Unintended Consequences: Unlimited Access, Invisible Work and the Future of the Information Profession in Cultural Heritage Organizations

by Paul F. Marty

Museum Informatics: Something New, Something More

EDITOR'S SUMMARY

Information professionals are challenged to deliver simple yet expansive results for the end user, who is typically unaware of increasingly complex systems behind the scenes. Visitors to libraries, museums and archives expect free and unlimited access to resources, but know little of the museum as an information source and the information professional as a service provider, compiling, organizing and delivering the resources of cultural heritage organizations. Changing mindsets are necessitating a change in the ways these organizations interact with visitors, prompting the need for more active engagement with resource users and even collaboration in developing resources. While technological change is fairly easy, sociological change is harder. Information professionals must challenge long traditions and deeply held philosophies to meet public expectations for expanded access to museum resources. But they must also advocate for their own contributions, using socio-technical skills to leverage their work through new platforms and channels to gain broader community recognition, respect and value.

KEYWORDS

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In early 2009 a team from Google took to the streets of New York to promote their new web browser, Chrome. Standing in Times Square, they asked more than 50 people, "What is a browser?" and recorded the results (www.youtube.com/watch?v=o4MwTvtyrUQ). Fewer than one in 10 people interviewed that day knew what a browser was, nor did they understand the difference between a browser and a search engine. This lack of understanding does not necessarily hinder information access. Average people on the street may not know what a browser is or how it works, but they know the basics of using one to access the web.

Library and information studies (LIS) students spend a great deal of time studying the fine details of things that many people may not know exist but that many people depend upon every day to make their lives better. It may not be necessary to know who Eugene Garfield is to search the Internet, but it is, if one wants to make those search algorithms better. When LIS students explore the concepts, theories and models of how people look for information, they are not just preparing for academic and professional careers; they are preparing to lead what is essentially a double life. To move knowledge forward, information professionals need to be able to understand the nuances of what is happening behind the scenes, while making the front end as seamless as possible for an audience that does not know what a browser is.

Information professionals working in libraries, archives, museums and other cultural heritage organizations frequently find themselves providing information to people who want to use their resources, but who have little interest in knowing where those resources come from and no desire to learn anything about the steps necessary to make those resources available. While this situation is not new, it has been exacerbated by recent trends and

technologies. Today's information professionals interact with their colleagues through increasingly sophisticated practices and technologies designed to improve information organization and access behind the scenes, while on the front lines, they strive to meet the needs of a public that is not only increasingly unaware of how their needs are being met, but that is also expecting almost unlimited access to information.

Unlimited Access

Visitors to today's libraries, archives and museums have access to seemingly unlimited information resources, online or in person. Cultural heritage organizations have opened up their collections to the world in a way that is not only without historical parallel, but is also, for the most part, offered in a way that users perceive to be free. Yet as information professionals strive to keep up with their users' constantly changing needs and expectations, they face challenges that threaten not only libraries, archives and museums, but all who are interested in promoting the digital humanities. Paradoxically, the harder information professionals work to provide simple, direct and almost unlimited access to information, the harder it becomes for the public to understand the information professional's value to society.

Despite decades of scholarship on the challenges of disintermediation (see, for example, Downie, [1]), it remains difficult to explain that providing direct access to information not only does not make information professionals unnecessary, it makes them more important while making their jobs more difficult. How does one explain the role of the information professional to people who argue that libraries are unnecessary because of the Internet when they do not understand what librarians do behind the scenes to make information organized, accessible and findable? How does one explain the role of the information professional to people who argue that universities are unnecessary because of *Wikipedia* when they do not understand that the purpose of education involves more than the teaching of facts? How does one explain the role of the information professional to people who demand comprehensive access to information resources spanning all types of collecting agencies when they have no idea that libraries, archives and museums are fundamentally different institutions

with different missions requiring different approaches to information organization and access behind the scenes?

It is important for cultural heritage information professionals to address these questions because the questions have developed and evolved alongside a critical change in mindset that is shaping the way cultural heritage organizations interact with their visitors in the information age. Just as LIS professionals have shifted their focus away from the "user in the life of the library" to the "library in the life of the user," cultural heritage information professionals have engaged in a similar shift from the "visitor in the life of the museum" to the "museum in the life of the visitor." Anytime, anywhere access to information – particularly digital information – brings with it a philosophical shift in interaction, where assessing the role of the library in a community means doing more than counting circulation records, and assessing the role of the museum in a community means doing more than counting the number of visitors who walk through the door.

