

# **The Next Decade of the Internet Revolution: Will the Internet Kill Sport Libraries?**

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## **Introduction**

When Gretchen Ghent asked me to speak here today my first impulse was to begin working on a list of predictions about the future of sport information. As I began to do some reading and thinking about the topic, however, it quickly became clear that I might want to lower my ambitions. Attempting to predict the future is a notoriously imprecise undertaking. The road to 2005 is littered with incorrect predictions about how the world would look in the early years of the new millennium.

It also occurred to me that speaking to an international group of sport information specialists and presuming to tell them what their profession would become overlooks the fact that sport information is not headed toward some preordained future. The future of sport information will be determined by the decisions people make, and those of you in the audience will be among the people making those decisions.

So, today I am not going to attempt the intellectual parlor trick of correctly predicting ten things about the future. Rather, I want to discuss - in a way that is more speculative than predictive - what I believe will be the overriding issue for us over the next ten years. Specifically, I want to examine the impact of the Internet on sport libraries, archives and information centers.

I approach this topic somewhat apologetically because it is not a particularly original one. Anyone with even a cursory knowledge of librarianship knows that people in the field have been preoccupied with the topic of the Internet since the mid-1990s. Nevertheless, the Internet remains an important, fundamental and unresolved issue.

Widespread public use of the Internet is about a decade old. The emergence and maturation of the Internet in the past decade has had a remarkable impact on sport information producers, sport information consumers and those of us who gather and organize sport information to facilitate other people's access to it. The impact of the Internet will continue to evolve during the next ten years. The way in which sport information managers respond to the opportunities and challenges of the Internet will largely determine what sport libraries, archives and information centers become.

## **Librarians' Reactions to the Internet**

Librarians, generally speaking, have responded positively to the Internet, but many also have expressed reservations. This ambivalence does not derive from computer phobia. Librarians have used computer-based information systems for more than thirty years. However, database systems that appeared in the 1970s such as LexisNexis, DIALOG and BRS, as well as various local, regional and national online catalogs were created with librarians in mind. They put librarians in control, or at least gave them a central role in guiding other people's usage.

By contrast, the browsers and search engines that made the Internet and more specifically the World Wide Web broad-based public phenomena in the 1990s, were not developed for librarians, but rather for the general public. And, the newly empowered public embraced the new technology enthusiastically. That fact, combined with advancements in electronic publishing and the increased ease with which paper documents could be converted to digital format and made full-text searchable represented a threat not only to the authority and expertise of librarians, but to the very concept of traditional libraries as institutions.

Much of the discussion among librarians and archivists regarding the Internet is driven, I think, by an underlying and often unspoken fear that the emergence of the Internet as a popular, mass technology will render libraries and archives, and the people who work in them, obsolete. This is a reasonable concern that understandably causes people to worry their own futures and the fate of the institutions that they have helped to build.

Libraries and information centers of all kinds, whether they are general or specialized, have felt the impact of the Internet. Before considering the effect of the Internet on sport information centers, it would be instructive to consider the broader discourse about the impact of the Internet on the future of general-interest libraries and archives.

## **Debate About the Future of Libraries**

The debate about the future and survival of libraries predates the Internet. The suggestion that libraries could be replaced by automated information systems is at least a half-century old. In 1945, for example, Vannevar Bush proposed his "memex" system, a machine-based research system that looked very much like today's hypertext.<sup>1</sup> Bush and others who believed that libraries were unable to properly manage the explosion of information in the sciences continued to propose automated solutions for the next several decades. In 1976, at a conference in Finland, F. W. Lancaster predicted a paperless research environment. Lancaster expanded on this theme in his 1978 book, *Toward Paperless Information Systems*.<sup>2</sup> Among Lancaster's predictions was the assertion that "the library as an institution housing physical collections would eventually become obsolete." In his 1985 essay, "The Paperless Society Revisited," Lancaster held to earlier predictions, adding, "we are so far along the road to a paperless society that it is difficult to see what might occur that would permanently reverse the trend."<sup>3</sup> In a similar vein, about a decade later, as the Internet gained in popularity, Gordon Bell and Jim Gray of

Microsoft, predicted that in fifty years “almost all information will be in cyberspace . . . including all knowledge and creative works. All information about physical objects including humans, buildings, processes, and organizations will be online. This trend is both desirable and inevitable.”<sup>4</sup> The emergence of the widespread use of the Internet in the mid- and late-1990s added urgency to the existing debate about the future of libraries.

