Making Waves: Technical Services Past, Present, and Future
Pamela Bluh

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The theme of today's meeting is certainly one with which we are all familiar, and the title really captures the essence of technical services. The tide conveys fluidity and a sense of restlessness. Tides can be calm, gentle and benign – imagine walking along the beach and having the water gently lapping at your feet, or violent, dangerous and destructive - as when waves lash the shore during a hurricane or a typhoon. Technical services, like the tide, is a study in contrasts. It is a fixture in library operations and at the same time the focus of massive changes in our profession.

I thought I might expand upon that image by calling my presentation "Making Waves: Technical Services Past, Present, and Future." (And it was only long after I settled on that title that I discovered the title of the 2000 NASIG conference was entitled "Making Waves: New Serials Landscapes in a Sea of Change." So I feel that I am in good company with my choice!) Dictionary.com defines 'to make waves' succinctly as "to disturb the status quo; cause trouble, as by questioning or resisting the accepted rules, procedures." I like the phrase for it calls forth both the constant movement which accurately characterizes technical services work as well as the colloquial meaning of challenging the status quo, another dimension of technical services - dynamic and restless and willing to test existing procedures and policies. The double entendre provides the perfect image for our profession.

I found it quite challenging to decide on a practical approach for dealing with today's topic because I'm skeptical about making predictions, all the more so in a fluid environment where changes seem to occur with increasing frequency and intensity. In order to envision library technical services in the future, it seems to me we have to understand at least a little bit about the past and the present. So, my plan for this morning is first to take a peek at technical services in the past. Then I would like to consider the environment in which we operate today and finally conclude with an overview of a few of the major issues we will face and some thoughts on what we can do in our own institutions to prepare for the future.

When you registered for today's program you were asked to indicate how long you had worked in the library profession and in technical services (I deliberately did not say as a librarian). I had an ulterior motive for asking that question because I wanted to find out a little bit about the composition of the group. I discovered that nearly 60% of today's audience has 19 or more years of experience in technical services and slightly more than one quarter of the audience has less than 10 years experience, so we are clearly a well-seasoned group. Since I planned to begin my presentation by taking a little detour down memory lane I was wondering how meaningful that might be to you. If nothing else, I hope that the introduction will be amusing and establish a point of reference or a base line, for the remainder of the talk.

When I accepted my first professional library job as a serials cataloger at Johns Hopkins University, the library's organizational structure, like that of many academic libraries, was hierarchical and there was a clear "divide" between public services and technical services. Technical Services was comprised of three distinct departments – cataloging, acquisitions, and serials – and the emphasis was on creating and maintaining excellent records. Technical services staff had limited contact with users and seldom ventured into reference territory, except when cards had to be filed in the public catalog or in the special 'serials catalog' where bound volume holdings were recorded. The focus was on ordering, receiving and cataloging according to the 'rules.'

There wasn't a lot of collaboration between the various units or departments and there was certainly no cross-training. Everything was stratified and compartmentalized. Librarians were regarded as the 'keepers'

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of knowledge and technical services perpetuated the notion that the work that was being done was mysterious and could only be performed by a select few.

Bibliographic searching and identification was done manually in print sources such as the National Union Catalog, the Union List of Serials, or New Serials Titles. Catalog cards were typed, then duplicated onto card stock on a photocopier dedicated to card reproduction. Added entries and subject headings were typed on the cards individually. If we made a mistake, we used an electric eraser to remove the error! Great care had to be taken not to bore a hole through the card and all the eraser dust went down into the typewriter! If the eraser wasn't handy, we used an Exacto knife to shave off the offending letter. The main thing was to avoid, at all costs, removing the card from the typewriter, because chances were, it would never be aligned correctly when it was reinserted into the typewriter.

At Hopkins there was a special room – I think it was known as the "typing room" – which housed typewriters and the special copiers that were used to produce the card sets. The room was incredibly noisy so the walls were carpeted in an attempt to deaden the sound. This gave new meaning to a room with padded walls!

