

From Cybercolonialism to Cyberglobalization: A Virtual Shifting of Cultural Identity on National Museum Websites

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Internet communications technologies (ICT) change culture (Bowers, 2000, 2001, 2005; Lessig, 2002; Parekh, 2000) and subsequently how a museum represents itself. This is particularly so as national museum websites transform how we view and understand the cultural artifacts they house. Framed by the concepts of cybercolonialism, a colonizing of cultures by an array of computing ideologies, and cyberglobalization, an adapting of global cyber processes to local circumstances, this paper examines and compares computing ideologies shaping current website developments at the State Hermitage Museum, St. Petersburg, Russia and the Louvre Museum, Paris, France.

To examine how ICT changes how the two national museums represent themselves and their respective cultures, the paper asks: How are ideological influences, cultural pressures, and structural constraints originating in computing and related ideologies giving particular shape to theoretical, cultural, and applied website developments of the State Hermitage Museum at <http://www.hermitagemuseum.org/> and of the Louvre Museum at <http://www.louvre.fr/louvre.htm>? Findings will be compared, giving attention to the cybercolonial influences of sponsor IBM on the shaping of the Hermitage website. The Louvre new website conceptualization towards a cyberglobal sensitivity presents an alternative to cybercolonization. The central premise of the paper is that digital technology is a cultural construction, and it carries and generates cultural discourse related to its construction and place of application as is illustrated in the study of the two museums.

Theoretical Framing and Literature

There are questions about the Internet's ideological flavour, not only at the levels of content and context but in its very design. The design and programs that comprise particular computing applications (such as the Internet and the World Wide Web) are dominated by an arguably narrow range of ideological viewpoints, often emanating from the United States. This paper takes the position that no ideology or influence is neutral, and therefore ideologies are value-laden and direction shaping (Bowers, 1988, 2000, 2001, 2005; Franklin, 1999; Morbey, 2000; Morbey & Granger, 2002; Penley & Ross, 1991).

As information and internet communications technologies become dominant in shaping the transition from industrial-based to computer-based information cultures, the relationship between processes of colonialism and post-colonialism to the designs and encounters in cyberspace grows in significance. There exists an expanding body of research and literature on the concept of cybercolonialism (Chesher, 1998; Ebo, 2001; Fernandez, 1999; Marchart, 1998; Morbey, 2000; Morbey & Granger, 2002; Sardar & Ravetz, 1996). This work emerges from the concept of Discourse Analysis of Colonialism, first developed in Edward Said's salient 1978 work *Orientalism* (Said, 1978, 1994). There Said argues that the "orient" is constructed by Western discourses as "other" and represented as primitive, dependent upon Western expertise and in need of being controlled. Analogous to this understanding is the West's, and particularly the United States', historical global domination of computing expertise.

Two particular ideological viewpoints are key players in colonizing roles: the "American New Frontier" notion, deployed in narratives of cyberspace and standing in the tradition of one of the American founding myths of conquering new geographic spaces, and Japanese "techno-colonialism," a technical inter-discourse consisting mainly of "oriental" consumer technologies and objects (Marchart, 1998). The American New Frontier notion, as illustrated through various narratives (such as American Revolution literature and stories of colonial movement westward across the North American continent)

that foreground the emptying and subsequent re-territorialization of space, can be understood in relation to electronic spaces which can themselves be de- and re-colonized. Techno-orientalism can be described as a more expansive aesthetic or cultural Orientalism that “seeks to re-code Western consumer products into an oriental trend” (Marchart, 1998, p. 57). Morley and Robins (1995) contend that “Japan has become synonymous with technologies of the future – with screens, networks, cybernetics, robotics, artificial intelligence, simulation” (p.168). In the techno-orientalizing process, the Internet and the web, as technological objects, replace other artefacts of popular culture (Marchart, 1998). The case study of the State Hermitage Museum comprises a deeper investigation of the notion of cybercolonialism and its influence.

