

Creating More Using Public Content

**Remarks presented at:
Kennisland's Images for the Future session**

PICNIC '07

**Amsterdam
September 26, 2007**

**Peter B. Kaufman
Intelligent Television
www.intelligenttelevision.com**

Let me say at the start how honored I am to be invited to speak with you today about these issues. When I used to work in book publishing, many Dutch publishing houses and Centraal Boekhuis in particular always stood head and shoulders above many other national models of book production and distribution in their elegance and rationality. In the world of television and film documentaries, Netherlands Public Broadcasting and its teams of great directors have proven to be imaginative co-producers for many years. In the world of libraries and archives, few projects are as exciting as Images for the Future.

I would like to make five points about moving images before addressing the fundamental question of how best to market audiovisual resources to the public and thus create a sustainable model for the curation and publication of this kind of content.

1. First, everyone here is a producer of screen-based media. We need to know that. We need to absorb it. From the sponsors of this meeting to every individual in this room, all of us, in almost every computer act in which we engage, are producers or co-producers of screen-based media: of screen-based advertiser supported media, of screen-based media on-demand. Every film or video that Intelligent Television makes, to be sure, has a market, but so too does every newsreel our libraries digitize, every book our institutions scan, every article and image we post online, every blog, every personal e-mail. Indeed, I read on the plane from Zurich yesterday that there is a new company called Pudding Media which intends to see you advertising on your Skype-like phone calls, in the same way that G-mail may accelerate doing against keywords in your e-mail. Every one of these digital acts of creation and communication today or tomorrow becomes a piece of the monetizable cosmos of Google, Microsoft, Apple, Adobe, Cisco, Amazon, eBay and many other sorts of stakeholders we might not be able to imagine yet (you will remember how YouTube—and, for that matter, Google, basically came out of nowhere).

2. Second, we are all involved in peer production, and that is whether we want to be involved or not. The art of a Van Gogh or a Proust or an Eliot, a Stravinsky or a Pavarotti, the cultural output of Netherlands Public Broadcasting, is unique maybe in the moment the morning that they create or publish their art and their media—but tomorrow

it becomes part of the world that many of us will draw upon to make new visual art, new literature, new music, and new television. Over time, as everyone scans and photographs and tapes and records books, paintings, sculptures, television and speeches, no piece of cultural production, no piece of film and television production, no piece of scholarly publishing, will be able to avoid becoming part of the vast online commons.

3. The third point is that the cult of the amateur, as it has been derided, is actually of great benefit to all of us; we just have to get rid of the fear. The great *New York Review of Books*, perhaps our leading intellectual journal, may soon start (rightly, I think) encouraging its authors to populate Wikipedia. Librarians with their links to amazing special collections have mobilized now to do the same; so too are individuals who seek to participate in the great Internet value exercise that is much, much bigger than Ebay. Nowhere is this culture more visible than on YouTube, as some of you know from your own searches, and also if you've seen my riff on the subject in *First Monday*.¹ YouTube is a haven for metadata—it is a giant video chatroom for people interested in everything. And there is an inherent teleology in all of this activity, a tendency toward—as Harvard's Yochai Benkler has told us in *The Wealth of Networks*, as the *New Yorker's* Jim Surowiecki has demonstrated in *The Wisdom of Crowds*, as George Mason University's Roy Rosenzweig has shown us in history—a tendency toward better organization, toward legitimation, toward self-improvement, even towards truth, which is too precious to be left in the hands of the professionals.

4. Fourth, I turn to some TV and video statistics from our wider world. Today, an amazing 20 percent of all U.S. Internet users—and one-third of all Internet users ages 18 to 29—watch or download a video online every day. Cisco Systems now predicts that video streaming and downloads will grow in size from 9 percent of all consumer Internet traffic in 2006 (that's already pretty big) to 30 percent in 2011.² The demand for online video in education in particular has exploded. In 2006 alone, the University of California Berkeley—one university!—supplied consumers worldwide with 18 million streamed and downloaded university course videos and course archives, online, for free.³ Today, after news and comedy, education and music are the most popular subjects for American video consumers online.⁴ Online video is also where the money is heading. According to the *Wall Street Journal*, “Internet video, including ad-based and user-based services,

¹ Peter B. Kaufman, “Video, Education, and Open Content: Notes toward a New Research and Action Agenda” *First Monday* 12 (Number 3), April 2007, available at: http://www.firstmonday.org/issues/issue12_4/kaufman/index.html

² Kevin J. Delaney and Bobby White, “Video Surge Divides Web Watchers,” *Wall Street Journal*, August 14, 2007.