Over the past few decades, this idea of the "digital museum in the life of the user" has spread through museums and other cultural heritage organizations [2]. Museum researchers and practitioners are increasingly exploring how museum visitors perceive the integration of the museum's information resources into the sociocultural fabric of their everyday lives. Cultural heritage information professionals understand that it is not what their visitors do in the institution that matters, but the role these institutions play in their visitors' lives outside the museum. It is no longer sufficient to provide access to limited resources inside the museum; today's visitors expect unlimited access to information resources, where they want it, when they want it.

From a technological perspective, meeting this demand becomes easier every year – relatively, conceptually and technically speaking. Advances in technological capabilities continue to make it easier, faster and cheaper to provide access to information across multiple platforms and environments. As the barrier to implementing a particular technology gets lower and the reward for getting over that barrier gets higher, museums and other cultural heritage institutions are increasingly able to provide more visitors with direct access to resources through web browsers, reach more visitors on the

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go through their smart phones and engage with more visitors using augmented reality and mobile computing.

From a sociological perspective it is relatively more difficult to quantify the effects these changes are having on museum visitors and museum professionals. While starting a Facebook page is easy, maintaining it can be time-consuming, determining its impact on museum visitors can be challenging and figuring out best practices for using social media to reach audiences and improve lives can be extremely difficult. New technologies are not only changing people's lives; they are transforming the museum's ability to provide access to resources in innovative, almost unimaginable ways. These changes are having profound effects on cultural heritage organizations and the information professionals who work there.

Invisible Work

Researchers and practitioners have been discussing the changing role of the cultural heritage information professional for decades [3]. It is increasingly clear that the driving factor behind these changes is not technology, but rather an evolving philosophical mindset about the responsibilities of cultural heritage information professionals in terms of information access and provision. Today's museum professionals are working toward a world in which people engage with museums, their content and their collections in a virtuous circle where visitors are encouraged to form lifelong relationships with museums, visiting in person when they can and visiting online when they cannot [4].

Developing technologies that encourage museums to reach out to engage their visitors, as their visitors reach out to engage them, is not easy. We want our institutions to become transparent, where the interface goes away and we engage directly with what is increasingly viewed as our art, our history, our culture and our collections. Efforts to achieve this level of engagement tend to be distributed and frequently rely on the use of social media. Recent advancements in social media platforms and technologies have been groundbreaking and include such activities as social tagging, personal digital collections and the involvement of users in the co-construction of digital knowledge. In an attempt to "unlock the museum" [5], numerous institutions are involving their visitors in distributed annotation and collection building tasks, from transcribing historic restaurant menus at the New York Public Library (http://menus.nypl.org/) to helping Oxford University decipher the Oxyrhynchus papyri (http://ancientlives.org/).

Encouraging this type of engagement on the part of information professionals and users can be challenging, not only for technical reasons, but also because of the philosophical issues involved. For years, the museum perspective was, "If you want to look at our collections, you need to follow our rules." Changing philosophies from one of controlled access to one of open access is difficult and can require astonishing conceptual leaps at the individual level. Implementing these changes at an institutional level can be even more time-consuming, and even policy changes that seem relatively straightforward can take years to implement.

For example, recent announcements from the Los Angeles County Museum of Art, Walters Art Museum and Yale University "to make high-resolution images of art from their collections available for anyone to use, for any purpose, copyright-free" [6] illustrate the latest accomplishments in the ongoing efforts to improve access to images of works of art in the public domain. Despite these impressive achievements, it is astonishing how many barriers still exist that prevent the public from accessing museum images, more than a decade after the landmark Bridgeman v. Corel ruling (1999) [7] made it clear that images of works of art in the public domain are not copyrightable. Despite years of scholarship exploring the legal, fiscal and moral responsibilities of museums with respect to public domain art [8, 9], there remain many collections held hostage from the public, not by technology problems, but by the challenges of grasping the social changes involved with acts of this magnitude.

