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Furthering The Knowledge Commons In Our Field

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The Irony of the Internet

The internet is a very post-modern medium, especially in terms of some of the ironies it has produced. It was born as a scholarly commons. However, scholarly and common activities presently consume only a tiny fraction of the time, energy and money devoted to this new medium. Still, the impact of networked communications in general and the internet in particular on the craft of scholarly research must be accorded one of its greatest successes; in a cultural, if not necessarily, in a monetary sense.

In this paper, I will attempt to assess a number of related and converging technologies and opportunities to pursue something I call the electronic scholarly commons. By this term I mean to call particular attention to an assorted and integrated assemblage of electronic aids to communication, dialogue and exchange among the worldwide community of practitioners, researchers, teachers and students interested in the collective enterprise of third sector studies.

The hype surrounding the internet as a commercial venue – a completely new "cybermarketplace" – has tended to obscure some of the other contributions of this new medium, most notably its potential for scholarly commons in all disciplines and professions. Even so, the commercial record of the internet is still, to this date, a very mixed one. A large number of new companies went under in the downturn of the high tech economy this past year, and a great many more among the survivors have yet to achieve profitability. And, as my ARNOVA paper last year pointed out, a network of nonprofit organizations appears instrumental at this juncture in shoring up what commercial viability is currently there. (Lohmann, 1999)

Remembering The Original

It is well, therefore, for those of us associated with third sector research to remember – and to remind others – of the important

role of scholarly commons in the original Internet. We should remind ourselves, for example, of the role of ARPA (the Defense Department's Advanced Research Projects Administration) and its successor DARPA, and yes, of then-Senator Al Gore in all of this. It was out of the hooking together in the late 1960's of multiple large mainframes for data sharing, and the subsequent discovery that text-edited files could be shared across machines under certain conditions that electronic networking was born. It was not until nearly three decades later, however, that Tim Berners-Lee at CERN drafted the code for Hypertext Transmission Protocol (the ubiquitous http://) and gave birth to generic format of the World Wide Web. Again, this action was taken initially to advance the scholarly commons – to allow physicists to share papers – and not to conduct online auctions.

In considering the fate of the scholarly commons it is well also to taken into account the importance of social theory and vision. It was not an ineluctable movement of the global marketplace, but an explicit set of political decisions by the Clinton Administration which resulted in the U.S. government divesting itself of the internet backbone, and turning the international naming authority over to the nonprofit ICANN. (Lohmann, 1999) It was neither clearly necessary not inevitable that this occur. It was primarily the expression of a pro-business neo-conservatism.

Internet II – The Sequel

In late 1996, roughly 100 research universities announced the formation of Internet II, a government-university collaborative which was said to "put universities back on the fast track" as far as networking was concerned. Development work continues, and there are now 180 partners in the collaboration. (Information on the Internet II initiative is available at www.internet2.edu. Like its older sibling, Internet II is clearly intended as a scholarly commons. Among its features are a significantly higher speed backbone than the current Internet and middleware to enable multicasting and other features.

For some, the question is whether Internet II will be hijacked for commercial exploitation also. Anyone who doubts that there are already significant commercial plans for Internet II should consult some of the online discussion on the matter. (See for example, http://www.edisonresearch.com/internet1.htm . For some, it will truly be "an advertiser's dream come true," as one online commentator put it. For many of us, it may well be the

opportunity to be bombarded by full color, interactive media junk mail at a higher level than ever.

The Irony Continues

This, indeed is, from a scholarly standpoint the core irony of the internet: amazingly, indeed astoundingly, complex and sophisticated technology in service of a range of objectives which include more than ample doses of the trivial, mundane, pedestrian, and perverse.

It is important to remind ourselves, in this context, that there continues to be space for the scholarly commons on the internet, and that space can be as big and important, or small and trivial, as we ourselves choose to make it. There is already much more available on line than sales, marketing and promotional sites and email discussion lists. One of the most impressive developments have been the "labor of love" efforts of individual scholars and similar organizational initiatives. In one case, an individual architectural researcher is putting up 3D renderings of all of the buildings of medieval Constantinople. Within third sector research, the posting of over 600,000 tax records for tax-exempt organizations by Guidestar (www.guidestar.org) represents a comparably impressive achievement. Likewise, the more recent posting of the nonprofit bibliography on the Foundation Center web site represents a comparable achievement, and these are just a few among many such examples that might be cited to demonstrate that the scholarly commons is alive and well in nonprofit, voluntary action and philanthropy research.