³ See: <http://confluence.media.berkeley.edu/confluence/display/WCTREQ/UC+Berkeley+Podcast+Webcast+Program+Overview>

⁴ Mary Madden, “Online Video” (Philadelphia: Pew Internet & American Life Project, July 25, 2007), available at: http://www.pewinternet.org/PPF/r/219/report_display.asp

could exceed \$7 billion in the U.S. alone by 2010.”⁵ I do not know the comparable statistics here in the Netherlands (you can be sure CISCO and Phillips and TomTom know them) but that is essentially two years from now. Moreover, as you know, video editing facilities for the public are proliferating. They stretch well beyond iMovie and MovieMaker which come installed in all of our laptops now—a new application called Kaltura, which bills itself as a collaborative video editor, YouTube-meets-Wikipedia, launched last week in San Francisco.⁶ And I will remind you of the predictions that come out of Google’s laboratories--that an iPod, or a device its size, will be able to hold a year’s worth of video (8,760 hours) by 2012 (five years from now); all the commercial music ever created by 2015 (eight years from now), and all the content ever created (in all media) by 2020 (thirteen years from now). In other words, by the time my children are in college, they will be able to carry all the media ever created in the world on an iPod around their necks, and they will be manipulating it all the time.

Fifth, this is a great moment for all of us working with archives. Not only is the Images for the Future project with us with funding now for seven years, and not only do we have the BBC Creative Archives and other UK initiatives that my friend Paul Gerhardt will talk about, but in the Spring of 2008, in a sleepy town called Culpeper 75 miles southwest of Washington DC, our Library of Congress will open the new National Audiovisual Conservation Center—a \$350-million dollar initiative to preserve and render accessible the American audiovisual legacy. This is a 45 acre campus—the usable space exceeds 415,000 square feet—created to house more than 5 million film, video, and audio items that comprise our country’s audiovisual heritage. The Center includes miles and miles of shelves, lockers, 124 vaults purpose-built to house 130 million feet of nitrate film (which can explode), state-of-the-art preservation laboratories for film, sound, video, and all kinds of other media, conference rooms, study carrels, a new 208-seat theater capable of projecting nitrate film, and automatic, semiautomatic, and manual digitizing facilities that are almost unbelievable, so that when it gets up and fully running in 2009, an estimated 5-plus million gigabytes of digital information will be produced—and produced is the word—annually.⁷ Our ability to preserve and access our own culture and history will change in mind-boggling ways.

Let me turn to the giant sustainability question

The most important article anywhere in the past five years (I say) was published by Michael Jensen in our *Chronicle of Higher Education* this June. In “The New Metrics of Scholarly Authority,” Michael, who serves as director of strategic web communications at our national academies of science and medicine, tells us that instead of putting our heads in the sand and “fighting copyright-infringement battles of yesteryear,” producers,

⁵ Yukari Iwatani Kane, “Sony to Challenge Apple in TV, Movie Downloads,” *Wall Street Journal*, September 4, 2007.

⁶ See: <http://www.kaltura.com/>

⁷ See: <http://www.loc.gov/avconservation/> and Mike Mashon, “The Library of Congress National Audio-Visual Conservation Center,” *Cinema Journal* 46, No. 3 (Spring 2007).

publishers, librarians and archivists have to start talking seriously about new business models—models that are going to have to be built on foundations way deeper and more fascinating than Google’s value proposition and PageRank system of today.

Jensen asks, how are we going to make sense and value out of our content in a universe of hundreds of billions of screens or pages of content where tens, sometimes hundreds, of thousands of these pages are similar if not virtually identical? Citing the Web 2.0 “authority models” represented by Digg, Delicious, Slashdot, Flickr, YouTube, MySpace, Facebook, and Wikipedia, the answer, he tells us, is by “competing in computability”—by helping our content be understood by the technologies that will be reading this content and automatically deciding on its authority value. The answer lies in working to make our content feedable into, and findable by, all the automated computer-assisted systems that make decisions to pre-select, pre-cluster, and prepare material in search. Our prestige as producers and publishers and the prestige of peer reviewers and other commentators still counts in everything we do, of course. But authority, online, is now computable by a much richer and extended list of metrics (below), which the machines of search are now using in their calculations. These include:

