I am deeply appreciative and honored to have been selected for the 2020 Miles Conrad Award from NFAIS and NISO. What a way to start a new decade! I was distraught when I realized that the award ceremony would be held during your conference on February 23-25, and that this conflicted with a long-standing commitment to be in Brazil at that time. I am thankful that I was allowed to participate in this asynchronous way, and to share some reflections on our work. I have been given three questions and about 15 minutes to comment:

When you started in library leadership, what were the pressing issues the information community faced and how have they changed over your career?

The answer for 46 years ago: funding, not enough, imminent technology, new collaborative strategies, and social unrest.

What has been the most disruptive change in information dissemination over your career, and how well or poorly have we, as a community, reacted to that change?

The answer: global scholarly communication, online learning, user managed applications, big data, streaming access, smart objects and systems. Not well.

What do you see as the biggest challenges faced by the library, publisher, and information intermediaries over the next 5 to 10 years?

- Democratization of creativity
- Born digital explosion
- Policy chaos: privacy, market monopoly, global intellectual property, intellectual freedom
- Diversity, equity, and inclusion
- Human machine symbiosis
- Blended reality

I have noticed over the last several years that my presentations at professional conferences have become more alarmist and strident. I have subscribed to the Emerson adage that, “Sometimes a scream is better than a thesis.” Prognosis exercises offer opportunities to set aside reason, to avoid evidence, and to speculate with abandon.

Library and publisher and information intermediary futures are particularly challenging to define, as the community of interest is narrow, and the implications of error are modest. Ken Kesey, author of One Flew Over the Cuckoo’s Nest, once commented in an interview, “You can count the seeds in the apple, but you cannot count the apples in the seed.”
We have entered a period of gross mutability, a state of constant change, of productive and powerful chaos, of hybrid strategies and maverick structures, of radical shifts in our traditional staffing, of massive leadership turnover, and of essential creativity in advancing individual and collective visions. There are in my view, three essential elements.

First, we must have hope, believe in and aspire to expanding relevance and impact.

Second, we must achieve power, to have authority, influence, and respect.

Third, we must focus less just on ideas, and more on action — getting things done. We must advance primal innovation, a basic commitment to risk and experimentation, and radical collaboration, moving beyond the kumbaya to more deep and systemic partnerships.

The library has always been a fundamental partner in the learning and research process. But key changes in the information, technology, economic, social, and political environments are challenging this relationship and raising critical questions about our value in the community. Do twentieth century skills still matter? Do students see the library as central to their learning? Do researchers still need libraries?

Do the new roles that libraries are advancing as aggressive consumers, intermediaries and aggregators, publishers and educators, creative and maker spaces, entrepreneurs, and policy advocates — do these present a refreshed opportunity for innovation and library centrality?

As we look out over the next decade, libraries will be increasingly defined as convener, enabler, distributor, advocate, and archive, and less as infrastructure, platform, repository, and portal. Resources and applications, recognizing that quality equals content plus functionality, will be directed more and more to the consumer. Open resources for learning, research, and recreation, and open source tools supporting innovation, collaboration, and productivity will be more prevalent in the global economy.

Self-publishing and niche technology development will dominate. Information policy wars will dictate national and global legal and legislative debates.

We will apply new knowledge to new resources to produce new goods and new services, that is develop the market. We will focus more aggressively on managing the costs and increasing the benefits, that is adding value. We will deliberatively think about challenges and unmet needs, that is seek solutions. Measured transformation will be key:

• to change in composition or structure, what we are and what we do.
• to change in outward form or appearance, how we are viewed and understood.
• to change in character and condition, how we do it.
I recall the wonderful Mel Brooks film *History of the World Part 1*. There is a great scene when Brooks as Moses is coming down the mountain carrying three large tablets. “Children of Israel, I have fifteen ...” He suddenly trips and one of the tablets crashes to the ground. He picks himself up and proceeds down the mountain, “Children of Israel, I have ten commandments.” I think we all applaud the loss of those five additional suggestions. Allow me to speculate what they were:

(1) Thou shall preserve the cultural and scientific record.

We are in trouble. The world is producing vast amounts of digitized and born-digital content. The volume, complexity, and dynamism of this information challenge force us to think creatively about its capture, organization, and long-term preservation and usability. We need the technologies, infrastructure, financial resources, shared responsibility, and the will. We have done a modest job at best preserving the analog record; we are failing in our management of the digitized record, including published e-journals, e-books, e-media and e-documents.