In contrast to the cyber colonizing activities that will be pointed to in the context of the Hermitage, the notion of cyberglobalization (Friedman, 2000; Robertson, 1995, 2000; Seerveld, 2003) will be illustrated through developments in the Louvre Museum new website launched on June 6, 2005. Like other scholars across a variety of fields, Benjamin R. Barber (1992, 2002) argues that globalization is the opposite of localization elaborating a worldwide homogenizing globalization. In sharp contrast, the notion of glocalization being argued here follows Roland Robertson’s articulation of the global not counter posed to the local but rather the inclusion of the local within the global; affirming that globalization can enhance traditional culture (Robertson, 1995, 2000). Glocalization in this respect then is a linking of localities (Robertson, 1995). Robertson (2000) views globalization as a compression of the world, recognizing it is as a multidimensional process which simultaneously is cultural, economic, and political. Adapting his conceptualization from the Japanese word *dockakuka* with a meaning of something like “global localization,” Robertson (2000) posits that glocalization encompasses worldwide processes adapted to local circumstances.

Robertson’s delineation of glocalization given a cyber designation brings new possibilities for cyber spaces interlinking with centuries old geographic and culturally defined spaces. The Louvre site provides an example of adapting global cyber processes to local circumstances and is done in a way that richly expresses French history and culture.

Methodological Processes

Following in Said’s conceptual footsteps, ethnographic observations (Spradley, 1980, 1997; Yow, 1994), pre-structured open-ended interviews (Creswell, 1997), ongoing discussions online and off with six Hermitage ICT-related personnel and three of the Louvre Service Internet, and onsite observations were employed for data collection. Brief historical tracings of website development in each museum were recorded. Philosophical analysis employed a hermeneutical approach to decipher the remediation of text and image on the current museum sites employing Bolter and Grusin’s (1999) notion of remediation, new media re-fashioning old media in web communication.

Field data collection at the Hermitage in 2001-2003 and the Louvre in 2003-2005 engaged ICT website related personnel in qualitative pre-structured, open-ended, taped interviews of about one to one and one half hours each. The Hermitage interview questions, open-ended, numbered ten, and the Louvre, ten, with similar questions asked of personnel at both sites. Those interviewed were invited to question the interview questions as well as to add pertinent information not overtly sought in questions asked. Several ICT personnel of both musea were interviewed several times as further queries arose in the ongoing collection of research data. The taped interviews were transcribed and analyzed. Along with the interview texts, ethnographic research notes were taken on-site noting museum ICT procedures and practices. Subsequent conversations and emails with personnel of the two museums continue to clarify particular ICT engagements.

Transcribed interviews were analyzed qualitatively and coded, both manually and employing Atlas.ti qualitative software to track themes and locate patterns, with a coding synthesis of transcriptions using an inductive grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1998) approach to

coding, structuring a system for understanding what one discovers and framing these to produce meaningful knowledge. Analysis of the full data collection searched out themes and patterns of web employments with cross-museum comparisons made (Hantrais & Mangen, 1996; Ragin, 1991).

A Tale of Two Museums

Data collection of the two museums' web histories and multiple collected field data, accompanied by website interpretation using the Bolter-Grusin remediation notion, were analyzed and pressed forward by two questions. First, how are internet communications technologies changing each museum's representation of itself on the web? And second, can these changes be understood as a playing out of underlying ideologies?

The Hermitage Story

Historically the Hermitage has been represented virtually through two websites. The first, a large website with text errors, was created around 1997 by the museum with available Russian technology and expertise because its director, Dr. Mikhail Piotrovsky, understood the importance of the Hermitage having an online presence which would give a possibility for everyone globally to share in Russian history, culture, and the treasures collected in the Hermitage (R. Shabaltas, personal communication, May 11, 2001). In June of 1999, the administration of the Hermitage and IBM through the work of Rebecca Kerr of Global IBM jointly launched a second and IBM-sponsored website with IBM giving certain specified equipment and lending particular expertise. The original agreement however, took a long time to evolve because Ms Kerr had to be certain that she could convince IBM that this would be a good step for the company to take because IBM did not want to lose money. Many within the museum view the second website, run by an IBM server located outside Atlanta, Georgia, as superior to the initial site. The story of the current Hermitage site is told through three chapters: 1) web representation, 2) interpreting website representation, and 3) relationships and web representation.