The discussion that ensued is perhaps best understood as a continuum of opinions.<sup>5</sup> At one end are those who predict that libraries will cease to exist. The end-of-libraries argument maintains that the Internet and related digital resources will make libraries irrelevant. Information, it is argued, will be available to anyone anywhere who has the necessary hardware and software. People will no longer be dependent on going to a physical place that we now call a library. Young people, particularly in affluent nations, are growing up in an electronic information environment. The only finding aids and research tools they use are electronic ones. These “New Millennials,” as they are called, are technologically savvy and simply will not settle for anything less than the efficiency and user-friendliness of online documents, full-text search engines and hypertext. Just this month, David A. Bell, a historian at Johns Hopkins University, cogently articulated the end-of-libraries thesis when he wrote that because of “the Internet Revolution . . . scholarship is fast moving toward a bookless future.” Bell continued, “Libraries, in turn, are likely to turn increasingly into virtual information retrieval centers, possibly located thousands of miles from the readers they serve. The advent of “bookless or largely bookless libraries,” wrote Bell, is “too large and powerful a change to be held back.”<sup>6</sup>

Proponents of this line of thinking, at least in the United States, buttress their argument with claims that the usage of libraries and paper-based information sources declined rapidly as the Internet became increasingly prominent. They point to statistics like the ones published in a 2001 *Chronicle of Higher Education* article titled “The Deserted Library” indicating that library gate counts and book circulation had dropped dramatically since the mid-1990s.<sup>7</sup> Shortly after the publication of “The Deserted Library,” one college administrator in the United States reportedly told the college’s library director, “I don’t believe we need libraries.”<sup>8</sup>

On the other side of the continuum are people who acknowledge that while the information environment is changing rapidly and will continue to evolve, reports of the death of libraries are greatly exaggerated. Their argument rests on several points that might be summarized as follows. First, the wholesale switch from paper to digital format is neither desirable nor feasible. Books are a flexible, functional, and user-friendly technology. Even Bill Gates has noted that at Microsoft if a document is more than three or four screens long, people typically print it on paper. Second, there is no compelling evidence that digital collections are less costly to build and maintain than paper ones. The retrospective digitization of collections is prohibitively expensive for many institutions. And, conversions sometimes involve insurmountable legal barriers. Third, and perhaps most importantly, people are social animals. They seek places to congregate and interact socially and intellectually. Public and academic libraries, especially academic libraries, provide such places. The library as a “place” built of bricks and mortar, therefore, will continue to have value.<sup>9</sup>

People who doubt that the library “as a place” will disappear provide their own data indicating that after a decline in the mid-1990s, many libraries, especially academic libraries that attempted to accommodate the online needs of students and that consciously promoted themselves as social centers, actually reported increases in visits and book circulation. Yet, even these skeptics acknowledge that library usage patterns have changed as a result of the Internet. For example, Andrew Richard Albanese, writing in *Library Journal*, in 2003, noted that academic libraries in the United States were reporting declines in reference questions and the use of periodicals. One academic library cited by Albanese recorded a 76 percent drop in periodicals usage between 1993 and 2003; another reported an 80 percent decline.<sup>10</sup>

Those who believe that libraries have a future maintain that many libraries already have become hybrid libraries - sometimes referred to as “gateway” libraries - that provide a mix of electronic and paper-based sources. Hybrid libraries, as envisioned by several writers, will be physical places. That is, they will be buildings that contain printed materials as well as the hardware and software needed to use online information. They will aggregate electronic sources and be staffed by librarians who are experts in the use of those sources. Chris Rusbridge, a proponent of the hybrid library concept, contends that hybrid libraries represent more than “an uneasy transitional phase between the conventional library and digital library.” Rather, the hybrid library is “a worthwhile model in its own right which can be usefully developed and improved.”<sup>11</sup>

It remains to be seen if Rusbridge is correct about hybrid libraries being something more than a transitional phase on the way to an all-digital future. It seems unlikely that during the next decade of the Internet Revolution any large public or academic library will completely discontinue the use of books. However, the long-term future is less clear. Similarly, it is unclear, even in the short term, how hybrid libraries will integrate and balance their paper and electronic resources.