Automation was in its infancy. Sally McCallum, Chief of the Network Development & MARC Standards Office at the Library of Congress summed things up very neatly when she reflected on the past, that:

> …. librarians in 1963 did not yet have many of the automation options that are commonplace in 2003. Integrated circuits, chips, networks, even floppy discs were still a few years away. The cathode ray tube was invented but not yet deployed. The personal computer would not debut for 17 more years. And the first MARC Pilot Program at the Library of Congress would not start until the following year.[1]

It's difficult now to imagine such a world, even for those of us who remember that time. OCLC, the Ohio College Library Center as it was known initially, was founded in 1967; the Research Libraries Group (RLG) in 1974. Fully integrated library systems were just a gleam in a developer's eye! I remember the excitement when OCLC was first introduced! The OCLC terminal – in those days we referred to it as a 'terminal' - was larger than a breadbox. With the introduction of OCLC more sophisticated and timely bibliographic searching was possible, bibliographic records could be created and edited more efficiently and catalog cards produced more accurately. A printer attached to the terminal made it possible to print out a copy of the bibliographic record. What an advance that was over taking Polaroid pictures of bibliographic records, spreading some sort of pink, jell-like substance – a fixer – with a very unpleasant odor, on the print to set the image. Printer paper, which came on a very big roll, was very poor quality, like newsprint. For some reason, I saved an old print-out from 1981 which has survived in pretty good shape!

Serials check in was done manually on kardex cards stored in a kardex! Some libraries also recorded payments on the verso of the kardex cards. At Hopkins we had a separate serials payment file and a separate catalog to record the bound volumes. I'm sure we considered ourselves the model of efficiency but in retrospect, I shudder to think of the amount of duplication and duplicate effort that took place.

Several of the images I've used to illustrate this bit of technical services' past come from a wonderful slide show assembled by Karen Schmidt on the occasion of ALCTS' 50th anniversary in 2007.[2] Karen graciously gave me permission to share them with you today. If you would like to view the entire show, it can be found on Karen's Selected Works page at http://works.bepress.com/karen_schmidt/4/.

While it is fun to reminisce occasionally, it is more exciting, I believe, to live in the present. Technical services is in a state of flux, but how exhilarating it is! In many libraries, the rigid departmental compartmentalization has been superseded, to use a term with which we are all familiar, by a more flexible,

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open arrangement. Libraries have abandoned an administrative structure based on format and embraced an organizational structure based on function, allowing workflows and routines to be adapted or modified more easily to accommodate the new formats and new procedures. Collaboration and cooperation are central to the success of the new organizational structure. The mystique that surrounds technical services is lifting and processes are more transparent. The emphasis on perfection, on creating the perfect bibliographic record, which was a hallmark of technical services for decades, is being replaced by a model that places a higher value on access to information rather than on the information itself. Vera Fessler, in a 2007 article in *Library Administration & Management*, expressed it this way:

> Today's library technical services face the most significant changes since the invention of moveable type. These changes challenge librarians to develop new policies, apply new technologies, develop new competencies, and to take risks for making improvements. Most importantly, libraries find themselves operating in a totally new environment, one where they serve as only ONE [my emphasis] source of information, not *the* source of information.[3]

Years ago, technical services departments were staffed with an array of professional librarians. In today's technical services, many tasks, including some that were previously the exclusive domain of the librarian, are performed by paraprofessionals and other support staff. They have accepted greater responsibilities for many and more complex tasks and staff at all levels throughout the organization are being retrained and reeducated to handle new and often more complex tasks. Shrinking library budgets, changes in acquisitions patterns, the outsourcing of some tasks, a greater emphasis on the needs of the user, and a desire for transparency rather than the mystique of processing, have resulted in the realignment of technical services.