Chapter One: Web Representation

The current IBM-sponsored Hermitage website bears a striking resemblance to the websites of various other national museums, notably the National Gallery of Art in Washington, DC (<http://www.nga.gov/>) on which it is modeled. The employment of a Western museum design at first received unquestioned acceptance by those engaged in the development of the Hermitage site, with little concern about whether the use of a Western-based museum design developed through Western-based technology to represent a Russian institution was problematic. The Museum IBM Project Head points to a possible limiting of Russian cultural representation in his observation that "it will take a long time to answer this question I cannot say that we have problems with the Western design, but you can see the influence of IBM on this project" (A. Grigoryev, personal communication, May 10, 2001).

Along with IBM hardware, software, and expertise donated to facilitate the new website came the import of an IBM e-business advertisement situated beneath the blue IBM icon located on each site page in both Russian and English sections. The "About the Site" page accessible only in English on the home page elucidates IBM's involvement and goals for the project, namely

to do much more than just provide technology to the Hermitage Museum. We aimed to transform how people around the world experience the Hermitage Museum and its collections. The partnership with a world class cultural institution like the Hermitage marks IBM's web debut in the cultural arena and represents another powerful opportunity for IBM to demonstrate its leadership in providing leading edge e-business solutions to help customers leverage their existing assets (http://www.hermitagemuseum.org/html_En/00/hm0_8.html).

This text, which does not appear in Russian, is an advertisement for IBM's e-business. It consists of a statement of the corporation's business goals for *its* project with the Hermitage, which is positioned as a commodity to be exploited, a culture to be cybernetically colonized, and invites the important question of precisely how IBM benefits (*vis-à-vis* its global business) from involving itself in such a project?

Along with overt acknowledgment of the adopted Western museum web design and the IBM e-business advertisement beneath the IBM blue symbol adorning every web page, discussion with the IBM Project Head indicated what he believes is a key question directing the museum's web development: "What [is the] goal [for people who] use this website?" This query about the goal, or perhaps goals, for potential website users raises further questions because the majority of the Hermitage web visitors, to date, come from outside Russia and mainly from the Western world. Therefore, if the primary goals directing the design and content of the website are for mainly Westerners including an underlying expansion of IBM e-business, does this then not lead to the creation of an e-communication which moves the cultural museum artefacts towards commodification? And is this movement not from the West and for the West?

When asked how the "Russian-ness" of the museum comes through on the website, the Museum IBM Project Head remarked that the information text, the museum building, and its contents are Russian so it does not matter which technology is used to represent them or how it is displayed. He does not seem concerned that the technology used is, without exception Western in origin, pragmatically acknowledging: "If it works, then the ... kind of design does not matter" (A. Grigoryev, personal communication, May 10, 2001).

The overall consensus within the Hermitage ICT-related administration seems to be that while IBM provided the technological framework for the new Hermitage website, the content was provided by the employees of the museum. Content from the original Russian-based website was incorporated into the new site within the IBM technological shell. What is most interesting about this, however, is the relationship between the technological framework and the content. The distinction could be made delineating a separation of technological design and employment and the content, however the actuality of what historically occurred appears to be to the contrary. The Museum IBM Project Head succinctly described this relationship in concluding that because we already had a new technology we had to make new content. "We did not have the full technology [for the old website] but we tried to prepare everything for [the new website], so when we got it we could fill it.... We create[d] data for [the] new technology" (A. Grigoryev, personal communication, May 10, 2001).

This is a clear indication of how a change in technological framework – the form – began to drive the content of the website. What is important to note is first that the shift came about, and second that it came about as a result of IBM's involvement in the training of Hermitage staff and the application of its technical and corporate standards to their work. This is not particularly unique for museums that have acquired computer management systems have discovered it is not a straight forward nor simple task to shift content and data from a previous site. The Museum IBM Project Head's acknowledgement, along with his initial contention of what matters is that the site is easy to use, suggests however a clear acceptance of the superiority of IBM formats, standards, and procedures in the shaping of the content.

To state that the choice of design does not matter as long as it pragmatically works is to ignore or to fail to see the ways in which the structures that make the site "user friendly" and accessible to the onsite visitor are not neutral; there are underlying ideologies and directions at work. Applications of information communications technologies embody the underlying structure – and in this case IBM and its configurations – that forms the technology, therefore the application of a particular information communications technology is not an act of neutrality (Morbey, 2000).

Chapter Two: Interpreting Website Representation

In their 1999 influential text *Remediation: Understanding New Media*, Jay Bolter and Richard Grusin posit that the World Wide Web favours ongoing re-mediation, that is ways new media – computer graphics, virtual reality, and the WWW – define and refashion old media – painting, photography, film, and TV – and vice versa. Their remediation theory provides a hermeneutic, a way to interpret and understand what is transpiring on a website and subsequently what is viewed on the screen.

