

Exploring Landscape, Documenting Culture, Constructing Memory: The Loire Valley Internet Workshop

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ABSTRACT

In 1998 a 260-kilometer stretch of the Loire River—and its adjoining parklands, vineyards, châteaux, churches, abbeys and prehistoric sites—from Sully-sur-Loire to Chalonnes, was nominated by the government of France as a World Heritage Site. Because of the enormity of the designated site, the newness of UNESCO's 'cultural landscape' classification, and concerns about nuclear power generation along the river, this nomination stalled in the international committee. French officials turned to digital media as a way of explaining the merits of their nomination, and as an aid for coordinating multiple agencies' efforts in plans for the region's future.

professionals, and government officials was charged with modeling a clear and sustainable vehicle for cultural memory. What transpired is a story of landscape exploration and cultural documentation in the age of the internet.

LAND AND LIFE

The classical definition of 'landscape', in a day when artists like J.M.W. Turner and Eugene Delacroix journeyed to the Loire Valley to train their gazes on its terrestrial and atmospheric splendors, was a vista of rural country composed as a picture. Even landscape designers had begun to take their cues from painting, constructing parks and gardens that embodied aesthetic principles of an idealized pictorial landscape. Although English language dictionaries still offer the old-fashioned formulation of landscape as "an expanse of the earth's surface that can be seen from a single viewpoint," the perspectives of geography and environmental science have transformed our sense of this terrain. The disappearance of wilderness and the depletion of natural resources have become matters of fact. The modern concept of landscape is no longer a pretty picture of unspoiled scenery, and it is never simply a natural site. Rather it refers to a space that has been defined, ordered, and fulfilled by human habitation. Geography, for better or worse, is anthropocentric. A landscape is "a space deliberately created to speed up or slow down the process of nature," wrote J.B. Jackson. "It represents man taking upon himself the role of time" [1]. To form an idea of a landscape is not merely to behold a view or to catalog its component features, but to perceive a system of dynamic interrelationship among its elements, as Carl Sauer insisted—"to comprehend land and life in terms of each other" [2].



Figure 1: The Val de Loire web site home page

http://www.cdv.berkeley.edu/research/Val_de_Loire

For one extended week in July 2000 a small group of skilled volunteers descended upon the Loire Valley to record, narrate, and interpret its history. With the worldwide web as a unifying instrument of expression, the interdisciplinary team of twenty some students, teachers,

The World Heritage Convention, adopted by UNESCO in 1972, established an international legal instrument for recognizing and protecting sites of outstanding cultural or natural value. In the original writing, this Convention did not include the word ‘landscape’. Yet for purposes of practical implementation, its authors’ careful distinction between natural and cultural properties posed a paradox: many sites that seemed worthy of inscription in the List failed to strictly match criteria of one category or the other. While a handful of sites were approved under the designation of ‘mixed property’, it was not until 1992 that the World Heritage Committee officially introduced a new provision for acknowledging sites that are distinguished by the reciprocal actions of nature and man. According to this provision, a ‘cultural landscape’ is a site which embodies “the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment, and of successive social, economic and cultural forces, both external and internal” [3].



Figure 2: The UNESCO section of the web site

The Loire Valley, nominated in 1998 for inscription in the World Heritage List as a living cultural landscape, exemplifies characteristics of both classical and contemporary ideas of landscape. Defined by a river that crosses half of France, the site extends over a distance of 260 kilometers—far greater than the eye can comprehend at a glance. Its powerful waters, verdant fields, and vibrant villages have inspired painters, poets, writers, and architects throughout the centuries. The diversity of plant and animal species in this locale facilitated human settlement as early as 500,000 years ago. The legacy of previous inhabitants includes numerous vestigial remains (Neolithic compounds, Roman towns, Renaissance châteaux). The limestone basin of the Loire forms a mutable aquifer, which has perpetually challenged human attempts to channel the river for navigation and to stabilize its banks for agriculture.



Figure 3: the confluence of the Loire and Vienne Rivers

Such audacious exercises in hydraulic engineering are evidenced by levees that date from the 12th century and an elaborate system of dikes introduced during Napoleon’s regime. The 20th century witnessed a gradual disappearance of traditional navigation and fishing in favor of the construction of hydroelectric dams. Human activities continue to impose a toll on water quality and the migration of aquatic animal species. Nevertheless, people of the Loire region have been resourceful in adapting to the changeful nature of their river. The Loire is the last river passage in France which illustrates the successful interaction between humans and nature over centuries, in a dynamic, modern landscape that continues to evolve.

