Why Reinvent The Wheel Over And Over Again? How An Offline Platform Stimulates Online Innovation.

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[http://www.meetup.com/Innovators-Netwerk-Erfgoedsector/]

Abstract

In this paper, the case of an innovative Dutch think tank for the cultural sector is described. The Heritage Innovators Network (INE in Dutch) is unique in the Netherlands. INE is an offline platform created by and for cultural heritage professionals from institutions like Netherlands Architecture Institute, Science Museum Boerhaave, Van Gogh Museum, National Archive and The Netherlands Institute for Sound and Vision. Every month creative thinkers from these cultural heritage institutions come together and discuss current topics on online innovation in their sector, such as crowdsourcing, interaction with the public, image rights & creative commons and open content. The discussions and results of these sessions have successfully influenced and spread innovative ideas and solutions for cultural institutions. The INE is an offline platform created for and by cultural heritage professionals. The project network is initiated by Knowledgeland and has been made possible by has been carried out within the scope of Images for the Future, one of the largest digitization efforts in Europe to date. This paper will focus on how a bottom-up approach leads to a think tank for innovative solutions for cultural heritage institutions.

Keywords: innovation, organizational change, collaboration, multi-institutional, sharing knowledge

1. Introduction

Flipping through the extensive amount of 1,400 papers, all presented on one of the previous Museums and the Web conferences, it becomes apparent that there are not that many papers on organizational change. Just a meager 6 papers show up after a quick search. Philip Yenawine wrote a most interesting article on the topic in 1993. It is an account of how an offline cultural heritage community encounters massive barriers to set up joint activities in order to effectuate organizational change. This struggle is best reflected by the following paragraph:

Basically, any attempt to get a larger community of museum people to think beyond rather narrow and institution-bound issues, particularly considering policies with regard to reproduction rights and fees for "venture" projects in multimedia, proved unproductive. [...] Although we have given up all staff and our office because of the lack of funds, we still exist as an organisation committed to concerted action by a range of museums, geographically widespread, different in terms of collections and more diverse as individuals. (Yenawine, 1993)

Much time has passed since Yenawin wrote these words. The Web has changed and cultural heritage professionals have changed with it, embracing the possibilities that online communication and presentation offer to change practices within their own organizations. But there are still hills to climb and barriers to break. Remember the image of a man rolling a large stone up a mountain in one of the presentations during the closing session of MW2010? (Gates 2010) Although organizational change and cross-institutional collaboration may not sound as sexy as for instance Augmented Reality and crowdsourcing, it might just be what is needed to further offline, online and on-site developments in the cultural heritage sector. The many innovative ideas that exist within the walls of cultural heritage institutions should be connected and given a platform to break out of the sometimes closed organizational environments.

This paper describes how cultural heritage innovators can bypass some of the obstructions and leave their organizational islands, by means of an offline network. A network that helps them in creating solid ground for increasing the online awareness of their staff and colleagues. A network and where they discuss face-to-face the challenges they encounter in their daily working practice, exchange possible solutions for these issues and interesting news found on the web. In the Netherlands, a group of innovators in the cultural heritage sector did just this – they decided to go island hopping.

2. The INE format

The Heritage Innovators Network is an initiative by Knowledgeland, an independent think tank in the Netherlands, continuously searching for ways to spark the social innovations needed to improve the knowledge society. At the end of 2009, Knowledgeland did a survey among a variety of people working in Dutch heritage organizations. There was a consensus that the innovative potential of the heritage sector could and should be strengthened, particularly concerning the possibilities of the digital public domain. Since individual organizations often do not have extensive budget and personnel, nor a clear focus on (digital) strategies, ideas, possibilities and plans cannot always come to fruition. Therefore, a meeting was held in January 2010 in which 20 creative thinkers and innovators from the Dutch heritage sector came together to brainstorm about how to join forces and create a network that could contribute to the innovative power of the heritage field. The Innovators Network Heritage sector (Innovators Netwerk Erfgoedsector in Dutch, or INE in short) was conceived to facilitate knowledge sharing, fostering new collaborations and spreading and increasing an innovative vision within the cultural heritage sector. The partners of Images for the Future (http://imagesforthefuture.com/en/) decided that they wanted to support the network with a small budget for the organization of the meetings for one year.