Let us consider again the tidal analogy. We might say, in looking back over the first six or seven decades of the twentieth century – in the library world – that change, like the tide, ebbed and flowed reasonably calmly. However, since the mid 1970s I would suggest that change has been, and continues to be more dramatic - more tsunami-like in its intensity. This doesn't mean that the more recent changes have been destructive, but rather that they are exerting a very powerful and immediate influence on our activities.

A great deal has been written about the future of the profession and the need to be adaptable in order to remain relevant. Predictions and prognostications abound and cover the spectrum from the ultimate demise of the profession to one with a hearty, robust future. I personally think predictions about the future are risky and likely to be unproductive. I believe that it is more prudent to try and understand current conditions, to outline the major challenges we will face in the near term and consider how we can prepare ourselves and our organizations to deal with those challenges in the immediate future.

One thing is very clear. The distinction between library departments has been fading for many years and that blurring of the lines will continue and most likely intensify. Talk about technical services, user services, instructional services, may well be a legacy of past organizational structures. One evidence of this trend can be seen in a review of position descriptions that often describe duties and responsibilities that are a hybrid of traditional technical services and other services. For example, a recent advertisement for a "Digital Information Management Librarian" – lists the primary duties as follows:

> - developing, maintaining, organizing, improving, contributing, and promoting the library's growing information base and repositories in all formats
> - … demonstrated knowledge of file formats, media/data migration, metadata, database management, and digitization techniques
> - experience in a library's cataloging area with substantial knowledge of cataloging and classification policies, practice and tools …. [4]

That is a pretty tall order – to find one individual with the necessary skills and experience and who is accomplished in such a diversity of tasks. But that is just a sign of the times. As libraries make strategic decisions on how to deal with budget constraints, internal reorganizations, and the need to provide new services in what is at best, a status quo environment, we will see more realignment of responsibilities and more positions that overlap "the services."

Throughout the first part of the 20th century, our profession was largely dominated by one organization, the American Library Association and the ALA division known initially as RTSD (Resources & Technical Services Division) and since 1989 as ALCTS, the Association for Library Collections & Technical Services. In the last several decades, specialized professional associations have emerged and opportunities for professional engagement have blossomed. Organizations such as the North American Serials Interest Group (NASIG), the American Society for Information Science & Technology (ASIST), and the Society for Scholarly Publishing (SSP) as well as specialty conferences including the Charleston Conference, Computers in Libraries, and Electronic Resources & Libraries offer many alternatives from which to choose. For those who prefer to be active at the regional or local level, there are also plenty of choices. Groups such as PTPL, state library associations and regional networks such as Palinet, as well as an assortment of consortia, sponsor face-to-face meetings and, more and more often, online workshops, webinars, and short courses which are appealing for their convenience and accessibility as well as their reasonable fees. It is good to see so much diversity and the competition makes all these organizations stronger.

The interest in technical services at the national, regional and local levels is, unfortunately, not matched by formal educational programs. Training for technical services is not as robust as it should be. Janet Swan Hill – a previous keynote speaker at PTPL – and a staunch advocate for technical services is also an outspoken critic of the state of education for technical services. In her excellent overview "Education For and About Technical Services" Where Are We, and Where Do We Go Next?" she wrote: "…. the state of education for technical services today is neither happy nor satisfactory …." and she continues:

> The challenge of enabling prospective librarians to take a greater number of specialized and elective courses has been met in part by reducing the number of courses required of all students. As a consequence, technical services related topics, once a mainstay of professional library education, have come to occupy only a small portion of the overall curriculum …. [5]

Nevertheless, Janet remains optimistic about the future and writes "… technical services activities continue to be essential to successful library operations, [although] education for those functions requires a variety of apparatuses." [6]

With library school education for technical services on the decline, those "apparatuses" Janet mentions must be found elsewhere. As practicing technical services librarians, it is up all of us to become mentors and work with our networks, local, regional, and national associations and within our consortia to endorse the importance and value of technical services. As more and more tasks are automated, as paraprofessionals and other support staff handle more complex tasks and acquire new and different skills, and as libraries respond to changing environmental conditions by redeploying staff, the need for training and continuing education for technical services becomes more critical.

