This presentation will undertake an exercise in "future history": describing a possible future for the world of libraries in 25 years, then narrating the history we would have to live through in order to get there. The purpose is to focus attention on a few key themes and issues that need attention. The main headings will be collections (what it means to collect when place is less and less relevant), services (who serves whom -- that is, what kind of people and facilities with what kinds of skills and capacities will be needed in order to allow users their best creative freedom), and uses (mainly a reflection on the future history of reading). The conclusion will identify several main areas of policy concerns that should be addressed by different stakeholders in order to build support for education and innovation globally.

In the late 1990s, I wrote a book called *Avatars of the Word: From Papyrus to Cyberspace*, describing a historical context for the developments in information technology and networked communication that had lately begun to surround us. In those days, people still spoke with longing of "the virtual library", the ideal collection of everything everywhere in a single virtual space. I argued that the idea and even the fact were quite old, but the awareness of novelty was still striking.

For great libraries had always spoken of containing "everything" – from the library of Alexandria to Jorge-Luis Borges to Vannevar Bush in 1945, the dream was the same. But in 1998, we could already begin to sense what was different, and even then I saw quoted a remark by the philosopher Anthony Appiah; he spoke of "the
library I never go to is already one of the most important places in my life.” He was ahead of his time. I have myself spent much less time in the physical spaces of libraries in the last fifteen years, much because of my professional responsibilities, but much as well because I am out of reach of a library now mainly only when I am asleep or in an airplane. The airlines are working hard on getting me my library in the air by getting me network access. And in fact fragments of it come with me even there, if I think of the raft of downloaded literature on my laptop. Even I am content to leave the library when I sleep.

Miracles have in fact happened. Twenty years after I heard librarian John Ulmschneider tell an audience that "Moby-Dick is a megabyte", when digitized texts were precious treasures, no one can now reasonably count just how much of traditional library literature is available in electronic form. My laptop knows all of Proust’s great novel, all of Saint Augustine’s Latin works, much of classical Latin literature, and many other classics and oddities. But I can reach into our University’s library at any moment when I am on the network and fish out many more texts, then reach beyond the library to the great scary worlds of Google Books and the Internet archive and find more and more. Two signs of what has changed: First, I now often use the network to look up something in a book whose physical avatar I could literally see from my desk – because it is easier and more accurate to find and search an online text than to leaf the physical volume. Second, not long ago I was trying to recall something I had quoted in one of my books or articles – and because I was in a meeting in a hotel meeting room far from home, it was entirely obvious that I should search my own books on the web to find the quotation. Google Books "snippet view" sufficed. My own memory is, in an important if limited way, now part of the network outside myself.

So there is much that libraries do that they used not to do, but surprisingly little that they used to do that they don’t do now. (Subscriptions to newspapers are fading, but so far still only fading, and Google has recently decided to stop trying to scan archives of them.) But there is all around us a sense that change is imminent. What form might that change take?

I take caution from the old book of Ithiel de Sola Pool, Forecasting the Telephone, who collected and cataloged things people predicted the telephone would do and things they even tried to do. One obvious prediction in the late nineteenth century was that women would never be big users of telephones because the devices were too mechanical to appeal to them, and there were real experiments in distributing symphony concerts by what we would now call "landlines". That didn't catch on – until now! There are now radio stations that offer to let you listen to them on your mobile phone.
So prophecy is to be undertaken delicately. But I think I can describe at least conceptually three main ways in which libraries will evolve, and I do so under the made-up word of my title – UbiLib. I imitate there an old coinage, Ubicomp, a practice explored at Xerox PARC in the late 1980s and attributed to a researcher there named Marc Weiser. The idea was straightforward: that your computing environment would follow you, in those days by letting you approach any appropriate device, identify yourself, and have the device turn into your device – your files, your applications, your security. We now could speak of that as cloud computing and we are well aware that we are somehow moving to that kind of environment for much of what we do – even if we know we are not happy with every aspect and opportunity of that environment today, notably security concerns.

But what about the library that is everywhere, the library that follows me around? The library that is there even when I visit the building, but that is there – here – wherever I happen to be? I will speak of collections, services, uses, and policies.

**COLLECTIONS:**

There are two essential collecting functions that cannot be escaped and that are unlikely to be provided by anyone other than libraries: ownership of the special and access to the much. Both functions require the highest degree of traditional library professionalism, albeit with new skills and foci.