Following this first kick-off meeting, eleven monthly meetings, addressing a variety of themes, were organized and hosted by INE members, for INE members. Among them are mainly archives and museums, such as the Science Museum Boerhaave, Van Gogh Museum, National Archive and The Netherlands Institute for Sound and Vision, but also a variety of miscellaneous types of organizations, such as the Netherlands Architecture Institute, Knowledgeland, DEN Foundation (Digital Heritage Netherlands) and even cultural heritage students.

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Figure 1. Overview of the various types of organisations in INE.

Members take part in INE not as representatives of their institutions, but with the intent to co-operate and co-create relatively informally and on a personal level. The meetings are organized and hosted by one of the member's institutions and co-organized by a small group of initiators. The host institution is responsible for the agenda of a meeting. An online meetup-platform (http://www.meetup.com/Innovators-Netwerk-Erfgoedsector/) serves as forum, calendar, source for inspiration and a share point for knowledge and ideas.

During the first meeting it was clear that all the attendees were already working with new media in museums and most are even responsible for incorporating new media in their institutions. Most of them were using Twitter and other platforms like LinkedIn groups to get in touch with each other to discuss issues on innovation. Judging from the number of conferences and meetings organized each year, like DISH (http://www.dish2009.nl) and 'Kom je ook?'(http://www.mediamatic.net/page/178016/en) in the Netherlands as well as Museums and the Web and MuseumNext abroad, one might say there is enough time and space to meet each other.

All these online and offline events however may lead to an "information paradox". There is so much information available, where to find the information one is specifically looking for? Besides that, where do you find the time to keep up with or keep track of the ever-increasing information streams? Above all, and more importantly, often these meetings – especially in the Netherlands – do not rise beyond an exchange of basic ideas or the presentation of best practices and success stories.

Good practices are nice and certainly helpful, but they only represent one side of the coin. Developing innovative projects in the cultural sector is a combination of success and failure. You don't hear about the pitfalls, the do's and don'ts, and the absolute failures at much of the conferences, nor do you read about them on blogs and online platforms. These failures are however possibly the most constructive information you can acquire when planning a same kind of web project.

Within the group of INE members, it was felt that personal, real-life contact is a better way to foster creative exchange of ideas. The most important added value for a new offline network would be to create a place where information can be exchanged in an intimate and informal atmosphere. It was the initial idea that the INE network would be about interaction and not just about broadcasting, promoting and receiving information. Participants of INE would like to share knowledge and experience, get inspired by others, and maybe more importantly, to learn from someone else's mistakes in order not to reinvent the wheel over and over again.

3. What is INE all about?

According to the participants of INE, innovation is not by definition about 'new', but more about 'better'. How can we reach our audiences better? What's next for new media and technology in cultural institutions? In what way can we cooperate? How do we keep on track with innovation? And would it be possible to get the subject of cultural innovation through new technology on the agenda of national and governmental organizations? The INE platform is not too focused on the technical aspects of new media. The subjects of standardization or machine language and such are well discussed, developed and implemented by other networks/institutions. INE tries to fill the gap between technology and daily practice.

The eleven INE sessions held in 2010:

February 2010: Museum Boerhaave, Leiden;

Mobile platforms and museums

March 2010: Gemeentemuseum, The Hague;

Cooperating with 1.0 colleagues

April 2010: Denver Art Museum, Denver, CO;

Museums and the Web prep (the longest session so far...)

May 2010: Netherlands Institute for Sound and Vision, Hilversum;

Contextualizing collections

June 2010: Amsterdam Museum, Amsterdam;

Copyright and Creative Commons

July 2010: EYE Film Institute, Amsterdam;

Communicating your online collection

August 2010: National Glass Museum, Leerdam;

Using social media for crowdsourced research

September 2010: Van Gogh Museum, Amsterdam:

Crowdsourcing, how do you do it?

October 2010: Dutch Railway Museum, Utrecht;

New media and the Utrecht city museums

November 2010: Museum Boijmans Van Beuningen, Rotterdam;

Everything you always wanted to know about online video

December 2010: DEN Foundation, The Hague; Making knowledge is sharing knowledge

A Dutch cultural relay; framework for a network.