Change is complicated, it is difficult and the pressure to change is often unrelenting. To prepare ourselves both individually and organizationally to deal with change we need to understand the major issues we face and the factors that influence the way we respond to or deal with those major issues. In business these are known as "driving factors" and "restraining factors" and it is crucial that we identify them and understand them in order to determine how to respond to the pressures inherent in a changing universe.

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I would like to suggest that, for technical services, the factors that favor change might include:

> 1. the growth of electronic resources and the concomitant need to provide immediate, accurate access to those resources
> 2. the necessity to utilize staff more effectively
> 3. the requirement to maximize shrinking resources
> 4. an interest in identifying new projects that enhance the institution's goals

At the same time, the factors that might be seen to inhibit change include:

> 1. inertia, apathy, fear or uncertainty about how to deal with user expectations for the vast number of new resources
> 2. limited financial resources
> 3. insufficient or inadequately trained staff
> 4. inability to overcome the "we've always done it this way" syndrome

Most likely you will recognize or identify with one or more of these factors and I'm also sure that you will easily be able to think of others that apply in your specific situation. I selected these to illustrate that the driving factors and the restraining factors are often quite similar, and in some instances may even be identical. In fact, something that might be considered a driving factor in one scenario might easily be viewed as a restraining factor under a different set of conditions.

In order to adapt our processes for the future, we must recognize that these forces exist. We must understand current conditions, be brutally honest about our capabilities and realistic about our expectations and try to maximize the positive or driving factors and minimize the negative or restraining factors.

Today's technical services landscape – or perhaps we should say 'seascape' is complex and multi-faceted and might easily consist of the following:

- conventional, or traditional technical services functions continue to be performed. As long as libraries order, receive, catalog, pay invoices, and bind material, some level of physical, hands-on processing is required. Employing automated processes does not obviate the need for some form of human intervention and control.

- budgets will remain flat, barely keeping up with inflation, or perhaps even not keeping up with inflation. To continue to provide essential resources, compromises and tough decisions on collections, staffing and services are being made.

- staffing levels are static, or may even decline. It is becoming more and more unlikely that new positions will be funded. As physical collections decrease – or at least do not increase - and as resources are directed elsewhere, including towards the provision of electronic resources, technical services positions will be re-evaluated and in some cases staff will be assigned to handle new or different tasks.

- the emphasis on acquiring and utilizing electronic resources is increasing and with it comes the need to improve the management of those resources, including negotiating license agreements.

- as libraries become more and more heavily invested in electronic resources, the need to understand the issues surrounding intellectual property and copyright are more urgent. This may include oversight of copyright clearance for course materials and for documents that are incorporated into an institutional repository.

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- providing access to collections, whether real or virtual, is more important than ever. New forms or methods of bibliographic control provided in an efficient, cost-effective, comprehensive manner are emerging. In this regard, all eyes are trained on the Library of Congress to see how the recommendations contained in the Library of Congress Working Group report will be handled – I'm sure we will hear more about this later today during the panel discussion.

- renewed attention is being focused on the need for preservation of library materials. As technology advances and new techniques are developed, more time and effort will go into preserving collections.

- new programs and services will be desired, even required, to meet the needs of users. In academic libraries this may include development of institutional repositories to enhance scholarship and scholarly communication.

- collection development will be re-defined and might include activities such as interlibrary loan.

The experience, the tools, and the skills necessary to deal successfully with this wide range of issues all reside within technical services. With such a full and ever expanding agenda and without additional staff or resources, our challenge is to continue to manage the traditional and essential tasks and at the same time engage in new activities without diminishing the level of service that we offer. And we face the added challenge of balancing our institutional needs with national environmental conditions and global industry trends.

