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**Capturing the Vision of the Future**  
**Keynote Address to the**  
**Indiana Library Federation District 4 Conference**  
**September 30, 1994**  
**Hussey Mayfield Memorial Public Library**  
**Zionsville, Indiana**

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Thank you for inviting me to be with you today for the Indiana Library Federation district conference. I am also pleased to share in celebrating the use of this wonderful new building and the promise it represents for Zionsville. All of us can take genuine pleasure and excitement in the town's good fortune. This library is both a regional asset and a symbol of hope for other communities and other libraries yet to be built. The story of the relocation of this library and its transformation into a symbol of community pride is itself an affirmation of your essential, public role as librarians. And it is another installment on our shared commitment to keep this nation free and civil through the humane use of knowledge and information. I want to add my compliments and congratulations to all those who helped make the dream of this facility real.

We at IUPUI have come to think of our new library in much the same way — as a symbol of our university. It is at the physical center of the campus, near our heart. Through the personal efforts of Barbara Fischler, Donna Burrow, Steve Schmidt, and many more, our commitment to providing access to world information resources through technology reflects a promise to the citizens of Indiana to make IUPUI a new national model of successful public higher education. At a time when many are questioning the need either for libraries as buildings or for books as stored resources, we who understand the practical and functional role of libraries in a transitional age must also pay attention to their symbolic role. If we lose a sense of spirit — of pride — in libraries, then we may have lost the very basis of support we will need in the future. A library that is not truly connected to its community is not likely to long endure. In this sense, the new IUPUI library and the new Zionsville library are partners in an important cause that involves all of you. I want to thank you for giving me the opportunity to make this personal connection between IUPUI and the Indiana Library Federation in what may yet be a fight to preserve libraries and their social role.

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I have been asked to talk about “Capturing the Vision of the Future.” When this title was presented to me as a general topic — not a title — I decided to keep it as a title because it reflects perfectly the dilemma we all face. In 50 years, will libraries have become entirely virtual and electronic in their services, with some buildings remaining as museums to house objects for the curious? Who will be using this wonderful building and for what purpose in 2045? How do we reconcile the dream James Billington (United States Librarian of Congress) has for a National Digital Library with the development of intimate spaces such as this one, where the interaction of one child with one book promises a habit of lifetime reading? If any of us could foretell the future of libraries — know with certainty what the true face of this Protean creature actually will be when we have wrestled it into submission — then we would be heroes and like Ulysses lead our profession homeward and into a safe port. You all know the story of Proteus — the herdsman of Poseidon whose ability to foretell the future saved many a Greek hero, if they could capture him and hold on until he exhausted his many different forms and shapes... whether a raging beast or a changing wind. Alas, I — at least — am no Ulysses and the emphasis of my remarks will be on the “capturing” part of the title — the struggle we all share as we wrestle with what is increasingly described as the most profound technological and societal change since Gutenberg’s moveable type created the book and our current concept of libraries.

We all understand the analogy to Gutenberg and the metaphors of change being discussed monthly and weekly in our professional journals, daily in the news media, and hourly on the Internet. We are literally overwhelmed by the image of change — or at least I am. At the same time, I am conscious of becoming inured — anesthetized — to the unrelenting and insistent barrage of people telling me that my world, my work, and my place in society is being changed. All of us must cope with stress, fatigue, and helplessness in a far more personal way than ever before. Stress management is no longer a workshop topic just for fast-track, high-pressure business and corporate types. It is a part of our lives, too, and much of the stress is related to the uncertainty and ambiguity of the future — the struggle to have the true Protean visage within our grasp and the true vision of the future revealed. We all seek some greater order, some greater sense of control over the events unfolding before us, and some greater hope that we will have a place in the promised new future. Even if we cannot hold on to Proteus until the future is foretold, we can take some personal pleasure in giving this creature the face and the name of our most recent frustration and strangling the virtual life out of it.