The web offers a constant promise of live interactivity through the flexibility of networked communication. This instantaneously engaging immediacy dictates the medium, created through the underlying contributing layers of media labelled hypermediacy in Bolter-Grusin terminology. The web has become an increasingly salient remediator, a reconfigurer, of all sorts of information which readily absorbs and integrates almost all other visual and verbal media.

This occurs in convincing manner, for example, in viewing the “Big” French ornate ceremonial carriage located on the Hermitage’s first floor atop the public main entrance stairwell in the Field Marshall’s Hall. The carriage (early 1720s, Gobelins factory), commissioned by Peter I in Paris in 1717, was used in the coronation ceremonies of Catherine I (1724) and Catherine the Great (1762). The immediacy of one’s presence in the virtual web space depends on the hypermediacy arranging of text, graphics, digitized imagery, video, etc. in multiple panes and windows, and joining them with programming and hyperlinks to generate the live sensation of walking around the Field Marshall’s Hall and of viewing the carriage much celebrated in Russian eighteenth century history. “HotMedia” and “Zoom View,” Java-based technology, provide movement about the room to create an instantaneous engagement of the on-screen visitor. In contrast however to the immediate “liveness” of HotMedia and Zoom View leading one about the hall, are the hidden layers of other media, hypermediated, which enable and facilitate the lively immediacy for the viewer. The two live together in contemporary media such as the Hermitage website and are mutually dependent (Bolter & Grusin, 1999). Both old and more current media that comprise the Hermitage website – traditional graphic design, digitized imagery, composites of paintings, text, video, HotMedia, Zoom View, etc. – co-exist in the remediation process.

Chapter Three: Relationships and Web Representation

Querying the relationship between the Hermitage and IBM, and particularly in relation to website development, maintenance, and sustainability, is it one of reciprocity, in which each party benefits to a similar degree, or is one party likely to be advantaged more than the other as the relationship unfolds? Within the interview transcripts, ongoing conversations with museum personnel, museum ethnographic observations, and website analysis, there are certainly moments when a perception of reciprocity is specifically articulated and noted in website decisions and what actuality appears onscreen. Clearly, the enthusiasm with which many of the Hermitage ICT-related staff has become involved in the IBM project reveals that they believe it is beneficial for them. In fact, the Museum IBM Project Head relates that it is good for both the museum and IBM. Other museum ICT-related personnel in more recent discussion, however, reflecting about their thoughts prior to the Hermitage/IBM partnership arrangement and what might happen to Russian cultural content in an IBM-shaped website, strongly believed before the project that in the IBM-sponsored site Russian content and context would be lost. They now confirm this is the case. There are three areas in which cybercolonizing aspects of IBM’s work with the Hermitage can fairly easily be demonstrated. These include: (1) the subtle shaping by a US corporation of the structure and ideology underlying the website, (2) the changes ICT and the website have brought to ways people experience (and think about experiencing) the museum, and (3) the question of language choice and usages, including corporate e-business language as well as American English branding, on the website.

In considering the question of cybercolonization of the Hermitage on the part of IBM, it is important to examine not only the overt concepts but also events that symptomize the process. We also

must look at how both the concepts – website ideology and structure – and events become naturalized in the users of technology and its languages. There is ample evidence in the data findings of the IBM developed website layers to support the view that members of the Hermitage ICT-related web staff have begun to accept as given, particular forms that cybercolonization has taken with respect to their work. Website structure and design, speed and information, and the Hermitage Shop, tickets, and e-business marketing are small parts of a museum experience, yet they are the aspects that are emphasized across data findings. It seems quite natural for museum personnel to accept the website structure incorporating IBM American techno-frontier and techno-oriental ideological influences, a website appearance resembling strongly that of other world class national museums originating in the West, the high-speed and information-providing aspects of ICT, and the site's marketing component – the goal of attracting more visitors to the museum where they can transact IBM e-business as well as purchase goods in the Hermitage Museum Shop and museum entry tickets. Put differently, such naturalization – a very subtle kind of influence that views technological and economic ideologies as neutral with no underlying ideology – might help to account for the overall enthusiasm on the part of Hermitage ICT-related personnel for the joint museum/IBM project. Technology has become naturalized, that is neutralized, to such an extent that it can no longer be viewed as other than pragmatically useful, even when it has the potential to change profoundly the ways the museum works and is experienced by those participating in it.

