pages. Finally, the site could have been enriched by activities that are found in the real space reference rooms, such as the study of certain documents in detail by virtual reality magnification or handling, or by encouraging oral history through inviting visitors' personal or family experiences of the locations and events depicted in the images.

The computer's monitor screen is "flat," like a printed book page, yet its pixelated apparitions are fluid and flexible rather than fixed. Virtual exhibitions offer an exciting opportunity to share archival holdings with far greater numbers of visitors and researchers, particularly younger users for whom the Internet is becoming the most relevant "frame" for learning anything about the world. The virtual exhibition overcomes the limiting one-way (monologic) communication of real space exhibitions, in which the curator "addresses" the audience with information, by inviting a two-way (dialogic) interaction. In this model, visitors to a site direct their own tour according to individual curiosities and preferences. The potential of digitization extends far beyond sharing treasures from archives: it can do what most promotional campaigns fail to do, which is to reveal (at last!) to its public what it is precisely that archival institutions do, how their manifold collections are structured, and how we can find pathways into relevant research and interpretation.

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Virtual Exhibitions. *Real Stories: A Past in Miniatures; Canada and the First World War; Tracing a History in New France*. NATIONAL ARCHIVES OF CANADA. Ottawa, Ontario. <http://www.archives.ca/00/00_e.html#top>

Click on "exhibitions" on the menu page at the National Archives of Canada Web site, and you will come to a list of fourteen exhibitions. In the following review, we look at three: *Real Stories: A Past in Miniatures*, *Canada and the First World War*, and *Tracing a History in New France*, all developed and appearing on-line in the past two years. Adopting the position of the user, we examine these virtual exhibitions and their links to historical documents and objects. We ask: who is speaking, and in what tone of voice? Is this intended to be an interactive experience, or a passive consumption of "knowledge," or facts? We develop categories to evaluate design and the structuring of information, the scope and voice of content, and the perceived purpose, or meaning, of the information. We look at images reproduced from the archive's holdings, graphics created to support the content, the colours, and varying degrees of text. We look at how formal choices have an impact on our perception of information. With the National Archives launching into large-scale virtual exhibitions, it is a time to reflect on how the technology of the Web can best be used.

The term "look and feel" has come to describe graphic elements, information architecture including navigational tools, and the layers making up the site. In *Canada and the First World War*, the user initially encounters a "scene setting" title page filled with images of bullet holes, a war correspondent's desk, and photographs. Entering the next layer, the surface is simplified, only a newspaper image carrying over. Further layers are reduced in design, presenting text and the border established in the opening page. A typewriter font, reminiscent of the era, is used throughout the titles. Army green, grey, maroon, and a mute blue evoke the military. Sometimes it's hard to know what to expect in a particular category. For instance, the biography of John Diefenbaker is located in "They also Served."

Arriving at *Real Stories: A Past in Miniatures*, a horizontal band of well-spaced images moves across the screen. Simple and crisp, the oval miniature portraits appear jewel-like against a black background. Accompanying white text that looks like handwriting suggests a step back in time. We are presented with images of dainty porcelain likenesses of a privileged world. Narrow vertical lines prevent the images from floating in black space. From one section to the next, the user knows what to expect because the format is consistent.

Opening to *Tracing a History in New France*, the user is met with relics from the eighteenth century, 1960s patterning, a *fleur de lis* set in a hazy sky, and buttons like a video game interface. The navigation bar of the title page is retained throughout the site, and provides useful links to other areas. All the same, it is hard to know what the site will offer. We must enter the exhibition to learn the content of the history, and then we are merely provided with the eight thematic titles, including broad areas such as economy and religion. It is an attempt at creating a comprehensive official history of French Canada. Here, there is no room for other voices. Images absent from introductory pages might have been used to entice the viewer and give a snapshot of what is to come. Without them, the site is not visually compelling enough to generate sufficient interest to look further. However beautiful the featured images are, we have no reason to seek them out.

Audience knowledge and interest levels have been considered in the production of the exhibitions. By creating layered information, the viewer can peruse the site, or conduct more serious investigations through "the Vault." The Vault is the term used to describe the institution's database of holdings, and the exhibitions act as thematic starting places into the wider collection. Hyperlinks placed throughout the text also direct users to supplementary information. By clicking on key words, the user can investigate specific areas of interest. In *Canada and the First World War*, links actually bear the request "I would like to know more." These techniques encourage the user to become a more active participant in the Web experience.