By ownership of the special, I mean the continuing mission to collection, preserve, and make accessible in physical and often digital form the treasures of the written word, old and new. This means the book preserved as work of art, the book preserved as artifact of a culture and a moment, and the book preserved simply as the unique thing in its own right, as something to read, cherish, and understand. The traditional physical library will distinguish itself more and more by the specialness of its special collections, by the uniqueness of the materials or the uniqueness of the collocation of materials that it collects. What will always and irresistibly draw people to places with library spaces is that physical access to the objects of literate culture. What people will think of those things, what they will do with them, and how those things will interact with other cultural artifacts and practices – no one should pretend to guess how those questions will be answered in twenty or fifty years. But the objects will survive, be cared for, and be used. Only librarianship can assure that.

But ”access to the much” may sound less like something needing a librarian. We all have access to the much – to the ”too much” most often. But the professionalism of librarians has something to offer exactly to the reader facing the ”too much”: discernment, discrimination, and judgment. If we observe the concatenation of digital resources that our libraries now present to us, what strikes the eye
immediately is the combination of selection and quality – where by quality I mean just the technical quality with which, say, digital representations of books are made. But more than quality, there is selection. It is not that every book and every reference work librarians select is full only of truth – far from it – but the resources librarians find for us are consistently more worthy of attention than the undifferentiated mass of information beyond on the net.

SERVICES:

The traditional services that libraries offer – now what becomes of those? We must be frank and cautious and recognize that if librarians sit quietly and wait for patrons to come looking for their services, they could well fade quietly. The critical word is "outreach" – but you could as easily say "marketing". If traditional library service has been high touch but sometimes low tech (a reference librarian sitting all day long to tell people where the restrooms are), the future is to identify what is uniquely professional and valuable about the librarian's perspective and skills and then to reach critical audiences to make the services available and attractive. This is not just a question of looking to stay in business. Rather, it is a recognition that the value of libraries has always been both in what they present and in the way they make what they present a part of their patrons' lives. The library patron does not begin by knowing everything the library has or can do. Librarians intervene. In all the debates about "open access" to information, we should remember that the universally freely available resource that no one knows about is hardly the goal. We have to accept that much that libraries have done will become or has become commodity service, automated and net-accessible. This is an opportunity for librarians to go out to their readers – both physically and virtually – and have the kind of high-touch interaction that adds unique value. Consulting services in scientists' laboratories, on-line availability to help find the unfindable, training students in the arts and techniques of research: there has always been too little time and too much to do. Now is a chance to shed some of the routine and concentrate on the special.

USES:

What will people now use their libraries for?

First, where the reader in a medieval library, or even the reader in the tiny public library on an army post of my childhood had few treasures, eagerly and repetitively conned, the new reader will have multitudes. One friend thinks of that old style reader as a Robinson Crusoe of literacy, in some metaphorical way making his own clothes and food and shade for himself as he built a life of few and scanty materials. Even when relative abundance became possible, the uniqueness of the individual
artifact and the difficulty in acquiring just the right book made every reader a hunter-gatherer by trade and practice.

In the early days of printed books, manuscript copies of books were still made. There weren't enough copies of the printed books and they weren't for sale very far from the printer's establishment, so a Venice-printed book in the Netherlands could likely only be copied by hand still. In the later days of printed books, second-hand stores and luck were the chief means of finding some things.

Our reading – my reading – in that world of the hunter-gatherer was meticulous, careful, attentive, cherishing every page of the book it found valuable, careful in preparing notes on the academically valuable ones, fussy in preserving the physical condition of the artifact. In 1970 I threw a paperback science fiction novel down the trash chute in my apartment building, because it was so bad. I was suddenly overtaken with guilt, for I was twenty-one years old and had literally never thought of doing such a thing before. Now I suspect I give away every year as used and surplus more books than I used to buy in a whole year.

So I read more cursorily more often, scrambling to keep up with the flood. On my Kindle, I call it "zooming" rather than reading – the rapid click-click-click that gets me through pages of half-written predictability as quickly as possible, and on to the next. Now that is a great change – in me, and in all of us. It has some implications.

First, one of our common chores, and one that librarians are well-suited to support, is what I might call the historic preservation of reading. That is to say, by the kinds of spaces and places and environments they make and build and staff and enliven, librarians can still show us and encourage us in reading practices that are increasingly challenged. Library spaces can and should be open and welcoming and collaborative – and some library spaces should be quite different. Those "preservation spaces" should be quiet and enclosed and comfortable and private. Some of the best of those spaces will be themselves old spaces that know how to be used that way, but many of those older spaces are now wired and alive with devices of various kinds. It would be useful to have spaces that are dead to the wired world, places where reading is the only activity.