The forefronting of IBM's goals is also, arguably, made evident in relation to the question of language on the website. The fact that English is chosen as the second language is not surprising since it is the language of approximately half the individuals who access the website. Moreover IBM is a US-based company, and US English is its language of operation. What is curious, however, is the fact, observed by the site web specialist, that IBM was determined that the English used in the museum and on the website be *American* English. This demand resulted in heated debate between the Hermitage's English translators, who use standard British English and have done so for decades, and IBM management, who wondered why British English was being used. American English, rather than British English, is the second website language.

With the creation of the website, the museum's objective is not one of solely wishing to attract virtual visitors who come and go. Of course the administration of the Hermitage is aware that the website and its content provide only visual republication of the museum's artefacts which does not do justice to the originals. The hope exists that the viewer will someday actually visit the Hermitage to view and interact with the original artefacts beyond the remediated immediacy which draws them into the website. This leads one however to wonder whether the Hermitage website, influenced in its shaping by IBM software, hardware, web design, technical standards, expertise, and e-business emphasis, alters through remediation an understanding of the museum towards an IBM techno-object – a techno-orientalization – rather than one of Russian culture and history which brought the viewer to the website? Are not the agreed upon IBM web structure and design subtly, very subtly, both de- and re-colonizing the representation of Hermitage content?

The Louvre Tale

The first Louvre website was launched in 1995. About 1999 the Louvre Museum President-Director Pierre Rosenberg realized the importance of a new website that employed the Internet in more contemporary and meaningful ways to engage viewers around the world. His leadership initiated a minor new website development. It was his successor, Henri Loyrette, who inherited this vision in 2001 and made the development of a new and different kind of website a key emphasis of the museum for at least the next half decade. The new version "One" was launched June 6, 2005 with ongoing development, and whose guiding premises illustrate some playing out of the notion of cyberglobalization. This development will be elaborated in three chapters: 1) collaborative

conceptualization, 2) differing curatorial and educational objectives, and 3) a French cultural heritage scripted for global communication.

Chapter One: Collaborative Conceptualization

Under the new leadership in 2001 of President-Director Loyrette, the Service Internet team headed by Director Dr. Myriam Prot was struck to develop a new website conceptualization for the museum. From the outset, Loyrette made the new website a top Louvre priority with the notion of employing contemporary web ideas to change the Louvre cybernetically in relation to global visitors and to change communication, relationships, and collaborative engagement across Louvre departments and personnel vis-a-vis its internal life and internal service. The new Director wants an open system within the Louvre; his vision encompasses openness, communication, and new technology (M. Prot, personal communication, July 16, 2003).

Following Loyrette's vision, collaboration with and input from all sectors of the museum was imperative for the new development – curatorial to museum restoration to Service Internet to museum education to online tickets. The Service Internet Director clearly articulates the Louvre new website vision, "... we spent a lot of time, to define [through interaction] with lots of different [museum personnel] what they could contribute to in the new website. [We looked for what] they could invent as new services that [did not exist] on the old website, [what] they could create with their own knowledge. It took almost a year just to meet people, talk with them, and imagine all these new services for the next generation site. This is new for the Louvre, and very important! The [Museum Director] decided it was one of the main priorities for the Louvre" (M. Prot, personal communication, July 16, 2003). This vision led to an emphasis on the Internet and the development of innovative and strong strategies for its implementation. It has engaged normal people, not just technology personnel, in getting used to working with the Internet; a working together of researchers, art historians, curators, educators, and technology personnel which has become part of everyday life in the museum. With the launching of the website new version One on June 6, 2005, the different museum sectors remain collaboratively and integrally involved in ongoing development and input.

