable (if not more than) as individual items in the collection. Hence, the catalog has to allow for those in the community with personal or institutional memory to contribute to correct or enhance catalog records.

Developing a Community-Centered Catalog

The catalog existed in some form since the beginning of the library, with data being transferred where possible between systems as the library's technical resources developed, beginning with a simple Excel sheet in 2006, transitioning to the content management system Mambo in which a modified e-commerce module served as the catalog, before moving to WordPress as a placeholder that could visually mimic some aspects of the catalog's theoretical intent, if not actually perform its full functionality. In early-2009, several Chicago Underground Library volunteers decided to spearhead a major redesign of the catalog and website that would reflect the founding goals for the project. From meeting minutes of February 2009, "Our imperative, for the website, programming, and cataloging is 'Find ways to exemplify the social connectivity' that we are trying to demonstrate through this project. "4 The vision was and is to create an online social network that would mirror to some extent the social networks that exist in Chicago.

In practice, this means that it was necessary to create a system that would be easy for everyone to use but also leave plenty of option for growth in the future as the volunteers' skills and the library's infrastructure grew. After several months of research and experimentation, we settled on Drupal, a robust content management framework that would make it relatively easy to create custom metadata and display it in ways unique to our needs, as well as having all the desired features built in. What we wanted to get away from was a system that too closely mirrored the "traditional" library catalog or archival recordkeeping system because we wanted the social and tagging concept to be the central theme. As Steve Bailey points out, "The simple truth is that people love to tag but hate to add metadata." Many such social systems can be displayed on top of library catalogs, but getting the record in the catalog in the first place is challenging for trained catalogers, and certainly so for untrained community volunteers.

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^{4 &}quot;New email/introductions - Chicago Underground Library Discussions", http://groups.google.com/group/chicago-underground-library-discussion.

⁵ Bailey, Managing the Crowd, 73.

Alongside the effort to make it easy to get the information in, we wanted to create unique systems for discovering connections between items and concepts. Part of this was to reflect the unusual nature of many of the items in the collection, but also to create some sense of the organic serendipity that the physical collection elicits. The questions of how the catalog should behave and what it should do were brought to a volunteer meeting for discussion. We did not concern ourselves with technical feasibility, and certainly not with whether we had seen the concept in other library catalogs. The document that emerged from that discussion serves as something of roadmap for development: it draws together varying threads of conversation into certain core values for the catalog, namely unusual types of discovery systems, the ability to add reviews, folksonomies, and geography. An example of a desired feature is "The Obscurity Meter," which would allow visitors to view all items ranked by obscurity, with either most or least obscure items listed first.6 The goals of this tool are cultural rather than designed for traditional discovery purposes: it calls into question why something isn't being looked at in the first place and it encourages the viewing of the entry to rectify its obscurity. As formerly obscure items move up the list, more obscure publications will come to the fore, upending the notion that what has been previously popular should be the criteria by which one seeks exposure to something new. With an element of humor in its name, it also sets the tone for the collection, letting users know right away that there are many things they will encounter within this catalog that are not familiar, but that they shouldn't be intimidated by exploring them.

In its current iteration, the catalog (available at http://underground-library.org/catalog/) opens with a random view of all items, somewhat similar to the experience of walking into the actual library. Searching the catalog brings up keyword and faceted search options. The top ten most used keywords show up for each facet option, which gives a useful overview of what types of materials exist in the collection (or at least those that have been cataloged — at this point, about a third of the collection). All of the keywords, subjects, publishers, and contributor names appear as relative tags so that users can see how publications are linked to one another through threads of influence. Because each entry contains non-hierarchical combinations of subjects and keywords alongside a brief abstract that provides a contextual description of much of the individual keyword and subject data, our catalog interfaces extremely well with search engines.

Recognizing the changing way that people seek out information, catalog entries are tailored to best practices in search engine optimization (SEO). Because of the nature of the material we collect, it's extremely unlikely that someone will begin a search — whether through a search engine or within our catalog — with one of our specific titles in mind and it's also unlikely that the titles within our collection would appear anywhere else. Therefore, following the models set forth by SEO helps us boost the likelihood that one of our entries will rank highly when someone is seeking the specific information found in it. The searcher may not know the title or author, but if someone is looking for information on a contentious subject or event, one of our records may rank almost as well as a *Chicago Tribune* or *Sun Times* article based on the specific keywords the catalogers have chosen, offering a much-needed alternative viewpoint. The item's