Before getting to the contest itself and taking on Proteus, I want to make two other contextual references to the idea of change and to our ability to

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capture any vision of the future. Gutenberg stands at a firm point in the historical continuum, and thanks to books and other print material, we have an uninterrupted record of the transformation his printing press has wrought. Before Gutenberg, the record is a little less certain, but still recoverable. You can pick whatever entry point into the pre-Gutenberg world you want, but my personal favorite is the imaginative and fictional. For example, who among you has read Umberto Eco's *The Name of the Rose* or watched a hooded Sean Connery stalking the labyrinth of an abbey library in pursuit of truth? Those of you who know Eco as a semiotician can appreciate the fine humor of William of Baskerville's quest, and all of us can marvel in the vision Umberto Eco has created in the novel and the movie. There, in the medieval setting of 1327, the pre-digital library is anything but a place of innocence or of certainty. (In fact, those of you who know the story well can appreciate Eco's pun on "digital," since scribes are murdered as they lick poison from their fingers moistened to help turn pages.)

In Eco's book one of the characters says, "The library is a great labyrinth, a sign of the labyrinth of the world. You enter and you do not know if you will come out."<sup>1</sup> I think our perception of the process we are undertaking — this capturing of the future — should resonate to Eco's troubling chord. This labyrinth that William plys is different from the mythological labyrinth of Theseus with a definite entrance, a finite exit, and a Minotaur in the middle. It is more like what we can imagine our virtual, digital, future libraries becoming — something Eco describes as a rhizome structure — a library that can be structured but never structured definitively. Eco says "every path can be connected with every other one. It has no center, no periphery, no exit, because it is potentially infinite. The space of conjecture is a rhizome space."<sup>2</sup>

Some of you may have read the profile of Vinton Cerf in last Sunday's *New York Times*. Cerf is the father, or king, of the Internet and is widely credited with having created what is rapidly becoming the national information infrastructure. He has just left the public, not-for-profit sector to join MCI because of its potential to "take advantage of the convergence of video, voice, and data. The building of networkMCI involves the installation of high-speed switching, fiber-optic, and wireless transmission systems, with the eventual aim of melding exiting long-distance voice and data services with a new local phone network."<sup>3</sup> In less than 50 words, Cerf has described the elements of our uncertainty. While we may not yet be ready to give it a name, we all know many of the shifting faces of the creature with whom we are dealing.

What I found most interesting about the interview with Cerf is his reference to the enigmatic ads MCI has been running on television. Surely you have

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seen the other-worldly little girl — who, incidentally, is the Oscar winning actress Anna Pacquin of “The Piano” — in a most ambiguous setting making cryptic statements such as “There will be a road that will not connect two points. It will connect all points.” Or, “There will be no more there. It will all only be here.” MCI has its own version of a rhizome structure in mind, and Cerf and Eco both seem to share a sense that the future is likely to be a paradox — labyrinths without periphery and a “there” that’s not there. Put another way, they are both describing our central dilemma of dealing simultaneously with the physical library — this building with its personal interactions — and the virtual library — the world-wide electronic infrastructure with its infinite connections, a structure without definite structure that changes every time it is used.

The third allusion I wish to make as a context for my “capturing the vision” is to Werner Heisenberg, the Nobel physicist whose famous “uncertainty principle” is another metaphor for this same process. My overly simple, humanist’s definition of this complex scientific theorem is that in sub-atomic physics it is impossible to be certain about both the location and the velocity of a sub-particle such as light because the very act of observing, in itself, changes the actual physical conditions of the phenomenon. In the sub-atomic universe, reality is a highly ambiguous construct. This idea about the uncertain relationship between the observer and what can be known is an apt description of the difficulty we have in capturing the vision of the future of libraries. On one hand, the contemporary library is very much a physical space with a known location — a building such as this one. On the other hand, the library is also the sum total of all the ways it is used — the virtual library — and hence its movement, or velocity of use, is the second dependent variable. The more certainty we have about the physical library and its location in time and space, the less certainty we have about the rate of change and its direction. Moreover, the very act of observing changes the relationship between these two variables. By this, I mean that if as librarians you decide to favor either the physical or the virtual in your planning, you run the risk of changing the reality of your library. Your actions have consequences. And in this case, not to act is itself an action. No one in this room can remain apart from the observation, or from the action.