### **Differences Between Sport Collections and General-Interest Collections**

As we consider the broader discourse regarding public and academic libraries, the question for us as sport information managers is whether there are things about sport collections that will cause them to evolve differently from larger general-interest collections. In fact, there do seem to be certain characteristics and political realities that may push sport libraries and information centers to rely sooner and more heavily on electronic information sources than would be the case in a typical public or academic library.

One difference is that sport collections tend to be smaller. This has two implications. First, the relatively small size of a specialized sport collection makes digitization of existing paper information sources more feasible than is the case with a public or academic collection. Second, many titles in smaller sport collections also exist in bigger academic and public library collections. As projects such as Google’s conversion of selected major academic library holdings to digital format move to completion, many

sport libraries may find that significant portions of their collections are suddenly in cyberspace.<sup>12</sup> This will provide a reason for doing away with the existing and now redundant paper-based collection.

Another difference between sport libraries and academic libraries is that sport collections do not have the benefit of the nostalgia factor. The decision makers who work in universities come from a generation that went to university and began careers before the Internet was popular. For these people, who have made a career of university life, the library has a nostalgic attraction that motivates them to protect aspects of the traditional library. This is less true of sport libraries, at least sport libraries that exist outside of a university or college. Many sport collections have been created - to put it bluntly - for the purpose of helping countries win medals in international sport competitions. If sport administrators perceive that a digital library can do this as well as a traditional library, they will have no qualms about getting rid of large paper collections.

The specialization inherent in a sports collection also may have consequences. Many sport libraries, particularly those devoted primarily to supporting the efforts of coaches and athletes to win more medals, focus their collection development efforts on science and sports medicine. If it true, as several writers have asserted, that the research in science has moved toward digital resources more quickly than research in the humanities, many sport libraries will become part of the trend.<sup>13</sup>

Another fact of life is that some sport libraries exist to support sport museums or halls of fame. This too may create pressure to move toward a digital solution. In a combined library-museum setting, the museum is seen as the most important "place," as the place that provides the social experience. In a fight for limited space, the museum, rather than the library, archive or documentation center will have the advantage.

### **Symbiosis Between Sport and the Internet**

Perhaps the most important distinguishing characteristic of sport libraries affecting their future development is the symbiotic relationship between sport and the Internet. It often has been noted that the Internet is almost ideally suited to delivering and consuming sport information. Sport is visual. The movement of human bodies and objects is intrinsic to sport. Sound is an important component of sport. Sport is quantifiable, giving birth to a multitude of statistics. And, sport generates news.

A website is a multimedia delivery tool. A sophisticated website combines the power of print media, radio and television by providing, in one place, text, graphics, moving images and sound. The Internet can provide live coverage of sports events, and it can archive these events as audio and visual files. Because websites are computer-based, webmasters can update statistics in virtually real time. As a news delivery system, the Internet is as fast as any other medium and faster than most. Finally, the Internet offers to sport consumers a number of interactive capabilities that other media forms cannot provide.

In addition to the inherent characteristics of sport and the Internet, the historical development of sport also has contributed to the symbiosis. The Internet is a global technology whose development as a popular tool has been greatly influenced by media companies. Sport itself is a highly globalized enterprise that historically has exploited technological innovations and consciously has sought to create a close and mutually beneficial relationship with media companies. The historical nexus of sport, globalization, technology and mass media has shaped the present-day sport information environment.

It is significant and revealing that sport organizations, sport media companies and sport libraries were relatively early adopters of Web-based technology. The International Olympic Committee (IOC), the United States Olympic Committee (USOC), the IAAF, FIFA, ESPN, the National Sport Information Centre of Australia and the Amateur Athletic Foundation Sports Library were among the many sport organizations that launched websites in 1995. The media company Allsport Photography (now owned by Getty Images) launched its website for the delivery of digital photographs even earlier, in 1994.

In 1995, or earlier, an organization with a website was the exception rather than the rule. As late as November of 1995, a writer in the *New York Times* observed that the Internet “appears to be on the verge of becoming a mass medium.”<sup>14</sup> Quantification of the growth of the Internet is fraught with difficulties, but by almost any available estimate, a website launched in 1995 is now well within the first decile of the first 1 percent of all websites produced to date.

The decision by influential organizations in sport to establish an early presence in cyberspace reflected longstanding attitudes within the culture of sport regarding technology, mass media and the geographic scope of sport. There are a number of historical examples that would illustrate this point, but no example does so more clearly than that of the Olympic Movement.