The new site is financially supported by Credit Lyonnais with a monetary gift of 4 million Euros, by in kind sponsorship of Accenture with personnel contributions to assist in building the Louvre new site strategy, and with technology from US-based Blue Martini providing the platform software. The French corporation Gaggemini assisted with strategies and implementation of the Blue Martini platform, tailored to the unique requirements of the Louvre. The Gaggemini connection came through a juried competition run by the French Ministry of Culture and was chosen for its ability to bring large French corporate expertise to the project. French bureaucratic procedures slowed the museum's collaborative process which contributed to a site launching two years later than initially planned. The sponsors have been openly engaged in the site conceptualization and development conversations. Descriptive website wording attached to each key supporter is carefully chosen so to clearly reflect each company's precise contribution to the website development.

It is the practice of software companies globally to sell a museum software at the full price and then to return 90%, however French Napoleonic law declares that there can be corporate contributions to French national museums, however these are 100% philanthropic with no monies paid to a particular corporation; "they do not ask for anything in return" (M. Prot, personal communication, July 16, 2003). Under French law a violation is serious and can result in what the French call "mis en," to come under French judicial investigation.

Along with integral internal museum activity assisted by sponsors, the Service Internet realized that the approach to those outside of Paris, and particularly outside France and the French language, needed to be engaging in content, design, a variety of languages, and for diverse cultures and age ranges. With a vision and strategy in place to bring about these possibilities, the Service Internet and

contributing sectors remain constant to an embedding of French history and culture. The core focus of the Service Internet and the new website is not about the museum director nor about the sponsors; it is about collaborative development within the Louvre community.

Chapter Two: Differing Curatorial and Educational Objectives

With the advent of the vision and strategy of the new website, the Service Internet and sectors across the museum view the employment of the Internet as a cultural medium rather than as a financial tool, a way to explain what the museum and its artefacts are about culturally and historically. The outreach of the site is two-fold: global visitors and the French population. Two-thirds of those who visit the museum are foreign visitors, with one-third coming from within France.

Since the majority of visitors are non-French, the Service Internet realizes a need to develop strategies to engage in a “user-friendly” manner the dominate groupings of non-French visitors in their own languages. Website version One 2005 includes the French and English languages, however as the site continues development Spanish and Japanese will be added. An emphasis exists to represent the dominate languages represented on the Internet, which also would include Chinese. The Service Internet would like at some point to add the Chinese language.

The new site focuses on two objectives directed by the sectors of curation and education: 1) a more intellectual understanding of the artefacts, and 2) real museum visitation preparation that brings forward an intellectual purpose for the visit, engagement with guided tours online, museum navigation, and key points about the main art works that will be encountered. A thematic teaching approach is offered through five “Thematic Trails” for the exploration of a particular theme, movement, or period in depth. For example, the “Masterpieces of the Louvre in Search of Ideal Beauty” offering, encouraged for a first visit, includes the three key museum works of Venus de Milo, the Victory of Samothrace, and La Gioconda – the Mona Lisa, with a reflection upon the indefinable notion of masterpiece.

Engagement, in particular, by the Curatorial Department on the new site is one where the curators wish to provide the public with another kind of experience other than tourism. The curators wish to offer engaging venues for the museum’s large global public that present the museum intellectually and culturally with the curators writing for a large general audience. This is a far cry from the elitism of Louvre curators of a decade ago. In the next website versions, there is planning for the development of an open research community as well as more personalized service so that one can save information when on the site.

Chapter Three: A French Cultural Heritage Scripted for Global Communication

A directing philosophy of the new site vision is one of global community. With entry onto the site home page, along with brief acknowledgments of the three key sponsors and a link to <http://www.culture.fr/>, the visitor is introduced to and can choose to click on the four groupings which comprise the Louvre community: Membership, Professionals, Young People, and Support the Louvre. The sub-groupings include a broad expanse of ways to be involved with and to support the museum. The administration, acknowledging that two-thirds of its visitors real and virtual come from outside France, is reaching out globally to engage and educate its many visitors. The once elite world renowned museum has altered what it was about to engage on all levels the large global population that wishes to learn about the museum, its history and culture, and the artefacts it houses. What has changed is the development of a vision and strategies to do this in ways that engage, communicate with, and educate the many non-French visitors. Strategies to engage the French, Parisian or otherwise, are also in place. This change in the contemporary Louvre is movement towards an “open system,” reflecting Loyrette’s priorities of openness, communication, and new technologies.