Whether you chose the metaphor of clinging to a Proteus, of wandering through a labyrinth without fixed boundaries, or of defining reality through particle physics, the task of capturing the vision of the future is highly problematic. As you think about the way society has reflected on change over the millennia, you will discover hundreds of examples of useful metaphors that have helped people accept and deal with difficult personal and social transfor-

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mation. The imaginative and scientific literature of change is especially rich. Librarians, in particular, should take advantage of their knowledge base to make this an exciting, instead of a threatening, transformation. We can find ways to explain the process of change to others by giving it familiar and comfortable names.

I have spent a great deal of our time together establishing these three metaphors of change precisely because I think that metaphor is, in fact, the only image or vision we can have of the future. Hence these metaphors of Homer's Proteus, Eco's labyrinth, and Heisenberg's principle become tools we can all use in our own work of getting from where we are now to where we want to be in the future. The difference is that I want us to claim the library as a metaphor which you can use to help your patrons understand the change that is occurring in the way we are going to use information in the future.

This may seem like a terribly simple, even naive, notion for me to be telling as sophisticated and informed group as this. However, I think there is nothing more important for me to assert about the future of education and of libraries than this: The library is itself becoming the metaphor through which society can explain the incredible transformation now taking place in the creation, accumulation, storage, location, and application of information. As a metaphor, the library is both real and imaginary. It is known, familiar, and accepted. Yet its very characteristics and properties can be used to explain and predict that which is unknown, unfamiliar, and not yet accepted. Think about it — the library is becoming the metaphor of itself — with or without tags such as electronic, digital, virtual, multimedial, or networked. It is the proverbial black box many people use increasingly to name the interrelationship of location and velocity. It is the institution which can permit us to contain the explosion of information without destroying the order and structure we currently value. Every single advocate of the new age of digital information and communication, everyone who has held on to Proteus long enough to get a fix on the future, has alluded to the necessity of managing the entering, storing, and retrieving of information. To my knowledge, no one has yet found a more potent, graphic image of this process than the "library."

Each of the activities and processes with which you are familiar — regardless of the size or current technological condition of your own library — has been appropriated for new meaning in the emerging technological age. Some of the changes are conceptual — storage of physical objects on shelves becomes storage on discs and data bases. Browsing by walking becomes browsing by pointing a mouse. "Reading" a book may actually mean listening to a book on tape. A media department becomes a multimedia on-line service. The refer-

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ence desk becomes a directory or on-line tool box. Other changes are as literal as photocopying services that are extended to printing on demand. Cataloguing has changed forever as a result of OCLC and other standardized bibliographic services. Discipline and patron service specialists have added new competencies. As these internal transitions are made in a way that the general public can understand, the words and terms we have used for the library have been appropriated by companies and consultants and agencies to explain how their electronic and virtual products are every bit as friendly and helpful as the familiar librarian behind the reference desk, as real as a book on the shelf. Many people already imagine the development of “knowbots” or “infobots” — or information integrators — in the image of their own personal librarian. This role is not radically different from that of the medieval librarian who performed a similar function for prelates and kings. Are you ready to reclaim the ancient role of information integrator?

There are eight Indiana Library Federation district conferences, several of which are occurring this month. Everyone of them is raising this topic of the role of the library in changing people’s lives during a period of enormous technological upheaval. In Tipton, Tom DeCoster is talking about “change management.” In Bluffton, Mary Redden is leading a discussion of “Bridging the Gap Between Technology and Patrons.” In Richmond, Barbara Markuson is predicting what “Virtual Libraries” will be like. Librarians are at the very center of what must surely be seen as a maelstrom of change, and if it feels unusually calm given the strength of the forces of change, then just assume that you are temporarily in the eye of the storm. You are certainly in the eye of the public as the words “library” and “librarian” conjure up images of stability, accommodation, service, and safety as a buffer to the unknown and uncertain, to the rapidly changing, and potentially threatening, future.

