Knowledge As a Network

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We are rapidly putting the Information Age behind us. Of course we rely on information and the machines that process it more than ever, but information is no longer our culture's dominant metaphor. Networks are. And that will change just about everything about libraries. We just don't know how.

The Information Age was—as was well-understood by the "Do not fold, spindle, or mutilate" crowd—about anticipating the needs of users by centrally assigning the metadata categories that would be tracked. The rest of the swirl of information was left outside the system. The Information Age's strategy for dealing with the overflow of information was to ignore most of it.

In this, it was in line with our culture's age-old strategy, for information overload has been a problem for us ever since we as a species needed to know more than could fit inside the head of any one of us. We have broken the world into know-able chunks and have set up a system of filtering and credentialing by which we can wisely use our relatively scarce resources for preserving and communicating knowledge. For this, books have been our primary medium. It is no accident that expertise comes in book-size chunks.

Now we have hyperlinks. Rather than trying to contain knowledge in a rectangular object we can hold in our lap, hyperlinks burst outwards, eager to connect to other ideas. The intelligence of our species continues its progress from our skulls to our books to our networks.

Knowledge increasingly is found at the network level, and thus now has many of the properties of the network, just as it used to have the properties of books. Knowledge-as-network benefits from the many

differences and disagreements it contains, rather than by settling matters. It assembles itself around the interests of the seeker, embedding those interests in the broadest context of what matters to us as embodied creatures embedded in a fragile world and a complex social ecology. Knowledge-as-network does not look all that much like the canonized knowledge of the era of books.

This makes us uncomfortable, as it should. The dangers are real. We can become unhitched from the fence-posts of authoritative facts on which we all agree. Hateful ideas can be amplified until they sound like truth. We can lose the commonality of culture that joined us, if only as an ideal.

And it challenges libraries deeply. If the basic post-Information Age strategy is to include everything, then the library's traditional curatorial function is transformed. Outside of special collections (the value of which will increase as more books are available digitally), the answer to the basic curatorial question "Should this be in our collection?" will always be "Yes." Not that it matters, because that question won't be asked of librarians but of the organizations—including at least one well-known corporation—building the distributed, global, digital collection.

Of course, as the digital collection grows, we will need ever more help finding the set of materials relevant to our needs. Librarians have skills we will continue to need. But librarians will be competing with everyone. Literally. Everyone can recommend works. Everyone can post the metadata about their own collections, aggregations, and searches, and metadata about everyone else's. Some people have incredible higher-level understanding of how to work the network, some are content-area experts, and some are random strangers who happened to unearth material that would otherwise never have been found by those doing directed investigations. We need them all. We will have them all. Librarians will certainly be in the mix. We will consult them not because they're librarians, but because they are so good at what they do.

That means we will consult librarians whether or not they are attached to libraries. It is apparent that much of what we used to look to libraries for we are already finding elsewhere. Building a collection.

Finding what we need in it. Finding what we didn't know we needed. Making at least rough organizational sense of the mass of knowledge confronting us. Librarians are good at that, but so are other specialists, and so are networks of experts, and so are social networks, and even some algorithms are pretty amazingly helpful.

So, what does that mean for librarianship as a profession and for libraries as institutions and structures? We don't know and we can't know. We are now inventing an indeterminate future together. We don't even have adequate e-book readers, so how could we possibly know what will be the long-term future of books, reading, and libraries?

But, it's actually not hard to predict the role of librarians ten years out. For the next decade, their primary job will be, I believe, to help us collectively design the networked knowledge system. Without librarians and what librarians understand, what we build would likely be less usable, less reliable, less diverse, less provocative. What we build without librarians would unnecessarily constrict our understanding and imagination, rather than exuberantly expanding them. This is especially true given that the system is being designed to a large degree by commercial entities. And that means the next ten years for librarians should be one of passionate creativity, but also of passionate struggle.

After that, we'll maybe be able to get a glimpse of the future of libraries and librarians.