To make the INE network succeed in its mission a basic policy was felt to be necessary. Participants agreed on the following:

- Participants attend the meetings on their own account, not as a representative of an institution, because it is their personal mission to strengthen the innovative movement in the cultural heritage sector. The INE network is therefore noninstitutional and non-hierarchical, and it has a flat organizational structure.
- There are no leaders nor followers. Participants don't come just to listen. To create real engaging meetings, all attendees have to play an active role.
- Participation only when the subject of discussion is of your interest and if you can actively contribute. It is not an obligation. Knowledge and experience is shared for free, and the network is open to everyone in the field who wants to contribute.
- The network meetings each have a practical focus. Ideas should be 'ready made'. As a matter of fact it should be possible that suggestions can be tested for instance in a technolab the next day. Everyone in the network is free to act on these suggestions and to start using and implementing them, either alone or in cooperation.
- The INE network is actively searching for cooperation with and links to the available knowledge platforms (DEN Foundation (http://www.den.nl, ICN (http://www.icn.nl/), Archief 2.0 (http://www.archief20.org/), etc.) so that members do not have to reinvent the wheel over and over again.
- The INE network invites people from outside the cultural heritage sector to join, especially connecting to the fields of research and small businesses. When necessary, experts are sought to give their view on specific subjects.
- The INE network provides professionals in the field with a platform to communicate and to learn from best practices, share experiences and applications. This will help to convince colleagues and to create more support for innovation inside their own organizations.

The framework mentioned above resulted in a flowering INE practice. Since January 2010, meetings were organized on a monthly basis, from 14:00 until 19:00, on

alternating locations across The Netherlands. A relay system invited museums, libraries and archives to act as host and topics with respect to content and needs and a wide range of challenges and problems were discussed. The INE network doubled its innovators from 20 at the startup meeting to 58 at the end of the year. In an open and informal unconference atmosphere, comparable to that of a Dutch pub, interaction and exchange of ideas took place and in many cases the meetings were the onset of a new project or inter-institutional cooperation.

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Figure 2. Unconference style breakout session

Meetings had a agenda in which an introduction would be given by an expert, either from the host institution or its partners, followed by a breakout session in which participants would come up with a concrete idea around the day's theme. These ideas would then be pitched to the other groups in a closing session. Depending on needs this format was loosely maintained. In the next chapter some cases will be described as examples of how INE works in the cultural heritage practice.

1) Musefeed – a social media aggregator for the Gemeentemuseum, The Hague Platform for development, first proof of concept.

Musefeed was one of four pitches during the first INE meeting in March 2010. The subject of this meeting was social media and mobile platforms in museums. Musefeed is an example of an INE idea and was built in concept by one of the participants for the Gemeentemuseum The Hague. This social media aggregator is a good example of how to use a web tool to create awareness and support for online innovation. In the words of Erik van Tuijn of the Gemeentemuseum: "Social media are fluid in nature and not easy to get a grip on, especially in heritage institutions, which are – historically – more oriented towards physical objects. This bias of the museum staff stretches further than the collections themselves, it is also visible in the collection and storage of received media attention. This is largely limited to press reviews in major newspapers and hardly incorporates online media like blogs, let alone social media. In general, online media haven't really landed yet within the organizations, which is probably why so little of it is presented to the public within the walls of the institutions as well.'

Times change though, and it is quickly becoming important to aggregate more of the available data orbiting institutions in (somewhat) the same way we have done with press clippings since time immemorial. The idea for Musefeed was to (automatically) aggregate the institutionally specific buzz and make it presentable to both visitors and museum staff in bitesize form. The goal: stimulate participation by making the 'buzz' visible, and have online / social media make a soft landing in the organizations themselves while doing that.

For visitors this could mean using flatscreens in the main hall or restaurants showing them – in real time - the activities of other visitors. For museum staff it could take the

form of an exhibition specific digest (an email newsletter, RSS feed or maybe something like Flipboard or Flud, easier is better though). Musefeed is mainly about making streamlining information and making it visible in real time.

Although at this point in time there are several services we could build upon, like Google's ability to search and present tweets on a timeline, the online application Twitterfountain or Yahoo Pipes, we wanted more control. So, to experiment with the initial idea we built a simple aggregator that automatically shows the most recent relevant tweets (www.kunstwerf.eu), based on existing open source Drupal modules. Further research showed that the Data mining application Tattler App (http://tattlerapp.com) might (at least for the French and English languages) be interesting as a smart aggregator that works across multiple webpages and platforms. Eventually we would like to link Musefeed to our Drupal based intranet platform 'Geméén'. Drupal's 'Userprofiles' could tailor results to suit specific staff or departments.