Second, another valuable task that librarians can and should participate in is not so much research instruction as reading instruction. That instruction is not a thing of sitting and teaching, but a matter of exemplifying and demonstrating and encouraging. Much of the rapidly developing world has at best imperfect reading history as places of the written word and its highest and best uses. Many societies and cultures have relatively little history of some important kinds of reading: critical reading, reading with accountability for what one has read and what one says about
it, literary reading, and ludic reading. To foster cultures and communities of people who engage in the main practices of modern reading culture – whatever other cultures are being invented around us – is to offer an essential balancing function. That task will be very different in different libraries in different cultures, but a common conversation about that mission among or led by librarians could be very powerful.

And third, libraries will win credibility for their commitment to preservation of styles and modes by their equal commitment to innovation and reinvention. I strongly believe that we have not yet begun to theorize and understand what becomes of reading in the new age, nor have we really experimented with what we can do. Libraries as places of experimentation and demonstration will be as powerful as they can be as places of preservation.

What I am suggesting is that libraries now commit themselves more than ever to being places of action as well as deposit, of use as well as possession and access, and find their being as places and as beacons of inspiration for the kinds of reading that they know about, talk about, exemplify, and enable. The library that will survive is the one that is envied and admired and loved for what it offers. And that is no longer only (if it ever was) "content". It is the written word acting on people’s thoughts and lives.

POLICIES

So what are the policies that librarians should enunciate and support to make these missions real?

I can be brief and directive here, anticipating debate.

First, libraries can and must support discrimination: that is, discrimination among kinds of written works, with selection and preference of some and rejection of others. That is fundamental. There must be no omnium gatherum projects in libraries: let Google do that. Libraries select and selection means exclusion. Few other institutions can or will support that principle so firmly.

Second, libraries can and must support literacies. Not just literacy – though in many places, that is of great importance, but the literacies that come after first literacy. Libraries know about and can propagate the kinds of reading that make people free and thoughtful and inquisitive. They can and should talk about and embody and promote and protect the kinds of reading that matter. And they need not offer the materials for reading that does not.
Third, libraries can, must, and should support the commodification of services that they once owned uniquely. Knowing what to give up in order that (1) the task may be done more abundantly and cheaply by those who want to do that and (2) they may reserve their professionalism and their commitment to the written word and its readers for activities that really matter and make a difference. In other words, stop stocking videos. Let people investigate their travel plans or stock portfolios somewhere else. Those aren’t library strengths.

Fourth, stop worrying about price tags and focus instead on value. A great wave of enthusiasm is about in the land to make information of every possible kind as freely available as possible. That is a good enthusiasm and it is likely to be a very successful enthusiasm. It has already succeeded magnificently and the waves are running that way. But libraries don’t need to worry about such things. They can be pragmatic, because they know that some things have to cost a lot (rare treasures and the people and facilities that cherish them) and lots more things have to cost something. The librarian should not be fighting with publishers to make things free, though the librarian certainly should not overpay for anything; the librarian’s job is to make sure that the users and the funders they depend on understand the value of what the library does and work hard to make sure that resources are theirs to support that value. The rest will come. The greatest contribution librarians have made to human civilization is to bring together the resources that make their work possible, and that they must continue to do.

It remains a curious fact that for all the ideology of freedom and access in libraries, libraries have historically been anything but free for anyone. That is to say, I know of no serious library collections or communities that do not have some barrier to full access. Even an American “public library” of the best sort reserves its highest privileges for the citizens of the local political community that supports it; the Library of Congress is open in many ways to a nation and to the world, but it retains a “Members’ Room” set aside for the elected representatives of the Congress it was created to serve; and the greatest research libraries in the greatest universities are always importantly reserved in some dimensions for members of the university in question. To be sure, such restriction is often, indeed usually, accompanied by great generosity in opening doors and collections – but that generosity is rarely absolute. We live in a moment when the most important library work on access is not the work on finding out how to make better terms for the materials that are acquired. Markets and technologies and laws will shape that business in ways where librarians are frankly a small part of the constellation of forces at work. (Did librarians make the biggest difference in the copyright wars of the 1990s and after? No, the giant media barons did.) Rather, the librarian’s job is to make what the library does have as accessible to as many readers as possible – how to open their own doors to the greatest audience possible. That means doing the politics and the fundraising and the education needed. At the end of the day the greatest glory of a library is not
what it contains or what it has paid for what it contains, but who walks in its doors and who uses what it has and how shrewdly and creatively and wisely used its collections may be. That is the genius of the profession, a genius I think my poor prophecies here can anticipate and support and encourage. The librarian who makes it possible to read has a long future ahead.