CAPTURING THE SENSE OF A PLACE

The Image of the City, Kevin Lynch’s seminal urban design essay of 1960, advanced the proposition that people’s perception of their surroundings should be regarded as a critical focus for urban and regional planning. The coherence of a place in the minds of its inhabitants is key for measuring the success of a place as a habitable environment, and for making plans to improve it [4]. Lynch’s work introduced a classification scheme for the perceptual analysis of places, and it established a set of priorities which have been widely adopted as standards in urban design practice since then.

The complexity of modern cities has meanwhile provoked the need for increasingly sophisticated techniques of identifying, tracking, and representing phenomena that elude the language of static physical form employed in architectural drawings and surveyors’ maps. New approaches to ‘imaging’ the environment extend our sense of place beyond mere physical configuration of objects and spaces, into the realm of experience.

For one thing, there is the *genius loci*—a Latin phrase for the ‘guardian spirit of a place’, whose presence accounts for the life of the place and determines its character or essence. Something like this ancient Roman concept is common among indigenous cultures throughout the world. Compared with space, which can be mapped, the character of any place is too comprehensive to permit systematic specification, and it is also more concrete. It is a condition of atmosphere, weather, lighting, and the passage of time, as well as a function of space-defining form. This character expresses itself in the flavors, sounds, construction practices, and daily routines of a region, and it encompasses all the personal and idiosyncratic ways that people ‘belong to’ or ‘identify with’ the place [5].

THE INTERNATIONAL WORKSHOP

At the behest of the Mayor of Chinon, the fourth in an ongoing series of *International Workshops on Cities, Design, and the Internet* was staged in the summer of 2000 in the Loire Valley. Organized by the Center for Design Visualization at the University of California at Berkeley and the Urban Development Agency of Chinon, in collaboration with the UNESCO World Heritage Centre, the Loire “Atelier International sur le Patrimoine, le Développement Durable et l’Internet” sought to build the foundations of a cultural internet ‘portal’.

The *Cities, Design, & Internet* workshops have investigated ways for bringing new media technologies and communication paradigms to focus on expressing the sense of place—in terms of built form and landscape, culture, social relationships, and local heritage. Our emphasis concerns the enhancement of people’s sensibility about their physical environment in a local planning context. Through development of a multimedia database, interactively accessible via the Web, the goal of the workshop is to provide a basis for the construction of community identity and cultural memory.

Hypermedia on the Internet affords a structure which enables creation and dissemination of a highly visual survey of a site's architectural space, environmental morphology, and *genius loci*. Drawings, maps, video clips, 3D models, photos, and animation can be woven together in a composite and multi-faceted portrait of the place that individual viewers may selectively sample, sequence, and extend along a number of physical and thematic pathways. Such a survey offers a versatile and widely accessible information base, which may be rearranged, perused, and updated by members of the community.

Compared with the previous three workshops, which had undertaken individual towns, the Loire project addressed a far-flung landscape that spans two of France’s political Regions, four Departments, and 318 municipalities. A primary challenge of the project was how to construct, within the imagination of the Valley’s populace, a unified sense of this multi-centric, many-dimensional place.

In addition to establishing the Loire Valley’s presence on the web, the workshop aimed to lend impetus to the stalled World Heritage nomination by re-energizing officials and the community, and by employing internet technology to simplify coordination among diverse and overlapping management jurisdictions. Our UNESCO sponsors furthermore hoped that the workshop might yield a replicable case study for the use of digital media in cultural heritage projects. Finally, workshop participants were interested in exploring:

- the potential of hyperlinks via the web as a cultural organization tool.
- the map as interface to cultural landscape.
- the use of digital media for articulating a sense of place.
- the use of the internet in constructing cultural memory.

THE VAL DE LOIRE WEB ‘PORTAL’

“Environments are invisible,” observed Marshall McLuhan. “Their groundrules, pervasive structure, and overall patterns elude easy perception” [6]. When it comes to spotting the *genius loci*, visitors sometimes have the advantage over long-term inhabitants who have assimilated the character of their surroundings as second nature. Call it beginner’s luck, or the sheer pleasure of discovery. Our multinational team—with expertise in law, web design, architecture and urban planning, art history,

journalism, hydrology, and cultural management—brought diverse skills to this challenge. Hailing from Paris to Milan, and New York to Madrid, they spoke as many languages. Working from a makeshift computer lab that had been assembled in a local house, the group fanned out across the region on a daily basis to explore and record the rich cultural landscape. Utilizing digital cameras, sketchbook and watercolors, a kite-mounted photography rig, industrial design software and HTML tools, the group produced web pages replete with movies, sound, QuickTimeVR panoramas, and Shockwave interactions.