For our visitors we would like to expand the 'public feed' into a real time dashboard of social media data incorporating not only tweets but also Facebook posts, relevant pictures and video's from Flickr and youTube and Foursquare check-ins.

In short, Musefeed will be an application that:

- gathers tweets, Facebook notifications, YouTube videos, Flickr photos and blog posts about specific queries.
- Creates the possibility of a quick and centralized response on relevant messages.
- Collects and archives relevant messages for later use.
- Produces mail digests or summaries and can send these to stakeholders.
- presents aggregated information to the public within the institution's walls: in exhibits, the bookshop, or even the restaurant.
- creates the possibility of user and data analysis.

The implementation of Musefeed will hopefully also result in a better insight into a (younger) part of the museum's visitors and their preferences. (http://www.kunstwerf.eu/)

2) The Netherlands Institute for Sound and Vision: "content is king, context is the kingdom"

Conceptualizing the context of collections

The May 2010 of INE was hosted by Lotte Belice Baltussen of Research & Development department of The Netherlands Institute for Sound and Vision, one of the largest audiovisual archives in Europe. The Institute preserves a major part of the Dutch audio-visual heritage and makes it accessible to potential users. The collection totals over 700,000 hours of television, radio, music and film. An idea which has been investigated by the R&D department is a database which contains both relevant internal and external contextual (text)documents which can be linked to the records in the extensive Sound and Vision catalogue.

The R&D team is not just concerned with the technical challenges of developing a 'ContextDatabase', but also with defining the concept of context. Broadly speaking, a context source can be defined as a document that can be used to interpret the production, publication, perception and reception of archival material from different points of view. (Auffret and Bachimont, 1999) This means that a ContextDatabase could contain a broad variety of documents that are related to Sound and Vision's film, video, audio and photography collections, such as programme guides, subtitles, scripts, reviews, ratings and the Institute's own wiki (http://beeldengeluidwiki.nl). Furthermore, it has to be defined which type of context source is relevant for which user, since a cataloguer will likely have different context requirements than a leisure user who is merely browsing through the collections. The presented examples fueled a vivid brainstorm session on what context can be or mean, and how it can be provided, with some out-of the-box ideas as a result.

Not always do INE pitches result in a ready made solution as mentioned above in the Gemeentemuseum case. Often, and just as valuable, possible solutions are presented or concepts are developed. An example of such a concept was suggested by Pepijn Lemmens (NAi), who pitched the idea of Google Cultural Biographies (GCB). The premises of GCB is that you are your own context. Context is personal, or personalized. On basis a your own Google profile a search engine crawls through the digital Dutch Collections (an unfortunately still fictive online collection database which contains all the collections of Dutch heritage institutions). Your Google searches differ from day to day as they develop your sphere of interest, and so influence your Google profile. As do the mails you send with Gmail, the images you look at on Picassa and the movies you view on YouTube, all of which are Google products The GCB links you to the national collection without creating a profile yourself and even more practical: you never have to update your interests or other info! A side effect of GCB is that it could give an impulse to the idea that it is necessary and very useful for cultural organisations to link each other's collections in one way or another. Eventually it might be an idea to incorporate your GCB in the Google tab bar as Culture tab.

3) Think tank in action Offline back to online: Share!

In this last case we would like to present an interesting meeting where Jasper Visser (Museum of National History) invited participants of the INE network. He hosted a joined meeting on museums, kids and new media together with SETUP Utrecht (http://www.setuputrecht.nl/) and the Utrecht Museums Foundation (SUM). This is an example of how others can benefit from the offline INE network. INE as think tank is a unique novelty in the Netherlands. Unique because never before have a fast number of cultural professionals joint forces to become a pool of talent from which other institutes may tap.

The challenge for this meeting: How to use new media to get more young kids (0-12 years old) and their parents to the museums in Utrecht. Below is the wrap-up of Jasper Visser's blog, stating the three proposed strategies as a result of the meeting in the Railway Museum.