We must, therefore, capture the vision of the future by becoming the very image of that which is unknown. In giving our names to the future, we can surely have a better opportunity to participate in and to shape the actions and interactions of the American public we must continue to serve. Our free and democratic society may depend on nothing less. There are dangers in becoming a metaphor because by the very process of explaining the unknown, the original term — or institution — can lose its own properties and characteristics. As it succeeds in helping society accommodate a wholly new paradigm of using information, the library may cease to be what made it so successful in the first place. I think we have no choice but to allow libraries to give a name to the unknown, but I also think we must understand what it means to manage change, to reduce uncertainty, and to create walls in the virtual unknown. So, here is my list of properties that we must both protect and use as the very

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means to change ourselves into the library and librarians of the future.

First, we must not only acknowledge our dual existence in the physical and virtual realities, we must embrace this condition and assume that it is permanent — at least through our lifetimes. We must be both particle and wave; we must have both location and velocity. Duality will come in several forms — the local versus the world-wide, the physical versus the virtual, the personal interaction versus the impersonal, owned resources versus shared resources, and so forth. If we are at home in this condition, we can help our patrons and our financial backers be at ease with themselves and with the evolution of the library. Put more directly, I think every librarian has an obligation to understand as much as possible about the changing conditions of the electronic age and to become an expert translator to explain to others what is happening by using the library as a metaphor. You do not have to be an advocate of the digital or virtual library, but we all have a professional — perhaps even moral — obligation to understand the change that is occurring. We have this responsibility regardless of our own personal views and our sense that this challenge may better be met by a younger generation. As I tried to suggest by Heisenberg's uncertainty principle, our own self perception of our work influences what will happen in local libraries and in your patrons' conclusions about what their library should become. We must become engaged precisely because we are a transitional generation. No library in this state no matter how small, how specialized, or how remote can remain isolated and unaffected by the Information Age revolution. If you do not relish the thought of the virtual library, then view your work as linguistic — making the metaphors work for your patrons.

Second, whether as simple as a single room in borrowed town hall space or as complex as a county-wide system with dozens of buildings, every library that has a physical existence has an obligation to reconsider the social role of the library as a place of concourse. Each library has a personality, and usually its characteristics and traits are reflected in the personal beliefs and attitudes of the librarians who operate it. Although there are as many descriptions of the social function of libraries as there are facilities, we have come to view the physical library as a place of intersection between people of all ages and the ideas, information, and knowledge they need to make their personal, civic, and vocational lives more meaningful and successful. While necessity may have brought people to our facilities in the past, they have always used the spaces we provide for more than the circulation of materials. At various times libraries provide space for contemplation, meditation, and reflection. They are places where people share experiences and form communities of interest, whether it is a mother and child reading together, a high school couple studying together, or

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senior citizens linked by an interest in genealogy.

In the future, there must be places for people to gather and interact. The library must continue to fulfill this function of being the place of concourse because no other place has been so successful as a multi-generational, inter-denominational, cross-cultural, a-political, community-based gathering spot for people to interact. As the need for people to visit the library to obtain copies of books, magazines, music, films, or other objects is reduced, as references are readily available via electronic means, and as other activities offer more compelling locations for social gatherings, the physical existence of the community library is threatened. We must be very clever and resourceful to find the means to use electronic resources in personally interactive ways which draw people to our buildings. This change is especially important if we wish to cultivate a habit of library use that engages our young people. Whether we are prepared or not, young people now in middle school and lower grades are experiencing a form of learning and social interaction with technology that is fundamentally different. Their expectations of what the library should do for them are already being changed beyond the capacity of many of us. We may need to restructure our space and reconceive its use if we are to attract people inside. Whatever the use, libraries must be directly linked to the community they serve, and we should take aggressive steps to develop uses that meet real needs. This is another reason for all of us to understand how electronic access to information will change the social use of the library, the school, the workplace, and even the home.