After acknowledging these facts, or this state of affairs – no more money, no new staff, and an insatiable desire for more and more electronic resources – it would be easy to become disheartened or disillusioned. However, we will be better served to consider the current state of affairs as a challenge rather than a confrontation.

One way to manage change is to become proactive and seek solutions that address local concerns. These are things over which you have control, which you are well suited to examine and where changes can have a positive impact.

Let me describe a few of the practical steps we took at the law library to meet some of the challenges.

First we inventoried ALL the tasks for which technical services is responsible – and there were a lot. (If there is one thing technical services staff is good at, it is keeping track of the nitty-gritty! We have always been proud of our attention to detail!) Nothing was deemed too insignificant, and with our list in hand, we prioritized the tasks into three groups: those that were essential and had to be performed; those that were worth continuing but could perhaps be handled differently, and those that could be discontinued. This part was difficult. One never likes to admit that things were being done that were unnecessary. We also took stock of our financial situation in order to determine whether it would be feasible, financially, as well as potentially more efficient, to outsource some tasks.

And believe it or not, the first thing we decided to do was stop checking in serials!

Discontinuing serials check-in is a sensitive topic and one that elicits extreme reactions both pro and con! Several years ago, Rick Anderson, who was then at the University of Nevada Las Vegas, outlined his reasons for no longer checking in serial issues in "How I learned to stop worrying and give up journal check-in."[7] When I first read that article my initial response was "we could never do that!" For someone whose background is serials and who still has a 'soft spot' for serials, the idea of giving up serials check-in was absolute anathema. But a year or so later, I had an epiphany and decided Rick's arguments were worth

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consideration. Perhaps there were classes of serials that no longer needed to be checked in. We discussed the idea with our colleagues and explained which categories of material we were thinking of including in the 'no check-in' category. With their agreement, we no longer check in dailies, weeklies, or titles which we do not retain permanently, such as newsletters and popular magazines, as well as advance sheets of reporters. That "adjustment" has meant we are able to devote more time and effort to maintaining other parts of the collection.

We evaluated and scrutinized each task and over time, identified additional tasks that could be modified or discontinued without negatively impacting the level of service we provide. By outsourcing some processes (which we were fortunate to be able to do) we have been able to devote resources to new services and give staff opportunities to learn new skills and participate in new projects. Individually, the changes we introduced may seem inconsequential, but collectively they made it possible for us to revitalize technical services and introduce new products and services.

As I was preparing this presentation, I discovered an article written in 2006 called "Re-defining the Library" by Lynne Brindley, the chief executive of the British Library (and a Dame of the British Empire!) While much of her paper deals with library services in general, Dame Brindley concludes by identifying a number of themes which she says "will be central to the continuing re-definition and re-positioning of libraries to remain relevant in the twenty-first century." It was the 5th point that really caught my attention – "Reduce legacy costs and continue to improve productivity in traditional library activities." [8] She goes on to say:

> Underpinning the functioning of our libraries are many traditional processes and activities – selection, acquisition, cataloguing, fetching and retrieving, preserving, and so on. We need to be vigilant to ensure that these well-worn routines continue to be challenged both in the way we do them and the priority we give them. Freeing up resources for investment in new things … as well as creating funds for research and technological innovation will be critical if we are to keep up with changing expectations. This sometimes means challenging long assumed professional roles and other entrenched working arrangements.[9]

Going forward, we should heed Dame Brindley's advice as we consider a few key themes that will influence the nature of technical services in the years ahead.