Another example can be found in the Flickr Commons project, which was designed to increase awareness of and access to publicly held images with "no known copyright restrictions" (www.flickr.com/commons/). Since 2008, dozens of museums and other cultural heritage organizations worldwide have contributed thousands of images from their collections to Flickr, and there is no question that these images have reached an extremely wide audience. According to the Smithsonian Institution, images uploaded

to the Commons received as many views in three months on Flickr as they had during the previous five years on the Smithsonian's website [10]. On the other hand, despite some initial hopes that increased views on Flickr would result in increased traffic back to the museum's website, the Smithsonian found that this reference was not the case; while Flickr users were delighted to have access to images, they had little interest in learning more about the institutions making the images available.

There is a trade-off here that can be difficult to accept. Not everyone is willing to justify this trade-off by arguing that at least by our putting our images on Flickr, millions more have seen our images than if we had left them on our institutional website. Not everyone is willing to say they are happier knowing more people are using their resources on social networking sites such as Flickr, when the work they put into making those resources available remains largely invisible and the average user of those resources remains largely unaware of the institution that contributed them. There are consequences involved in accepting such a trade-off, for museums and cultural heritage organizations in particular, as well as the digital humanities writ large. And the choices that cultural heritage information professionals make in handling these consequences will drive the future of the information profession in cultural heritage organizations.

Unintended Consequences

Consider, for example, a hypothetical museum director exploring social media options for his museum. Looking on YouTube, he is surprised to find hundreds of amateur videos posted about his museum. Short video clips, typically shot with cellphone cameras, depict visitor after visitor essentially saying to their friends online, "Look at me! I'm at this museum!" Our hypothetical museum director, faced with this new knowledge about the realities of social media, might respond in one of two ways. He could say, "This is terrible! How dare these people post video clips of our museum without our permission! How can we shut this down?" Or, he could say, "This is terrific! These people must really love our museum! How can we encourage this?"

Advocates for the role of social media in museums clearly hope that this hypothetical director chooses the second option. If museum professionals want to give their data new life, so the argument goes, they need to set their data free and see what comes back. The idea that opening up the museum means opening up possibilities is an admirable sentiment, but there is also a danger here – the danger of opening up access while your work to create high quality, well-organized resources remains relatively invisible and your efforts largely uncredited. This invisibility is a problem in particular for information professionals working in libraries, archives and museums, in part because the information profession is at its core a service industry. Combining the rising expectations of museum visitors with the service philosophy that drives the information profession can result in serious unintended consequences.

Information professionals – especially LIS students and faculty – tend to be idealistic: they are happy if someone is simply using the resources they have created, and often the last things they think about are money, credit and other economic realities. As museums continue to dive deeper into the social media pool, the knowledge and satisfaction that their resources are being used may not be enough to keep them going. By no means does this dilemma mean that museums should stop making their resources available in multiple formats to multiple audiences. But as long as people believe their unlimited access to your information resources just magically appeared – no thanks to your invisible work – there is always the danger someone will ask, "Why are you important?" "What were your contributions?" And "Who are you anyway?"

This problem is one that information professionals need to solve as they build the 21st century cultural heritage organization. One possible solution lies in recognizing that invisible work is not just invisible inside the museum. Just as our users do not know what we are doing to prepare information resources inside the museum, we do not know how they are using our resources in their everyday lives outside the museum. The more information resources we make available free of restrictions, the more likely our users will return with ideas we could neither have imagined nor predicted. It is highly possible that by leveraging the users' work outside the museum, we can find ways to make our work inside the museum more visible.

Elsewhere I have argued that museum information professionals need skills that go beyond technology skills, that museums need individuals who can play an active role in guiding the future of information work in museums, including advocating, establishing and administering information policies [11]. But that argument is not enough. Cultural heritage information professionals need to do more than be advocates for their work inside their institutions; they need to be advocates for it outside as well. Cultural heritage organizations need information professionals with the socio-technical skills to consider the implications and unintended consequences of new information technologies and access to information resources.

Museums, libraries and archives in the 21st century face a stark paradox: the easier they make it for their users to access their cultural heritage information resources, the harder they make it for those same users to understand how much work is actually involved in making those resources available. The challenge facing cultural heritage information professionals today is to make their contributions clear, to be their own advocates for their own contributions to the betterment of humanity, while simultaneously making more resources available to an audience that wants increasingly unlimited access to everything – with as few barriers as possible and all of it for free. ■

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