Some Possibilities

The purpose of this presentation is to highlight a number of possibilities for further advancement of the scholarly commons in third sector research. Please note that I am not at all concerned here with how individual nonprofit institutions (including ARNOVA) can present themselves over the Internet, but with the broader objective of furthering scientific communication among researchers and improving the communication between the third sector research community and the rest of the world. Mine is a highly subjective, and in some ways, idiosyncratic list, as all such lists must be in the present. It is intended primarily to promote further dialogue. (This is, in the common parlance, a meta-dialogue – a dialogue about dialogue.

The five areas I wish to examine in this paper are: electronic publishing; multimedia in social research; XML standards; multimedia in social research; groupware and a proposal (detailed in a separate, accompanying paper) for a graphically oriented Organizational Descriptor Language (ODL).

Existing Scholarly Publishing Paradigm

First, some general observations about the existing paradigm of scholarly publishing, that is, from the standpoint of a scholarly commons seriously flawed. First, the economics of the currently scholarly publishing paradigm are simple, if slightly perverse: Collectively, we give our work to publishers and then buy it back from them at high prices. To be sure, there is value added in books and journals, through the editing, printing, distribution and marketing efforts. It should be noted that at least part of this value added is neither sought nor necessarily highly valued by the community of scholars. But it is truly remarkable how legitimate this arrangement is. To a remarkable extent, the existing system is viewed through the lens of commercial publishing rather than as an integrated network of scholarly dissemination.

That paradigm, as they say, could shift very soon. At the current moment, we are poised on what everyone expects to be an electronic publishing revolution. No one really knows how it is going to unfold. Both commercial and many nonprofit publishers are defensively poised at the moment, mostly to protect their existing equity, but few people really expect that they will be able to do so in the long run. Meanwhile, some authors are dazzled by what they see as the opportunity for great wealth through self-publishing. Yet, at least in third sector studies, there is surprisingly little serious attention to the golden opportunities to introduce entirely new paradigms. I would like to focus here on two aspects of the problem: journals and books.

No one can really say for sure what an electronic journal (or e-journal) is. Although, along with two of my colleagues on this panel, I am currently a co-editor of such a journal (*Critical Social Work*) I'm still not entirely clear on what the medium is. To be sure, like many others, it's a series of manuscripts offered up on the Internet in web-based format, and linked by an index intended to simulate the traditional journal. Most ejournals also are issued periodically with links suggestive of a traditional paper-based journal, although some are simply just paper archives. The traditional function of both scientific and humanities journals, it should be remembered, is not just to publish and disseminate the

work of individual authors to furnish a documentary record for faculty review. It has been to cumulatively document and archive the results of the collective work of a body of researchers in a field. That's why so many journals have words like "Transactions" in their title.

We need to keep this in mind in considering the electronic journal format. There are currently dozens (probably hundreds) of variations of the electronic journal theme distributed on the World Wide Web in an astounding variety of fields. There are, however, currently none that I am aware of in third sector studies. The ARNOVA-L archives (continuous since 1994) may, in fact, currently constitute the most complete record of scientific and scholarly work in third sector studies than any other online source.

In my view the electronic journal format is, like the electronic book, a transitional format; a kind of hybrid of the old paper medium with some of the potentiality of the new electronic medium. Facilitating the transition is a three-part problem. Hardware, mind ware and software.

Hardware suitable for just about any conceivable eventuality is already largely in place. If every researcher in a scholarly community has at least a desktop computer with even moderately large storage capacity by today's standards and a network connection The truth of the matter is that the entire lifetime *oeuvre* of any one of us (the good, the bad and the ugly plus all of the notes and data sets) would fit very easily on a single medium sized hard disk, and any of our universities is currently equipped to easily accommodate the entire output of all members of ARNOVA from its creation.