Years ago, as libraries began to dip a toe tentatively into the waters of automation, the conventional wisdom was that automation would solve all our problems. We were told it would save time, improve efficiency, reduce our need for more staff, create a more pleasant work environment, and ultimately be more cost effective! Now, after 30 plus years of experience with a variety of automated systems and processes, I think we all realize that the facts of library automation are quite different from the theory. While automation hasn't led to massive reductions in staff or saved us a lot of money, or even made us more efficient – in fact in some instances precisely the opposite has occurred - one, perhaps unintended consequence of automation is that technical services operations have become more visible. Our work is now on public display for all to see. I believe this is a positive development both for libraries and for the profession. It has meant that the knowledge and expertise possessed by the technical services staff are no longer hidden away, but are sought after more and more. Technical services staff have become major players in providing services to users. The automation of library functionality not only de-mystified technical services and but also helped launch the movement toward greater accessibility for collections and heightened accountability for library staff.

This slide is an excellent visual representation of the expansion of automated library services since the early 1970s. From just a few pioneers through the 1980s, the field literally exploded in the 90s and now we're beginning to see consolidation in the marketplace.

There are many reasons for the explosive growth of automation. One reason has to do with the increasing emphasis on standards. Whereas early online systems were proprietary in nature, new generations with more sophisticated functionality are being developed on open source platforms, resulting in greatly improved interoperability and enhanced opportunities to transfer and share information between disparate systems. Successful interoperability has its roots in the development and implementation of standards.

I am reminded of an apocryphal story about the importance of standards, relayed more than a decade ago by John Fitts, an EBSCO executive.[10] In his story, a large player – whom he referred to as "Company W" - made it very clear to the smaller player (EBSCO) that in order to maintain a business relationship with the company, it must implement Electronic Data Interchange. We do not have the same level of influence with our business partners as companies in the commercial sector have with their business partners, so we are not in a position to issue that kind of ultimatum. Nevertheless, as open source systems have become more advantageous and desirable, the standards movement is gaining traction with all players in the supply chain.

This slide illustrates the development of standards over the last 60 years and much like library automation, development was modest for many years, increasing dramatically towards the end of the 20th century. In fact, a comparison of the chart illustrating the history of library automation with a chart tracking the development of standards shows an interesting parallel between the two. It may be a little difficult to see, but laying the standards chart over the library automation chart seems to indicate a relationship between the rapid expansion and development of standards and the growth in automation. The adoption of standards throughout our industry has the potential to significantly alter the way we do business in the future.

I think it is universal that most libraries struggle to live within their means during prosperous as well as deteriorating economic times. This struggle is exacerbated during periods of accelerated or unusually high inflation, when the U.S. dollar is weak against foreign currency, when libraries receive waning financial support from their parent institutions and when the public exhibits an insatiable appetite for information. In the last several decades we've experienced these conditions, either all of them simultaneously or some combination thereof, more or less continuously. Libraries are constantly seeking ways to reduce expenditures and improve efficiency and at the same time meet their users' requests for expanded services. Finding solutions that satisfy the sometimes diametrically opposite ideas of management and patrons and that are fiscally responsible while simultaneously meeting or exceeding users' needs produces stress and tension – but also creates an atmosphere ripe for innovation!

Just a few days ago I read an interesting article by Carla Stoffle, the Dean of the University of Arizona Libraries and others in which the authors suggested that economics, not technology, drives change. They wrote "the times are changing and the financial environment – which shows no sign of reversing – is going to ensure that libraries change whether we like it or not." [11] No doubt fiscal considerations will play a role in shaping the future of library services. However, I believe the picture is far more complicated than that. I see a host of factors converging – economic, social, political - and together with local and global events, will influence our decisions.

Lisa German's lead article in the May/June 2008 issue of *Technicalities* says "it is hard to believe that 30 years ago library consortia did not exist. However, in 2008, one would be hard pressed to find a library that does not work in some type of consortia." [12] Today's emphasis on collaboration, networking, and the growth of consortia may well be a direct consequence of the intersection of developments in automation, standards, and perpetual budget concerns. The increase in the number of consortia and other formal and informal alliances in order to achieve greater influence and enhanced purchasing power is having a dramatic impact on individual libraries and upon technical services. The confluence of these factors resulted in the conditions that make collaboration attractive and feasible. By using the right tools and utilizing a common language to communicate, libraries are pooling their resources, ending their isolation, and sharing

information. Strength in numbers translates into additional capabilities, improved services, more effective and efficient processing, and judicious use of fiscal resources.