1) The Continuous Exploded Museum Fun Experience

In the exploded museum the collection is scattered around the city, in public spaces and in other museums. Objects (replica's or "recognizables") are hidden everywhere, sometimes in plain sight and sometimes on places where only kids can/will look. Mobile apps, (online) scavenger hunts and simple signage guide people from the objects they discover to the museums where they can learn more about them. This makes the city the playground and triggers curiosity in random passers-by. A website might tell you where to look and help parents design tours to walk with their kids.

2) The Ubiquitous Museum Platform

The second strategy, and the most heard one, was to connect all museums online and provide one centralized platform, connected to the social networks where kids (and parents!) hang out. On this platform collections are matched, can be shared and further information about museum activities is provided. A reward system encourages kids to participate in games and activities, both online and in the museum. An RFID key-chain, bracelet or 'coin system' identifies kids and addresses their need to collect stuff.

3) MuseumVille

The last strategy takes the previous one a step further. In a game kids can collect objects from the participating museums. Some objects are freely available, others are rare and might require the kids to use their creativity and intelligence. Players can build their own private collection and display this in their gallery. Of course all objects go with their information so the kids can learn more about them. In the physical museum kids can expose their collection by (for instance) beaming it on the walls of an empty room and invite their friends. Or maybe even get the real objects together. (Visser, 2010)

What's up and what's next: the (future) value of INE

Challenges for the INE network after this first successful year is to move beyond usable ideas for some institutions towards solutions for the whole sector, and to expand the enthusiasm deeply felt by members beyond the monthly meetings and deeper into their organizations.

In the words of Mike Ellis and Brian Kelly (2007): "Continued peer dialogue is the strongest means of building engaging and relevant Web 2.0 experiences within the museum sector."

A survey was held among the INE members in December 2010, in order to evaluate their experiences with the network, and if and/or how they would like to see it continued in the future. In total, 25 of the 58 members participated, and together they represent a good cross-section of the INE network. Those who responded mostly work in museums (14) and archives (4), followed by a mix of professionals working in knowledge centers, libraries and other cultural heritage institutions. Among the respondents are curators, communication managers, metadata specialists, digital collection managers and digital media coordinators.

The meetings were judged by the participants to be organized well (18) and very well (7). The reasons for members to attend the meetings were mainly: to exchange knowledge or ideas (25), to get an insight in the organizations and daily practice of fellow cultural heritage institutions (22), and to expand and strengthen their network (20). The INE members are mostly interested in practical examples and experiences from those hosting the meetings (22) and to hear informative stories by experts (18). Other elements that are deemed useful are the break-out brainstorm sessions (12) and the plenary discussion and wrap-up of the meeting's results (11).

All but one survey participants indicated that they want to continue to attend INE meetings if it is continued in 2011. The single person that answered negatively stated that this is because of a new job outside of the cultural heritage sector.

Some reasons (all translated from Dutch) the responding INE members provided for wanting to keep attending the meetings are:

- "Innovation is a necessity in these times of budget and subsidy cuts. INE has provided me with the ideas and ammunition that allow me to bring change to my organization".
- "INE meetings are perfect for keeping a finger on the pulse regarding "innovation" and projects [...] INE helps you to gather ideas and take them back and implement them into your work place."
- "The meetings are a nice, informal way of keeping up-to-date with your colleagues from the cultural heritage field. And of course the drinks afterwards are fun."
- "Most useful meeting of the month."
- "Young dogs unite! INE is a unique way of sharing knowledge and learning from each other. Keep it up!"
- "I believe INE has the potential to bring change to the cultural heritage sector."
- "It is a great platform, but the meetings do need to become more concrete in order to sustain the idea."

It is obvious that INE is seen as a platform which fosters the exchange of ideas that inspire the daily work of the network members. However, since it is a network of innovators, INE should not rest on its laurels. Instead, it should continue to work on improving and innovating itself. Therefore the INE members were asked how to improve and build on recipe for INE's success. The most salient and important outcomes were:

- Make INE more practical: many respondents feel the need to work towards concrete goals, and to develop the ideas conceived during the meetings.
- Make INE into a think tank: INE harbors a diverse range of experts from the cultural heritage field. Since INE is about sharing knowledge, the network would like to offer its collective expertise to institutions that need advice on specific topics.
- Make INE broader: Right now, the members of INE consist solely of cultural heritage professionals. However, it would provide an added value to attract experts from outside of the heritage field, such as web developers and advertising agencies, who can shed new light on and provide fresh insights into INE issues.