Along with its goal of global cybernetic inclusively, the Service Internet has built in layers of French culture and history relevant to the Louvre. This is done in four ways. First, the site is developed

so that the virtual visitor will feel more comfortable and familiar with the real Louvre the day they come for a visit so the web design navigation and museum layout is close to that of the real museum. Second, the Louvre in actuality is a palace. For the website user it is important to explain the history and culture of the Louvre so on the site there is an historical explanation of the palace. Third, many of the items on the site have been taken from ideas on other websites, however the Louvre possesses its own competencies which show what the Louvre is and that it could not be another museum. Fourth, within the site design and the 1015 artefact explanations thus far represented, the layering includes title, small picture, details, information, cultural explanation, text, guided tour, and so on with interactive links throughout. In this way the site design more subtly embeds historical and cultural information and explanation important to the museum and its representation of French history and culture. The Louvre site, an open system built on internal and external communication for the French and for the world, is a striking example of cyberglobalization.

Similarities and Differences of the Two Museum Websites

The key similarity of the two museum sites is the impetus for the website comes from the museum director, although how each went about directing this is considerably different. Piotrovsky initiated both Hermitage websites. In 1997 conversations with Global IBM about what it could bring to the Hermitage, in light of the lack of financial and technical support within Russia to bring contemporary ICT to the museum to substantially improve the first site, Piotrovsky invited in the sponsorship of IBM with its accompany baggage of influence to insure the Hermitage would have a quality global presence online. Louvre Director Loyrette, when taking over the directorship in 2001, set as a top priority the development of an open and collaborative site engaging all sectors of the museum in its development and with more user-friendly educational and intellectual engagement of its visitors through a diverse range of languages. Both directors pressed forward a website vision realizing the importance of the Internet for the global presence of his museum.

The content of these visions and developments play out in substantially different ways. Probably because of its Communist direction for decades and a lack of money and contemporary technological design and equipment, the approach to Piotrovsky by Global IBM provided a gift to concretize his vision to have the Hermitage on the web in a way that it would be globally respected. He accepted IBM's sponsorship with its influences and shapings which may have altered the Hermitage's internal ICT-related choices. The IBM US web structure, design, expertise, technology support, US language branding, and IBM e-business layer underlying the entire site, came with the agreement. Personnel within the museum, ICT-related and otherwise, confirm the reality that Russian cultural and historical sensitivity inherit in the first website was lost in the second, IBM sponsored site. The Hermitage website perhaps is ultimately a financial and communication tool where much of what it is about is US corporate branding.

The Louvre site embodying Loyrette's vision of an open system emphasizing internal and external communication and new technology, differs considerably from that of the Hermitage. Although museums regularly are in need of more funding as is also the case at the Louvre, it is one of the world's wealthiest museums so internal goals can be other than continually money generating. The site development came from the viewpoint of global openness and inclusively in structure, strategy, and design while at the same time overtly embedding French culture and history, and with sensitivity towards the French people. Once the vision was established, Loyrette passed the baton over to the newly developed Service Internet and Director Prot to develop a team to engage all museum sectors in the site vision, strategic planning, and development with an emphasis on internal and external communities. Differing museum sectors continue to develop, give import, and make ongoing website changes. The site, with its open collaborative conceptualization and development spanning four languages and a fifth to be added, with its curatorial and educative goals of engaging in a non-elite manner the virtual visitor

to develop more intellectual understanding of the museum and its artefacts as well as careful museum visitation planning, and with its French cultural heritage embedded so to communicate to the French as well as global visitors, provides a model of how the notion of cyberglobalization can be worked out meaningfully in the context of a large national museum.

As the Hermitage holds a US IBM technology and language branding, the Louvre is a more open, collaborative, communal system engaging all sectors of the museum with new educative and cultural visions as well as an array of sponsors. The need for financial assistance most probably directed the Hermitage choices towards IBM and its influences leading to subtle cyber colonization as IBM met its economically-based objectives and the Hermitage seemingly received what it needed. The Louvre on the other hand, led by a vision of openness, community, and engagement embedding French culture within the development of the new site, made from its Paris-based home a site that engages on local and national French levels, and reaches out in a diverse, user-friendly, multilingual, communal manner to engage those from around the globe. The Louvre website offers an example of the development of a museum site in the vein of cyberglobalization, providing an alternative and a beginning micro-model to cyber colonizing influences. The two museums illustrate in tellingly different ways my premise that digital technology is a cultural construction and it carries and generates cultural discourse related to its construction and place of application.

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