Titles such as "Now you be the historian" in *Canada and the First World*

War foster interactivity. This type of language encourages the viewer to reflect on the meaning of the objects through a process of search and discovery. Rather than passively accept the given text, the viewer explores the documents firsthand as a primary source of information. A privilege of looking traditionally reserved for the archivist, academic, curator, or historian is opened up to a wider general audience. However, the inclusion is tightly structured. The tone of the questions suggest a teacher-student relationship. This can be seen in the use of questions such as, "Did you know that?" Here, the viewer is placed in a position of presumed ignorance. The archives will provide the answers. Overall, the attempt to include the audience is a positive sign, but the questions need to promote a wider range of responses, creating a space for dialogue.

The tone of the titles used in *Real Stories: A Past in Miniatures* also reflects this concern. By playfully labelling important historical figures as "Big Wigs," coupled with the commentary, "I am splendid," the viewer is subtly told that this site is not textbook history. Other labels such as "I Will Become" dress up the archival objects in a somewhat ironic language. A band of these titles and representative images float by on the introductory page, providing an invitation to look more fully at the artifacts. The viewer is invited to consider not only aesthetic properties, but also to question the historical narrative. The site maintains the integrity of the National Archives of Canada by presenting historical documents, and does so in a user-friendly way. By contrast, the documents in *Tracing a History in New France* are presented bluntly as the definite facts. Various section titles radiate around a predictable image of the *fleur de lis*. The potential for meaningful interactivity, a feature of Web technology, is lost.

The inclusion of games in *Real Stories: A Past in Miniatures* and *Tracing a History in New France* are other indications that the National Archives is broadening the scope of its audience. Rather than only catering to a scholarly group, the institution is considering aspects of entertainment, and how such devices might be used to attract a younger audience while simultaneously serving as a teaching aid. This technique varies in success. In *Tracing a History in New France*, the game is closely related to the text, but is far from stimulating. It is essentially a knowledge quiz that tests the users on information presented at the site. This is a poor strategy, because rather than encouraging the user to learn through an interactive approach, knowledge is a prerequisite to playing the game.

The type of activities used in *Real Stories: A Past in Miniatures* is much more effective, because it reverses the order of operations. Carefully interspersed with historical text, activities are the hook that draw the users in. Requiring no prior knowledge, the user can instantly become involved in the viewing of miniature portraits. Quick-Time VR, a program that gives the illusion of objects moving in space, provides an opportunity to show them off,

allowing us a 360-degree view. Movie clips, puzzles, virtual paper dolls in period costumes, and the option to create your own family tree are other activities available to the user. Playful interventions serve to interest the user in the virtual documentation and to ponder the larger related historical issues. This is where the accompanying text on historical figures and "The Vault" come into play. These factual sources are meant to answer any questions that might arise in the exhibit experience. Once deeper levels of records have been accessed, it is hoped that the user will investigate other items in the collection. This is a good start, but audience inclusion could be further improved by a chat room or a place for postings that would take advantage of what the Web offers in terms of interactivity.

Having acknowledged design features which address issues of audience, we must question their actual use. Who uses this site, and how often is it frequented? Who knows about it, and what sort of approaches have been used to publicize its presence? Without advertisements outside the medium, the National Archives will exclusively reach an "in-the-know" audience. The responsibility is placed on the user, and the user must purposely seek out the site. For those fortunate enough to locate it, we are concerned that exhibitions are buried in the table of contents along with publications and other introductory information.

Coming away from these sites, we thought about what is being shown and said. On the whole, we had the impression of having flipped through high school textbooks. We had picked up some new facts, and seen some interesting images. Further than that, we'd been led to some actual objects housed in the National Archives. The exception was *Real Stories: A Past in Miniatures*, which played with our view of historical figures, however superficially. "Big Wigs" was, after all, a more fun way of naming a category of important men. However, it didn't help us rethink that category. This is an example of our overall sense of where emphasis was missing. New critical thinking could be coupled with the investment in the new technology by institutions like the National Archives to include new ideas about the presentation of documents, as well as giving us new pathways to them.

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