One of the less clear hardware issues is the concern that many people prefer not to read onscreen material. This is largely a three-part problem: First, there is the issue of screen quality. Let's face it. There are still a lot of low-quality monitors out there that make reading onscreen a very annoying experience. We also need to recognize, however, that above certain pixel and lumen limits, the human eye ceases to distinguish between on-screen and "real" visual inputs, and technologically we have the capability to mass-produce viewers well above that limit. A second major concern is portability. You can't read your desktop on a plane or in an easy chair. Some of the experiments in this area like the Rocketbook are very encouraging but, shall we say, inconclusive. What remains to be resolved is a third consideration – features of electronic media so compelling that they overwhelm any disadvantages or drawbacks.

Irresistible features will largely resolve the mind ware problem. Just look at word processing and statistical software and the ways in which they fit right into and even define the nature of your own scholarly work. Electronic journals, books and electronic publishing are still, however, in a mind ware problematic stage. To a large extent, the mind ware problem goes hand in hand with the software issue.

To be sure, there is no shortage of elements for scholarly publishing available through current software, whether it be such ubiquitous open standards as .gif, .pdf and .ppt or commercial products like the Rocketbook or Microsoft's proprietary standard for etexts. One can even make credible claims that the latest generations of word processors contain a wealth of features suitable for epublishing.

My own list of features essential to epublishing software would include at least the following:

- 'Indelible' text able to fix authorial intent and not changeable by the reader (unlike word processing files but like the current .pdf files of Adobe Acrobat).

- Search capabilities (unlike many current .pdf files).

- Page, section or some other suitable typographic divisions (unlike many current web pages)

- Hyperlink/docuverse capabilities (Lohmann, 1996)

  - The ability to mirror logical and connotative connections to other texts with actual, physical connections.

  - Full bibliographic formatting (of the type currently available with Endnote) combined with improved abilities to search bibliographic databases and easily incorporate results.

- Reader markup features

  - Built in highlighters (like Word)

  - Named reference lists of 'marked' items

  - Extended notes attached to particular items (words, sentences, paragraphs)

  - Sticky notes

- Full range of printing options

For a very nice demonstration of some of these textual possibilities, see the TK3 demo currently available online (www.nightkitchen.com).

Multimedia in Research

Until the 1990's, it was possible to think of the realms of "print" and "audiovisual" as separate and distinct media of communications. However, the digital revolution has shown us the potential for a common infrastructure of the two. It remains for us to figure out what this means for our scholarly commons. I am a recent, and still only a partial, convert in this area. I am still not fully clear, for example, on what might be the role of multimedia in third sector research. In fact, I still have some major concerns about the potential of multimedia for turning higher education into one gigantic Saturday morning cartoon show. Let me say that many of my thoughts in this area were stimulated by reading the astounding work of Nicholas Negroponte of the MIT Multimedia Lab and by discussions with Bob Heimovics in Kansas City and Myles McGregor Lownes in Australia. Yet while the potential is great, I remain concerned when I see that most of the tremendous potential of media like Quicktime, RealAudio, and Shockwave go into quacking ducks and offers to buy soap. Let me note also, however, that the failures to embrace these technologies in the scholarly commons are our own. They are not due to any inherent limitations in the media.

In general, it appears that the issue of multimedia in the scholarly commons of third sector research may largely be a two-part problem. On the one hand, there is the role of multimedia in research observation and data collection. In that area, I know of no current work going on in third sector studies, although the possibilities are interesting. It isn't hard to imagine, for example, a study to collect a data set of video recordings of board meetings "tagged" and indexed to an electronic text in such a manner that selecting (clicking on) footnotes in the text activated streaming video segments illustrating the points made in the text.

The second part of the problem is research presentation, and here we have made a bit more progress. Even so, the potentials for the scholarly commons may be far greater than we imagine. It would currently be technically possible, for example, to "broadcast" worldwide using Quicktime or RealAudio every conference presentation by every third sector scholar from now on, and to create a searchable archive of those sessions for future reference.

XML Standards

Let me move in a slightly different direction now. As even schoolchildren know, the public portions of the internet, known as the World Wide Web are built largely on HTML (HyperText Markup Language), which is a subset of the much more arcane and complex SGML (Standard Graphical Markup Language), previously known mostly by publishers. Fewer people may be aware of the quieter revolution currently already underway around another subset and extension of SGML, known as XML (Extensible Markup Language). While HTML is largely a formatting standard and fixed, XML may be thought of as a kind of erector set for communications groups, capable of a wide variety of tasks. One of the standard features of XML are its DTD's, or Document Type Definitions. The essential feature of XML that should be of interest to scholarly commons in general is the ability to create group-specific DTD's. Two related examples might help clarify this point.