Furthermore, ideas for new features of the INE network were put forward and discussed in the Evaluation Meeting, held on January 20, 2011. It was decided that the first two features are going to be piloted in the coming year. The aims for 2011 were defined as:

1) INE produces

The INE network as a producer of open source products that can be shared with the entire sector. The concept is that the ideas discussed and pitched during the session will also be produced. The Muse Feed idea was further developed into a prototype, but when within the organization that it was pitched, there was not sufficient support to further develop it. This and other project ideas could be further developed within INE.

2) INE advises

The INE network as a consultant to questions in the field of innovation and heritage. In the Netherlands there are a lot of small institutions, run by only a few or just one person, who can benefit from the network. INE can be an "external think tank" that can help with a specific question and give advice. This would run parallel to the meetings. For example a "Call for proposals" could be proclaimed wherby the two or three best advice questions will be accepted and worked out by INE.

3) INE publishes

The idea is that knowledge and experience gained in the network will be more explicitly shared and communicated within the sector through papers, interviews and articles in the media.

< Baltussen-fig3.jpg> Figure 3. Pitching ideas

Concluding remarks

An offline platform for online solutions

The Dutch cultural heritage sector is not yet exploring all the possibilities of the digital domain to its fullest. Often the activities of heritage institutions are limited to digitizing the collections and filling image databases with this content. At the same time there is a strong drive to innovate and experiment in the Dutch cultural heritage sector. But often the will and enthusiasm is carried by just a few individual frontrunners, that do not have the support in manpower and finances within their own organizations to implement new ideas, strategies or experiments with new media. An often heard reason given in defence for this, is that there is no basis, not enough budget and too little manpower to work out a good strategy. How often is it that in the museum world wonderful ideas are kept to institutions themselves? INE talks about, generates and shares these ideas.

INE has evolved into an inspiring national platform where individuals with innovative ideas meet, share ideas and come up with possible solutions with their own knowledge and tools. Innovation, inspiration and entrepreneurship through the power within!

The INE recipe

After a successful first year of existence and an evaluation round, the INE is convinced that it's formula, or recipe, will work for other countries and networks as well, as long as the basic rules are maintained:

- Find a small group of enthusiastic (cultural heritage) professionals that want to collaborate on exchanging and fostering innovative ideas.
- Have regular real-life meetings, which are hosted by a different member each time.
- Work towards concrete goals, or even join forces in realising an actual idea conceived during the meetings.
- Have drinks after each meeting.

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References

Bachimont, B., & G. Auffret. (1999). Audiovisual Cultural Heritage: From TV and Radio Archiving to Hypermedia Publishing. *Third European Conference and Research and Advanced Technology for Digital Libraries*. BNF: Paris, 58–75.

Ellis, M. & B. Kelly (2007). Web 2.0: How to Stop Thinking and Start Doing: Addressing Organisational Barriers in J. Trant and D. Bearman (eds.). *Museums and the Web 2007: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2007 Consulted January 24, 2011. http://www.archimuse.com/mw2007/papers/ellis/ellis.html

Gates, J. (2010). Clearing the Path for Sisyphus: How Social Media is Changing Our Jobs and Our Working Relationships. In J. Trant and D. Bearman (eds). *Museums and the Web 2010: Proceedings*. Toronto: Archives & Museum Informatics. Published March 31, 2010. Consulted January 27, 2011. http://www.archimuse.com/mw2010/papers/gates/gates.html

Visser, J. (2010). Museums kids and new media: The continuous exploded museum fun experience. Last updated November 4, 2010. Consulted January 24, 2011. http://themuseumofthefuture.com/2010/11/04/museums-kids-and-new-media----the-continuous-exploded-museum-fun-experience

Yenawine, P. (1993). Multimedia and the politics of museum organizational change. In *Museums and Interactive Multimedia: Selected papers from the second International Conference on Hypermedia and Interactivity in Museums* 93. Cambridge: International Conference on Hypermedia and Interactivity in Museums. 391–394, 1993, consulted 24 January 2011.

http://www.archimuse.com/publishing/ichim93/yenawine.pdf