Figure 4: although the workshop’s main focus was on cultural heritage a more commercially-oriented section of the web site was also designed. Shown here is a page listing local wine produce.

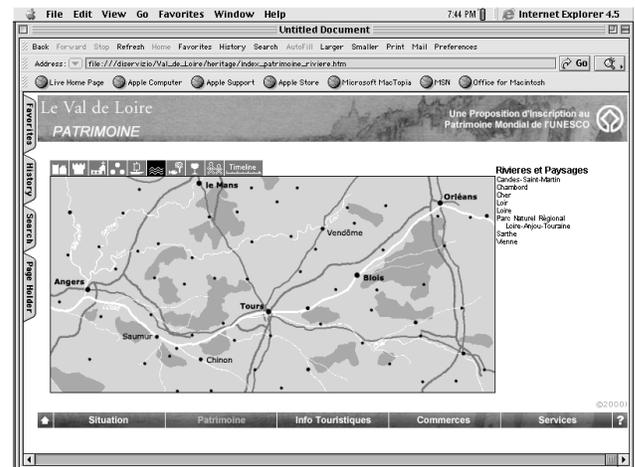


Figure 5: a map metaphor was used as the main exploration tool to the vast database.

Interface

With consideration for the size of the region and the diverse perspectives of potential site users (management officials, citizens, tourists, students, etc.), a handful of interconnected key topics (such as environment, heritage, business, services, and tourist info) establish the simple schema for an interface that is designed as a repeatable structure. A subsite featuring the city of Chinon, for example, employs the same visual arrangement and hierarchy of categories as the whole.

Within the primary heritage section a map metaphor was utilized. Maps provide an open-ended system for accumulating, storing, and retrieving geographic experience. "A map invites attention alike synoptically and analytically. . . Its symbols are translated into images, and these are assembled in the mind's eye into meaningful associations of land and life" [7]. Constructed and displayed on the computer, a map augmented by an underlying database enables people to read the landscape in terms of time relations as well as space relations. Adopting a typical tourist-guide approach, we charted a general purpose map of the region on which are superimposed thematic icons that locate relevant points of interest.