Can you imagine a world without the Internet? The Internet has revolutionized our processes and transformed our services. It has led to the explosion of electronic resources, to a major reconsideration of bibliographic control, and to a serious re-examination of the fundamentals of library services.   Our task is to take advantage of the amazing capabilities the Internet has to offer while not falling victim to its allure by abrogating our responsibilities to our communities.

Just a few weeks ago I was reading through applications from a group of librarians who were hoping to be accepted into the 2009 ALA Emerging Leaders Program. One of the candidates wrote about technical services "it's certainly not glamorous, but it's necessary."   That is a perceptive comment, for it conveys a sense of constancy and reliability. We are realists. We are practical. We understand there are tasks that must be accomplished and we just do them!

Yet I think there is another aspect to technical services, one that includes imagination and adaptability.   We are dreamers. We have vision. We are willing to take risks and experiment with new procedures. We can imagine a technical services that encompasses a different suite of activities and plays a different role within the organization from that which presently exists.

If we were going to be completely honest, I imagine all of us would find some level of comfort in maintaining the status quo. But in order to flourish in the future, we must discard old, outdated processes and be open to new ideas and possibilities. We must find a balance between the external forces over which we have only limited control and the requirements and even the desires of our community of users. Introducing alternatives to traditional activities and taking risks, within manageable limits, to identify new activities, will allow technical services to prosper and play a key role in the future of the institution.

It may be obvious, I'm bullish on technical services. I can't predict what the future of technical services will be, but I do believe that technical services has a future.   If we continue to manage what is essential, to explore what is promising, and to challenge the conventional, the possibilities for technical services in the future will be boundless.

[1] Sally McCallum, "40 Years of Technology in Libraries: a Brief History of the IFLA Section on Information Technology, 1053/64 – 2003." http://www.ifla.org/VII/s21/publications/40YearsOfSIT.pdf. (accessed October 20, 2008).

[2] Karen Schmidt, Collected Works of Karen Schmidt**. "**Library Technology, Gadgets & Paraphernalia" http://works.bepress.com/karen_schmidt/4/. (accessed October 20, 2008).

[3] Vera Fessler, "The Future of Technical Services, or It's Not the Technical Services It Was." *Library Administration & Management*, 21, no. 3 (2007): 139.

[4] Law Librarian Blog. July 11, 2008. http://lawprofessors.typepad.com/law_librarian_blog/2008/07/opening-digital.html (accessed October 20, 2008).

[5] Janet Swan Hill, "Education For and About Technical Services: Where Are We, and Where Do We Go Next?" in *Commemorating the Past, Celebrating the Present, Creating the Future: Papers in Observance of the 50th Anniversary of the Association for Library Collections & Technical Services*, ed. Pamela Bluh, 42-43 (Chicago, ALCTS, 2007).

[6] Hill, 57.

[7] Rick Anderson, "How I Learned to Stop Worrying and Give Up Journal Check-In." *Serials librarian*, 44, no. 2/4, (2003): 255-260.

[8] Lynne Brindley, "Re-defining the library. *Library Hi Tech*, 24, no. 4 (2006): 484-495.

[9] Brindley, 493.

[10] John Fitts, "Dancing with a gorilla: EDI in the retail sector." *Library Administration & Management*, 10 (1996): 171-174.

[11] Carla Stoffle et. al. "Bridging the Gap: Wherever you Are, the Library." *Journal of Library Administration*, 48, no. 1, (2008): 3-30.

[12] Lisa German. "It's all about Teamwork: Working in a Consortial Environment." *Technicalities* 28, no. 2, (2008): 1.