Most of us are familiar with some of the programs today that distribute news headlines directly to desktops and contain links back to additional information. You may be less familiar with the particular DTD known as RSS, an acronym for Rich Site Summary, which has become a *de facto* standard for these headlines. Here is the standard form of the RSS container:

<item>

<title>RSS Resources</title>

<link>http://www.webreference.com/authoring/languages/xml/rss/</link>

<description>Defined in XML, the Rich Site Summary (RSS) format has

quietly become a dominant format for distributing headlines on the Web.

Our list of links gives you the tools, tips and tutorials you need to get

started using RSS. 0323</description>

</item>

It consists of a pair of tags delimiting the container, a title, a web address link and a brief description. As standards go, it is an extremely simple one and yet very powerful. Any program written

Thus, for example, an item distributed to the ARNOVA-L discussion list and written in RSS could, at any point, be picked up from the archive and processed What would such an item

consist of? Here is an RSS container for this paper and the accompanying PowerPoint presentation.

<item>

<title>Furthering the Scholarly Commons</title>

<link>http://www.wvu.edu/~socialwk/faculty/Rlohmann/fsc.htm</link>

<description>

Paper by Roger A. Lohmann, Professor of Social Work. West Virginia University. Presented at the 2000 annual conference of the Association for Research on Nonprofit Organizations and Voluntary Action, New Orleans LA.

</description>

<link>http://www.wvu.edu/~socialwk/faculty/Rlohmann/fsc.ppt</link>

<description>

PowerPoint presentation accompanying paper entitled Furthering The Scholarly Commons by Roger A. Lohmann, Professor of Social Work, West Virginia University.

</item>

Although it is not included here, it would be relatively simple to also embed a link to the ARNOVA web site at the appropriate point in the text. The simple acts of each author posting their papers at a personal website together with a program incorporating such RSS containers in a world where virtually all internet browsers will soon be able to handle XML readable text would go a long way toward creating the scholarly docuverse I called for a few years ago. (Lohmann, 1996)

In case you think this is some kind of pie-in-the-sky futurist projection, it was announced in October that the news industry, which has been using RSS as a *de facto* standard for some time now has already gone an extra step and created its own set of XML standards and definitions called NewsML. The International Press and Telecommunications Council has adopted NewsML, which is built around a unique XML container (like RSS) called NewsItem. Particular NewsItems may be text, graphics, audio, video, or data. The standard allows for incorporating the same content in several languages or the same video clips at several resolutions. (For further information see www.iptc.org/NMLIntro.htm.)

Imagine the sample RSS tag above, for example, with the same content in sub-containers in different languages, after the manner of Voluntas abstracts.

The prospect of creating specific DTD's and XML containers to accommodate the unique demands of the third sector scholarly commons is a reality we ought to be taking a good bit more seriously than we do at present. In addition to the example above, we could easily be developing DTD's by deconstructing the standard elements of the conventional research report, case study and data set. In my view, there is probably more potential for electronic publication latent in this simple exercise than in all the electronic social science ejournals combined. As editor of Nonprofit Management and Leadership, I intend to pursue this avenue vigorously in the next several years, and I invite others to join with me in this effort.

Groupware

One of the categories of software that should be of greatest interest for the scholarly commons is that known as groupware. Roughly speaking, the intent of groupware is to facilitate the functioning and work of groups. Unfortunately for the scholarly commons and associations generally, the predominant paradigm in groupware to date has been groups entirely within large organizations. Groupware like IBM/Lotus' Notes and Novell's Groupwise