Third, every library that does not expect to become a museum must become a node on the nation's information infrastructure. For a moment, I want to be urgent in tone — even strident. Bear with me. The initial electronic connection may be as simple as a modem linked to the Internet, but by this time next year, there should be no library in this state that is not connected to the Internet in a way that patrons can effectively and purposefully use. Every public library in Indiana must serve as the gateway to worldwide electronic resources. Moreover, every library must have an adequate number of trained people to serve as mentors and guides. If you cannot help a patron sign on to the Internet and find a piece of information at some other world-wide source, if you cannot provide at least limited access to electronic databases on-line or on CD-ROM, then you should ask if your library should remain open. Even if you have to reduce or to forgo the purchase of materials for months or a year to acquire electronic access, then you should. I think it is so important that librarians, even if not many patrons, become familiar with and comfortable in using on-line information resources that you *must do so in the next year*. It is urgent. It is critical. It is necessary. In July, Governor Bayh announced his plan



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for Access Indiana and promised access within the year — he was right to make such a bold promise, and everyone in this room must help him honor the commitment to the citizens of Indiana.

There is much to be said about what can happen and on what scale when your resources and expertise are limited, when the patron base is unsympathetic, and when your board or administrator is dubious. I understand these realities. But by whatever persuasive means necessary, please try to make your facility and yourselves a community learning center where people can use — or, if they prefer, merely sample or observe others use — the basic capacities of the electronic infrastructure. I have been privileged during the past two years to participate in a very special resource within the State of Indiana — something you have probably heard called the Indiana College Network. Without going into detail, the network is a partnership of all of the state's public and independent post-secondary institutions working with state government on workforce education and a variety of school districts on secondary schooling. These partners are interested in increasing access to all forms and levels of education through electronic means, including in-home video and computer access over telephone or other proprietary networks.

Still in its infancy, this partnership will in time alter dramatically the concept of life-long learning and the very forms of education. Increasingly individualized, personal, and student-centered, the new forms of learning will depend on local gathering spots for access to technology and for help in using the electronic information resources. Moreover, most students will want places where they can interact on a personal and face-to-face basis with other students, especially since the end of learning is social and communal. Every library in the state has the potential to become a learning center for its community — a focal point for life-long learning that connects people with information, with each other, and with the very means of learning. I hope that next year, every library has at least limited access to the electronic infrastructure and that in the year following, most libraries have found a way to make themselves community-based learning centers for life-long education. The Indiana College Network will gladly become a partner with the Indiana Library Federation in reaching these goals.

Fourth, libraries in the state are going to have to recognize that their primary mission is customer service and, therefore, that they will have to provide services that customers or patrons want even if the library cannot afford them and the staff may even not want them. If libraries cannot find ways to provide the information resources that people want and need, they will turn elsewhere. Put simply, we are going to have to learn how to charge for

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services. Even the largest, most generously endowed, most strongly tax-supported libraries in the state will ultimately have to offer services for fees or go out of business. What library does not already charge for photocopying when the service is available? What is the difference between photocopying and faxing or printing? Why not provide access to special databases or on-line services for a fee? My advice is to begin immediately developing services for a fee and to do so with a long-range strategy in mind — one matched to the personality of the community but one which will permit your library to remain economically viable while expanding services into a wholly new range of educational and entertainment possibilities.

Lest I be misunderstood, I am not addressing the need most libraries have for increased revenue. This is a serious problem regardless of the issue of services for fees. Few libraries will be able to develop a fee structure that can subsidize current free services. Instead, I am advocating that you become responsive to your patrons' needs by finding a way to deliver all of the services they can possibly want that can reasonably be provided. We need to adapt to the new economic environment where virtually every service — including public services supported by taxes or private services supported by charitable giving — will be assessed and evaluated by the cost of the activity. We should not resist this development any more than we should resist the development of the electronic infrastructure. Instead, we must take advantage of the opportunity to expand and increase patron services.