⁶ "Catalog Wishlist - Chicago Underground Library Discussions."

publisher may never have had the time, resources, or inclination to digitize their publication and even if they had, just scanning the content alone wouldn't necessarily help with visibility. Because so much of the content on other pages within Chicago Underground Library's catalog is considered relevant and many keywords are similar throughout, reinforcing the relevancy of each term, all search rankings for catalog entries get a boost. As more people turn to search engines for their everyday research, it will only increase the amount of information consumed from major media outlets with the resources to optimize and target their content. In order to help the alternative perspectives housed within our collection compete alongside commercially optimized content, it is essential that we build strategies from the commercial search field into the overall catalog design. Again, the goal of this is not to say that the historical record or commercial publishers are always wrong, just that there should be a better way to get a hold of information that may call the record into question — just as the historical record may also cause one to question some of the information found in the catalog (for instance, we have not been able to verify that "The Word of God" who claims authorship of one our publication is actually "The Word of God.")

The last option for viewing shows the catalog geographically, with dots representing the locations of publishers or individual producers of items in the collection. Maps are also visible within each catalog entry, showing where the publication was produced. This is also an imperfect process; many publications won't list an address or just list a PO box, which may not be an accurate reflection of where the publisher's offices actually were or where the individual creator lived. Sometimes a publication will only make reference to a neighborhood, which can be problematic considering the shifting boundaries of neighborhoods throughout the city's history. Though they may be more of a curiosity for researchers, the maps play a particularly important role when it comes to understanding one's cultural lineage. If someone grows up in an area of a city where she doesn't read about or hear about any cultural role models from a community similar to her own, her sense of options for her own contribution to culture will be severely constricted — let alone being able to navigate the pathways that will guide her ability to seek out affinity communities, distribution channels, or improve her skill. The simple act of placing a cultural object within its geographic context and showing that it came from down the street or from someone with a background similar to the user has a profound effect on her ability to view herself as someone with something to contribute.

As above, one of the goals of the collection is to collect stories or history of items from the community. An example of this is a comment left on a zine entitled *The Bowel Movement* (the series title was apparently *Indelible Ink*), in which one of the original authors of the zine left a comment with some background information

Publisher's [sic] were Lauren Salmi, Dean M. Barthuly and Rob F. Olmstead. Started in 1994 at the University of Illinois at Chicago in response to the elitist and judgemental University Short Story publications, we were devoted to Poetry for content, and art for out covers. We also sponsored many poetry performances in wrigleyville and uptown, but never attended that garish event the "poetry slam" at green mill.

Content was selected from Chicago poet's [sic] and published simply because we liked it, because it was not cookie cut, rehashed and molded chicken paste.

Cover art was chosen based on the same reason, we liked it.

Eventually we were producing, by hand, 500 copies a month and distributed in the Wrigleyville, Uptown, Logan Square areas.

It was fun, wish we were able to make it last. But the WWW was just starting and the digital era was merely "A hershey bar in your fathers back pocket".

Lauren Rob: The Grinch hasn't gotten me yet.7

This comment enriches the record by giving some context that was lost in the original record. (Both the additional record and the comment may be viewed online at http://underground-library.org/content/bowel-movement-fourth-edition). While these types of comments are infrequent so far, it shows that people are willing and interested to share the details of their creations.

Future Growth

The catalog is by now a reasonable implementation of the theoretical underpinnings of the project. On a technical and procedural level it is a very simple implementation, and potentially too simple. There are two streams of data we must account for: first, the item metadata entered by catalogers, and second, the additional information left by visitors to the catalog. With more use, it will become clearer how to deal with these two types of data, but we can set some basic principles.

We must make a commitment to creating high quality data that accurately reflects the item with as little bias as possible. Once we have high quality data, we must commit to preserving and sharing that data with others.

We must maintain a history of public contributions to the catalog, and as we integrate that information into cataloger-supplied metadata, we must maintain a record of that so that future visitors understand the context of this additional information. We cannot assume that our catalogers have a complete understanding of the context of a publication, nor can we assume that visitors' additions are unbiased or more truthful. The main goal will be to maintain as much openness and transparency as we can, given limits of time and resources. For instance, currently when someone leaves a comment it has to be approved first. Over time we expect that requirements for what is acceptable will become more clear so that others may participate in this effort. Alternatively, we might gain a significantly committed user base that this can be done via voting or some other technique for crowd approval of comments.

⁷ "The Bowel Movement, fourth edition."

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