This audience should note that this situation may be about to change very dramatically in any of a number of directions. The November 6, 2000 issue of Newsweek contained an article about Ray Ozzie (the developer of the original Lotus Notes) and an internet startup called Groove which might be described as groupware for the rest of us. At least part of this capability is already operational in the oddly narcissistic world of *blogs*, short for weblogs (Mead, 2000) Blog software allows the user to easily post immediate (in some cases, stream-of-consciousness) updates to a web site and easily trade links with other users. In some respects this, like all groupware, Groove and electronic book formats TK3 and the Rocketbook like contains important kernels of a genuine electronic scholarly commons. Still other kernels are to be found, for those who choose to look among the equally movement-like denizens of the MOO/MUD/ world that grew out of the Dungeons and Dragons subculture. Among the possibilities here are the interesting, but under utilized Diversity University (www.du.org) The text-based virtual worlds of the MOO, together with some of the highly sophisticated software which supports these "game players" has enormously interesting possibilities when joined with some of the other elements discussed in this paper. (One DU component, for example, offers the capability to deliver a virtual lecture, complete with multimedia presentation.)

At present, however, there is no easy integration or overall user interface to tie all these interesting capabilities together. Sophisticated lead users would have little trouble making a "mind ware integration" but I'm afraid ordinary third sector researchers, many of whom find subscribing to a discussion list dauntingly complex, would be unable to make the necessary connections. We may, however, be on the verge of another great leap forward for the scholarly commons in the groupware arena.

Open Standards

One of the things that makes both the internet and such specifics as XML and groupware interesting is the curious mixture of open and proprietary standards. RSS, for example, is an open standard. NewsML is not. In many respects this is an issue of the competing demands of science and business. The paradoxes involved are many. Just ask the people at Sun about their experience in disseminating while controlling Java! A certain amount of openness is necessary for any standard to be widely disseminated and acceptable to developer and user communities. In a scholarly commons like third sector studies, few of us are likely to succeed commercially and the real interest is in openness. With that in mind, I would like to discuss two a couple of different approaches to the issue of open standards that could have great implications for third sector.

The first of these is a set of preliminary thoughts I've had for something I call an Organizational Modeling Language. At its core, it's a proposal for a set of graphical standards for a new generation of organization charts using a graphical language I've invented called OML built out of the analogy with chemical modeling and incorporating a relational database. If the components of this model were written in the open standards of a language like Java, for example, they might be widely and freely available to the research and practice communities. The fundamental idea, spelled out in an accompanying paper that I've brought along to this conference, is for a multi-dimensional online extension of the basic box-and-stick. I would encourage you to take along a copy of the paper and give me your feedback.

Most people know the familiar stick-and-box hierarchical organization chart. They may not know that the familiar form of such charts were invented by activists in scientific management early in the 20th century. They may also be under the impression that the stick-and-box branching diagram which is at the core of the organization chart is the ultimate form of a regrettably limited technology. A recent article by Henry Mintzberg and Van der Heyden in the *Harvard Business Review* proposing something

they call "organigraphs" would suggest otherwise. (Mintzberg, 1999)

A second, related proposal in the open standards would be for the members of the third sector research community most interested in organizational studies to look more closely at the potentials of pursuing organizational research on virtual organizations. My particular slant on this, of course, would be to explore the possibilities of creating a working model of the third sector scholarly commons. There are a variety of modeling languages and software products out there that demonstrate various capabilities. One I find particularly fascinating is the TOVE project (www.eil.utoronto.ca/tove/ontoTOC.html) which has set for itself the mission of creating "a commonsense model of the enterprise" . This concept is operationalized as creating accessible, online virtual organizations for analysis and simulation. Although its developers have created and published a broad array of fundamental materials for this task which are publicly available, their notions of enterprise seem not to include nonprofit enterprises and collaborative enterprises like commons. Among other things, I find the precision of the TOVE syntax, built around an entire "ontology" of structural and process-oriented terms to be one interesting way to attempt to sort out many of the issues posed in nonprofit theory. One might, for example, attempt to operationalize a real difference between nonprofit and not-for-profit organizations using the TOVE ontologies.

With the result online, this could be a genuinely collective enterprise, perhaps along the lines of a Groove collaboration, a Blog or even a MOO.

Conclusion

I have tried in this paper to suggest a variety of ways to advance the scholarly commons of third sector studies through the strategic use of electronic technology. Ways I have discussed include identifying and promulgating new associative forms of scholarly publishing, exploring the use of multi-media in data collection and presentation, defining and implementing strategic uses of XML, exploring and adopting new and emerging forms of trans-organizational groupware more suitable for commons, and encouraging and promulgating open standards based research on organizations using tools like OML and TOVE.

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