Moreover, we must be willing to provide services to patrons outside the library itself. I understand that the Indianapolis-Marion County Public Library will soon implement a home delivery system for a fee; this is only the beginning of such services. Libraries can also provide in-home or in-office electronic information management products designed to meet customer-specified criteria. Libraries can provide services to corporate or governmental agencies to meet institutional economic development initiatives or to address employee needs. Many of these services will require partnerships. Most will be delivered off-site, and many will employ electronic means in part or in whole. Libraries should be at ease in developing short-term strategic alliances. Schools at all levels, other service organizations such as nursing homes and United Way agencies, technology providers including Ameritech, commercial television, public broadcasting, or IHETS, and informal learning organizations such as museums or zoos are all potential partners. Given the variety and complexity of the possibilities, we should assume that most of the services will have a user fee attached.

Finally, every public library must provide some services free. Nothing less

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than our democratic society depends on this concept of a basic right to access to information as a public good. The library of the future may be the most important social structure for ensuring a free society because some — indeed, most — information will be available only to those who have access to the technology. Our libraries must take whatever steps are necessary to provide this access—no matter how difficult or how limited — to any citizen. There is no inherent contradiction between my urging that we charge for some services at the same time I am making my most urgent plea for free electronic access. Librarians have become experts at making hard choices already. You cannot buy all of the materials and services which you would like for your patrons to have, so you match their needs to your resources, occasionally substituting your own judgment about what is necessary for what is wanted. This choice is no different, except that electronic access is absolutely essential, even if it is one workstation and one modem that anyone can use without charge. You may have to set limits on the amount of time. You may have to schedule appointments. And you may even have to privilege one group over another, giving students, for example, priority over general use patrons. But you must provide free access to the front door of every electronic information resource that is available. If the resource itself costs, then you will undoubtedly have to set policies about how much you can provide at no cost or at subsidized costs. If you have to pay for access to LEXIS/NEXIS, for example, then you may have to charge your patrons. However, you must find a way to subsidize everything up to the point of charge for commercial databases and you must keep free the connections to America's public resources, such as the proposed National Digital Library.

Libraries themselves can model the principles of a free society through negotiation and compromise. We can thereby ensure that every citizen has reasonable access to the documents, the information, the data, and the images which are the building blocks of truth and of freedom. And yet we can also insist that patrons use these freedoms with a full appreciation of their responsibilities and liabilities. Electronic access will test the boundaries of censorship and copyright, and there will be those who will ignore the rules of civility and propriety to your embarrassment and dismay. You will be placed in what may become the most awkward and uncomfortable role society has yet created for public servants, asking you simultaneously to guarantee unfettered, uncensored, unregulated, and free access while protecting community standards of public decency, intellectual property rights, and fiscal integrity. It has always been tough to be a librarian, and the conditions of work are about to become a lot harder.

As you contemplate the future, recall the role of the librarian in the medieval monasteries where civilization was preserved in an age of darkness and

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violent change. It was the librarian who served society not only in protecting the texts and written materials from vandals and despots but also in serving as what James Billington has called “knowledge navigators, guiding users to the information they are seeking and working as European archivists or scribes who have long worked in the great medieval libraries.”<sup>4</sup> In his fictional account, Umberto Eco is more graphic: “Only the librarian has, in addition to that knowledge, the right to move through the labyrinth of the books, he alone knows where to find them and where to replace them, he alone is responsible for their safekeeping... So the librarian protects them not only against mankind but also against nature, and devotes his life to this war with the forces of oblivion, the enemy of truth.”<sup>5</sup> It is a noble calling and a distinguished tradition. Librarians have been at their work for a long time, and we have every reason to be confident that they will see society through this transition as well. In the future, you are likely to rediscover your past. As MCI says, there will be no more there. There will only be here.

## Sources

1. Eco, Umberto, *The Name of the Rose* (New York: Harcourt Brace Jovanovich, 1983), 158.
2. Eco, Umberto, *Postscript to The Name of the Rose* (New York: Harcourt Brace Jovanovich, 1984), 57.
3. Hafner, Katie, “For ‘Father of the Internet,’ New Goals, Same Energy.” *The New York Times*, September 25, 1994, F 4.
4. Billington, James H. “Electronic Content and Civilization’s Discontent,” *EDUCOM Review* 29, (September 1994) :25.
5. Eco, Umberto, *The Name of the Rose*, (New York: Harcourt Brace Jovanovich, 1983), 37-38.