Pierre de Coubertin’s concept of “progressive internationalism” was a guiding value of the early Olympic Movement that John Hoberman has called an “original contribution to the early doctrine of globalization.”<sup>15</sup> Although Coubertin’s successors ultimately rejected some of his other strongly held beliefs on matters such as amateurism and the role of women, the Olympic Movement and sport generally have institutionalized his global vision.

The Olympic Movement also has been a locus of technological innovation. Miquel de Moragas has noted that historically “the Olympic Games have been a privileged space” for the introduction of information technologies.<sup>16</sup> Television, timing equipment, specialized cameras and computer-based information systems have had an Olympic connection at early stages of their development.

The Olympic penchant for technological adventurousness did not develop in a vacuum. Much of the impetus came from the desire of Olympic leaders, inspired by a variety of

motives, to tell their stories to national and worldwide audiences. They looked to mass media, employing innovative technology, as natural allies in this effort.

The emerging relationship between the Olympic Movement and mass media was evident from the beginning. The official report of the 1896 Athens Games thanked the “foreign press” for having “contributed to the success of the games.” At the 1908 London Games, the Olympic Stadium included space for a pressroom. The organizers of the 1912 Stockholm Games established a press task force that met twenty-five times in the year before the Games.<sup>17</sup> Subsequent efforts to facilitate media coverage of the Games have grown to the point where in Athens in 2004 accredited media personnel outnumbered accredited athletes 2 to 1.

So, by the 1990s, sport leaders in the Olympic Movement and elsewhere in sport were products of a decades-old sport culture that was global in outlook, accepting of technological innovation and eager to exploit mass media. Sport administrators as well as sport journalists and sport information managers were quick to grasp the possibilities of the Internet as it emerged as a mass information medium. As a result, the Internet and sport in just a short decade have become inextricably linked. In a very real sense, the Internet now is an important part of the social institution of sport.

Much of what we call sport information is available now only on the Internet, or is so easily accessible on the Internet that no other form of acquisition makes sense. The Internet, primarily through free websites, but also through an increasing number of pay-for-use sites, provides a wealth of primary and secondary information sources in a variety of formats that are needed by sport researchers of all kinds. In short, sport libraries and information centers aspiring to high levels of service and collection development must have a sustained and systematic interaction with the Internet.

That said, it is important to acknowledge that the Digital Divide, separating affluent individuals and nations from those too poor to take full advantage of the Internet, remains an unfortunate reality. The diffusion of Internet technology throughout the world has been uneven. While there are now an estimated 1 billion Internet users worldwide, the per capita usage of the Internet varies dramatically from country to country. The Digital Divide exists within the world of sport. For example, although the IOC and the USOC launched websites a decade ago, and although every international sport federation on the Olympic program has a website, a majority of the 201 National Olympic Committees (NOCs) do not have functioning websites. Those NOCs that lack websites correspond closely to the countries and regions where the Internet is least-used on a per capita basis.

It is difficult to know how the Digital Divide will be closed, although it seems likely that mobile wireless technologies such as cell phones and personal digital assistants will play a role. It also is hard to know when the Digital Divide will narrow. It is certain, however, that while that process occurs, the development of Web-based sport information will not stand still. When the day comes when the Internet is more universally accessible, the Internet will be an even more important component of sport information than it is today. In other words, regardless of where a sport information center is located

geographically, the Internet will be a required information resource if not the most important information resource.

## Conclusion

At the beginning of this presentation, I posed the question Will the Internet kill sport libraries? In truth, I do not know whether the ‘Net will make sport libraries extinct, but I think it is clear that sport libraries – at least in the traditional sense of the word “library” - are on the endangered species list. And, if sport libraries are endangered, so too are sport librarians. So, I will close by suggesting that if sport information managers wish to remain relevant, they must become more proactive and creative in promoting the transition of sports information from a predominantly paper-based environment to one that is primarily, or exclusively, digital.