As for the explosion in born digital materials, some minimal activity, but no sustained programs and investments. This is an issue of integrity. We must maintain human records as complete, unimpaired, and as undivided as possible, and avoid the current state of repository chaos.

At the core of digital preservation and archiving are four principles:

- We must hold the content, that is archive as repository, because we cannot preserve what we have not collected.
- We must enable access, the repository as persistence.
- We must secure the content, that is archive as curation.
- And we must care for the content, the repository as steward.

(2) Thou shall fight the information policy wars.

We must more rigorously represent and advance the public interest and the needs of users and readers in critical information policy areas in national and global forums.

We must embrace an expanded role in the legislative, legal, and political arenas. The policy areas of interest are numerous and complex, and include:

- intellectual freedom and concerns over censorship.
- privacy and civil liberties.
- access to government information.
- network neutrality and telecommunications policy, open access to research and educational content, copyright/intellectual property.

Copyright is an area of particular concern. Broad exceptions for libraries like fair use, though strengthened by recent court decisions, and particular limitations that allow for such things as copies for users, interlibrary loan, access for the print disabled, and preservation are under threat. There is increasing focus on international agreements and treaties that influence
national laws. More and more of the publications and databases being provided by libraries are covered under contract law and not the public law of copyright.

Technological controls and digital rights management systems are reducing the ability to apply fair use and other valuable exceptions.

(3) Thou shall be supportive of the needs of your users and readers.

We are developing a more sustained and actionable understanding of our user communities. Our users are probably far more diverse that we realize. We intersect with our users way beyond the walls of our physical spaces. The current tools for measuring, surveying, observing, and listening to our users are inadequate. Users want more and better content, more and better access, convenience, new capabilities, that ability to manage costs, to participate and control their information environments, and individual and organizational productivity.

Users want technology and content ubiquity. They want technological sandboxes, places for experimentation and fun, but also privacy spaces, places with protection, and anonymity. They want support services, help when needed at appropriate levels of expertise. They want guidance to community resources, and assistance with health issues, jobs, and careers. They want community.

How can we migrate away from the insanity of ROI and focus more on the human objectives, the qualitative benefits?

How can we help users attain their goals, achieve well-being, realize benefits, move forward, make personal connections, participate fully, and have significant effect in their worlds through us?

How do we draw a line between what we do and student/citizen success, faculty/researcher productivity, the campus/community economy, health, values, and reputation?

(4) Thou shall cooperate in new and more rigorous ways.

Cooperation is part of our DNA, but we need more radical strategies for collaboration.

We need deeper integration of operations in areas of mass production, where we have hopeless redundancy.

We need early co-investment as we build new infrastructures and new initiatives.

We need a commitment to a shared network of centers of excellence. From the conditions of knowledge scarcity to the oppression of information overabundance, cooperation will be a constant for service, success, and survival.
Our future health will be increasingly defined not by sharing resources on the margins, but by new and energetic relationship and combinations, an in innovative entrepreneurial partnerships.

We are in a period of polygamy, of rampant partnering and combinations. Are we ready to move into a period of parabiosis and synergy, with selective but deep collaborations? And are we advancing to a period of particularism, with powerful, disciplinary, service, and technology and workflow specializations and interdependencies?

We must move beyond the rhetoric of conflict and parallelism that has defined the relationships among libraries, publishers, and information intermediaries.

(5) Thou shall work together to improve knowledge creation, evaluation, distribution, use, and preservation.

Researchers have the urge to share the results of their investigations through publication. This has been the way they communicate with peers and students around the world. It is part of the academic culture in which they have been raised. It is the way their ideas and contributions are preserved for future generations. It is the source of prestige, recognition, and remuneration.

Researchers are telling us they need support in several critical areas. They are seeking assistance in navigating, analyzing, and synthesizing a literature they simply cannot keep up with. Especially when they move into new and multi-disciplinary fields. They want guidance on working in an open research environment with scholarly exchange that is continuous and meaningful. They require more robust expertise databases, subject ontologies, and researcher information systems.

They expect more consultation and support with research data management. They want help with awareness and integration of disparate sources and grey literature. They argue for an informationalist and partner model for support of their work.

Researchers remind us that they work in diverse disciplinary communities. They emphasize the importance of trust, credibility, organized skepticism, and meritocracy in the scholarly process. They recognize that there is a new economics governing research, what is considered important and what is supported. They see the power of digital and networked information, big data, to produce wider vertical integration in research, new modes of discourse, expanded readership of research results, and a democratization of the research process more reliant on open and free exchange.

How can we together better support these shifting research conditions?

I hope these ideas are provocative and useful and will seed the panel conversation that will follow.