- The percentage of a document quoted in other documents.
- Raw links to the document.
- Valued links, in which the values of the linker and all his or her other links are also considered.
- Obvious attention: discussions in blogspace, comments in posts, re-clarification, and continued discussion.
- Nature of the language in comments: positive, negative, interconnective, expanded, clarified, reinterpreted.
- Quality of the context: What else is on the site that holds the document, and what is *its* authority status?
- Percentage of phrases that are valued by a disciplinary community.
- Quality of author's institutional affiliations.
- Significance of author's other work.
- Amount of author's participation in other valued projects, as commenter, editor, etc.
- Reference network: the significance rating of all the texts the author has touched, viewed, read.
- Length of time a document has existed.
- Inclusion of a document in lists of "best of," in syllabi, indexes, and other human-selected distillations.
- Types of tags assigned to it, the terms used, the authority of the taggers, the authority of the tagging system.⁸

⁸ Michael Jensen, “The New Metrics of Scholarly Authority,” *Chronicle of Higher Education*, June 2007, available at: <http://chronicle.com/free/v53/i41/41b00601.htm>

Jensen tells us that at the same time we need to attend very closely to the individual user and consumer's actions, wants, needs, and historic interests—and continually adapt to them.

We need to be aware of these trends and interests and strategies, and invoke them in our business planning to add value to our content. It is no accident, as the Russians used to say, that at the same time Michael is outlining these criteria for scholars in the digital age, Wall Street investment banks, consulting companies, and management and strategy firms are paying attention to exactly the same trends. Leading financial analysts like Gartner, who cover the media, tell us that too much choice can actually be detrimental to sales, leading to lower user satisfaction (Gartner calls this “consumer vertigo”). They tell us that that rendering our content searchable, or what Jensen might call computably competitive, is as good if not a better investment of resources than making more content available. They tell us that paid search—the business of current and future business partners in the library and archive world—is a \$15 billion business (one that has grown at an 88-percent compounded annual growth rate since 2002); that in three years one quarter of all online music store transactions will be driven directly from consumer-to-consumer taste-sharing applications such as playlist publishing and ranking tools; and that user-generated content, which is growing fast, now accounts for 13 percent of total Internet traffic in the United States, up from 0-1 percent in 2004.⁹ Our strategic planning and resource allocation decisions all will benefit from acknowledging this.

Second, we also need to take a page from commercial television networks, archivists, educators, producers, and publishers, and consider distributing our materials across the broadest possible array of platforms imaginable, experimenting with our content in cost-effective ways. We should look at what commercial television and video networks like CBS have established with their so-called “interactive audience network,” partnering with a variety of online distributors beyond the immediately sensible one and including AOL, Microsoft, CNET, Comcast, Joost, Bebo, Brightcove, and Veoh—Google being absent, as Viacom is suing its subsidiary YouTube for infringement—and now with social network application providers, all to allow users and consumers to incorporate CBS-provided clips to their own blogs, wikis, widgets and community pages. Everyone is potential distributor—not just MySpace. Providing our content through such “interactive audience networks” will reach millions, make it more relevant, and make it more valuable. “Use cases” of such smart or intelligent content getting out there abound—in education, publishing, and with the retail public. In scholarly publishing alone, the stately *New England Journal of Medicine*; the Public Library of Science; BioMed Central; and the new and fascinating *Journal of Visualized Experiments* all have launched profoundly sophisticated experiments in this area.¹⁰ Indeed, the *New England*

⁹ Spencer Wang, Shub Mukherjee, Stefan Anninger, “A Longer Look at the Long Tail” (New York: Bear Stearns Equity Research, June 2007); and Mike McGuire and Derek Slater, “Consumer Taste Sharing is Driving the Online Music Business and Democratizing Culture” (Cambridge: Gartner/Harvard University Berkman Center for Internet and Society, December 13, 2005).

Journal of Medicine publisher reports that the most downloaded content on its site is the video content! I guarantee you that more is yet to come, especially when this community connects first to the massive archives, our massive archives, of scientific video and recorded sound around the world and then to the thousands of expert producers of video in science, the humanities, etc.

So what is to be done? Whatever our feelings are about the Soviet experiment as a whole (or any parts of it), some of the media and publishing professionals of the early years—the Russian avant-garde (Mayakovsky, Rodchenko, Meyerhold, Eisenstein, Tatlin)—had a sense of what collaborative possibilities really existed through filmmaking, publishing and other media through art, through education, to better the human condition. Some of the ideas of the great Soviet constructivists who wrote about open source back in the 1920s, well before there was such a thing, who wrote about what UC Berkeley’s Steven Weber, the author of *The Success of Open Source* (a former Sovietologist too, by the way) has called the “political economy of open source,” have immediate and particular relevance to our discussion.¹¹ These Soviet constructivists, especially filmmaker Dziga Vertov, were agnostic about what media could and should be deployed in support of improving this improvable race of ours.