## Notes

1. Vannevar Bush, “As We May Think,” *Atlantic Monthly* (July 1945): <http://www.theatlantic.com/doc/194507/bush>, downloaded April 28, 2005.
2. F.W. Lancaster, *Toward Paperless Information Systems* (London: Academic Press, 1978). Mark Bowles’s, “The Information War: Two Cultures and the Conflict in Information Retrieval, 1945-1999,” (1998): [http://www.chemheritage.org/explore/ASIS\\_documents/ASIS98\\_Bowles.pdf](http://www.chemheritage.org/explore/ASIS_documents/ASIS98_Bowles.pdf), downloaded April 22, 2005, provides an excellent analysis of the culture clash between librarians and scientists.
3. F. W. Lancaster, "The Paperless Society Revisited," *American Libraries* 16 (September 1985): 554.
4. Gordon Bell and Jim Gray, *The Revolution Yet to Happen*, Technical Report MSR-TR-98-44, (Redmond, WA: Microsoft, March 1997): <http://research.microsoft.com/~gray/Revolution.doc>, download April 25, 2005.
5. For a good summary of opinions on the issue see Gregg Sapp and Ron Gilmour, “A Brief History of the Future of Academic Libraries: Predictions and Speculations from the Literature of the Profession, 1975 to 2000 – Part Two, 1999 to 2000 -,” (2003): [http://muse.jhu.edu/demo/portal\\_libraries\\_and\\_the\\_academy/v003/3.1gilmour.html](http://muse.jhu.edu/demo/portal_libraries_and_the_academy/v003/3.1gilmour.html), downloaded May 6, 2005.
6. David A. Bell, “The Bookless Future: What the Internet is Doing to Scholarship,” *New Republic* (May 2 & 9, 2005): 28.
7. Scott Carlson, “The Deserted Library: As Students Work Online, Reading Rooms Empty Out – Leading Some Campuses to Add Starbucks,” *Chronicle of Higher Education* (November 16, 2001): <http://chronicle.com/prm/weekly/v48/i12/12a03501.htm>, downloaded May 7, 2005. Although some librarians interpreted Carlson’s article as predicting the demise of academic libraries, Carlson himself made the point that by accommodating students’ desires to have online resources and a social gathering place on campus, academic libraries could attract users.



8. Andrew Richard Albanese, "Deserted No More: After years of Declining Usage Statistics, the Campus Library Rebounds," *Library Journal* 128(7) (2003): 34.
9. Albanese. John Seely Brown and Paul Duguid, *The Social Life of Information* (Boston: Harvard Business School Press, 2000). Alice Harrison Bahr, "Library Buildings in a Digital Age, Why Bother? Defending New Library Buildings and Additions to College Administrators and Trustees," *College & Research Libraries News* 61(7) (2000): 590-91.
10. Albanese, 36.
11. Chris Rusbridge, "Towards the Hybrid Library," *D-Lib Magazine*, (July/August 1998): <http://www.dlib.org/dlib/july98/rusbridge/07rusbridge.html>, downloaded May 2, 2005.
12. Barbara Quint provides a good account of librarians' reactions to the Google conversion project in "Google's Library Project: Questions, Questions, Questions" (December 2004): <http://www.infoday.com/newsbreaks/nb041227-2.shtml>, downloaded May 14, 2005.
13. Bell, 28. Andrew Odlyzko, "Tragic Loss or Good Riddance? The Impending Demise of Traditional Scholarly Journals," Condensed version, (July 16, 1994): <http://www.virtualschool.edu/mon/Academia/DemiseScholarlyJournals.html>, downloaded May 10, 2005.
14. John Markoff, "If Medium is the Message, the Message is the Web," *New York Times* (20 Nov. 1995): A1.
15. Pierre de Coubertin, *Olympism: Selected Writings* (Lausanne: International Olympic Committee, 2000): 209. John Hoberman, "Toward a Theory of Olympic Internationalism," *Journal of Sport History* 22(1) (1995): 22.
16. Miquel de Moragas, "Internet and the Olympic Movement," (2001): [http://multimedia.olympic.org/pdf/en\\_report\\_58.pdf](http://multimedia.olympic.org/pdf/en_report_58.pdf), downloaded March 14, 2004.
17. Pierre de Coubertin, Timoleon J. Philemon, N. G. Politus and Charalambos Anninos, *The Olympic Games, Second Part B. C. 776. — A. D. 1896. Second Part, The Olympic Games in 1896* (Athens: Charles Beck, 1897): 104. Theodore Andrea Cook, *The Fourth Olympiad: Being the Official Report of the Olympic Games of 1908 Celebrated in London under the Patronage of His Most Gracious Majesty King Edward VII and by the Sanction of the International Olympic Committee* (London: British Olympic Association, 1909): 12. *The Fifth Olympiad: The Official report of the Olympic Games of Stockholm, 1912*, edited by Erik Bergvall; translated by Edward Adams-Ray (Stockholm: Wahlström & Widstrand, 1913): 242.