With the core support of the Hewlett Foundation, Intelligent Television has been funded this year and the next two years to establish an educational video studio to produce more moving images, short- and long-form, for classrooms, journals, libraries, museums, and archives. This effort takes a page out of the manifestos of the Soviet avant-garde—manifestoes titled:

“On the Organization of a Film Experiment Station”;
 “On Building the Factory of Facts”; and
 “On the Organization of a Creative Laboratory.”¹²

This is the fourth week of the life of this Studio; I cannot say what will happen. But I know in addition to Hewlett, there will be commercial stakeholders; there will be additional foundation funders of our projects (the Soros Foundation is one); there will be government funding as well. Echoing these crazy Russian visionaries (and hopefully not ending up like they ended), we will be connecting up the leading non-

¹⁰ See:

<http://content.nejm.org/misc/videos.shtml?ssource=recentVideos>;
<http://www.scivee.tv/about>;
http://blogs.openaccesscentral.com/blogs/bmcblog/entry/new_additions_to_the_video;
 and <http://www.jove.com/>

¹¹ Steven Weber, *The Success of Open Source* (Cambridge: Harvard University Press, 2004). See: Christina Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism* (Cambridge: MIT Press, 2005).

¹² See: Annette Michelson, ed., *Kino-Eye: The Writings of Dziga Vertov* (Berkeley: University of California Press, 1984).

fiction/documentary producers, directors, cinematographers, and directors of production from the world of public and cable and online video together with educators and educational publishers in an effort to systematically produce and distribute more video for teaching, learning, and scholarship. In these productions, we intend, among other goals, to figure out this question: Can media that is a product of hybrid sources of public and private capital be more engaging than public media, and at the same time be more responsible than privately funded media, which, in my view anyway, has let us all down so very badly?

In conclusion, moving image archivists are a stakeholder in the future with all the other professions represented here, including producers. There are many broad opportunities for collaboration. One hundred years from now when the new history of video is written, the historians will puzzle why there was this false demarcation line between the disciplines and media that are represented in this room, and why there ever was any hesitation at all in our embracing each other. So, as we say back home, just do it.

Peter B. Kaufman is president and executive producer of **Intelligent Television** (<http://www.intelligenttelevision.com>) in New York. Intelligent Television's moving-image productions and research projects focus on making educational and cultural material more widely accessible worldwide. With the support of the William and Flora Hewlett Foundation, Intelligent Television is launching an educational video studio to produce and distribute more high-quality video resources systematically for education.

Mr. Kaufman also serves as an expert advisor on access issues to the Library of Congress's Division of Motion Pictures, Broadcasting and Recorded Sound (<http://www.loc.gov/avconservation/>) and served as a member of the American Council of Learned Societies Commission on Cyberinfrastructure for the Humanities and Social Sciences (<http://www.acls.org/cyberinfrastructure/OurCulturalCommonwealth.pdf>). He is the author of "Marketing Culture in the Digital Age: A Report on New Business Collaborations between Libraries, Museums, Archives, and Commercial Companies" for Ithaka and the Andrew W. Mellon Foundation (available at: <http://www.intelligenttelevision.com/MarketingCultureinDigitalAge.pdf>); "Video, Education, and Open Content: Toward a New Research and Action Agenda" (http://www.firstmonday.org/issues/issue12_4/kaufman/index.html); and, with Jeff Ubois, "Good Terms: Toward Improving the Equity of Commercial-Noncommercial Partnerships in the Digitization of Cultural Heritage Materials," forthcoming in *D-Lib*. In 2007 he completed a one-year guest appointment as associate director of Center for New Media Teaching and Learning at Columbia University (<http://ccnmtl.columbia.edu>), where he studied how to render thousands of hours of university video assets more openly available. He has served as a Senior Fellow of the World Policy Institute, a foreign policy research institute in New York (<http://www.worldpolicy.org/>), since 1990.

Educated at Cornell and Columbia Universities, Mr. Kaufman has written about culture and history for *First Monday*, *Information Outlook*, the *London Times Literary Supplement*, *The Nation*, the *New York Times*, *Publishers Weekly*, *Russian History*, *Scholarly Publishing*, and *Slavic Review*.

E-mail: PBK@intelligenttv.com