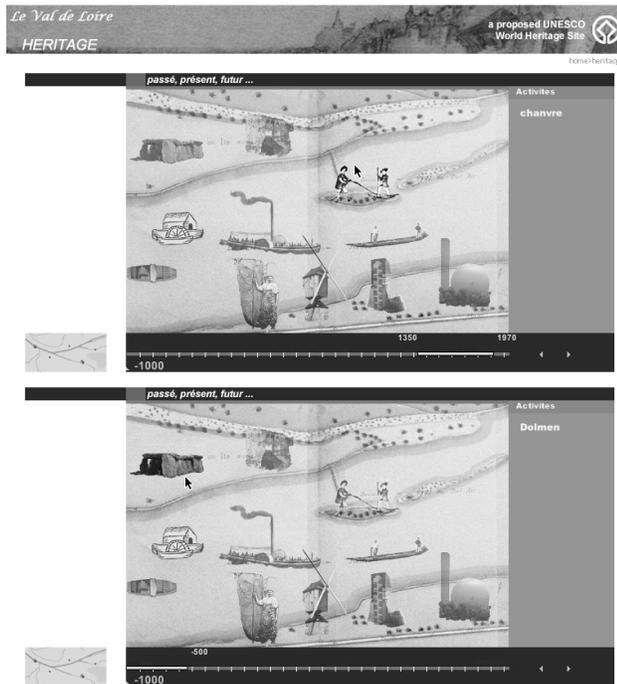


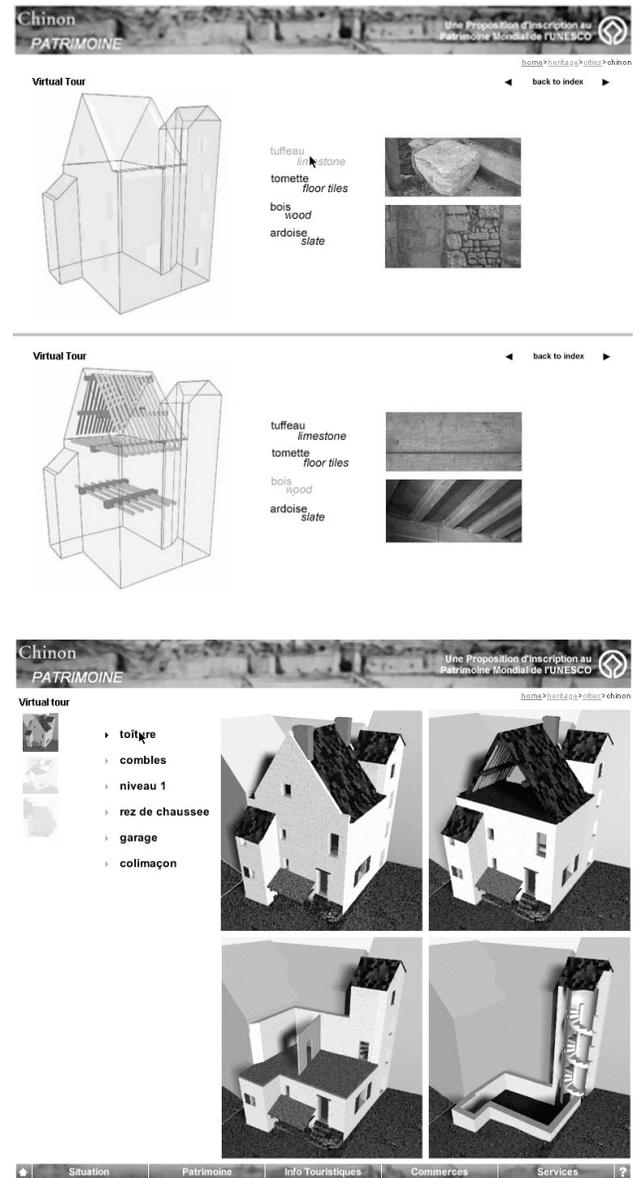
Figure 6: an interactive Timeline was developed in order to offer multiple access to the system.

The user can select icons representing river activities, or use a time sliding bar, thus switching freely between a historical/chronological and a geographic/social approach.

One layer of the map is a navigable timeline that chronicles the many different uses of the Loire River through history. Built in Shockwave, this timeline offers access to information through both an historical/chronological approach and a geographic/social approach. The timeline overcomes the fixed perspective associated with traditional maps, inviting those who examine it to consider the relationships among historical, social, and economic facts, and geography.

3D Graphics

Interactive multimedia and 3D computer graphics have been merged and used extensively within the web site to represent several historical elements, including a Loire riverboat and a Chinon townhouse. These interactive reconstructions aim to bring into full light the potential of interactive multimedia for producing educational presentations. The simple interactive sets allow a viewer to assemble/disassemble a complex object, and/or highlight individual components in order to gain new insights and better understanding.



Figures 7 and 8: reconstructions of a historic townhouse in Chinon. 3D models of the building were developed to support an interactive exploration. Shown here are two sections demonstrating local materials and construction techniques and the relationships between local typologies and the building's internal structure

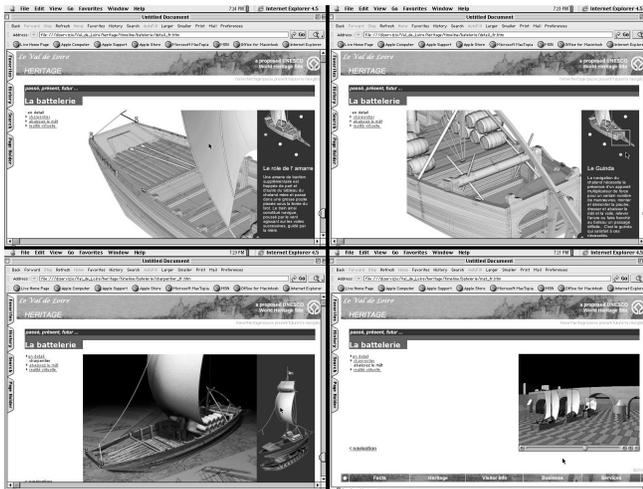


Figure 9: 3D animated reconstructions of a traditional boat on the Loire River. The model was developed to display details of the vessel and to explain traditional solutions of fluvial transportation problems such as having convoys passing under low bridges.



Figure 10: digital videos provide lively insights into the life of a weekly market in the Val de Loire region.

QTVR and Video

Liberal sprinkled throughout the web site, QuickTimeVR panoramas (with embedded directional sound) afford immersive views of architectural spaces. Short video portraits of local characters and settings, as well as glimpses of weather, water features, comings and goings of the neighbors and ducks, lend viewers an animate sense of daily life.

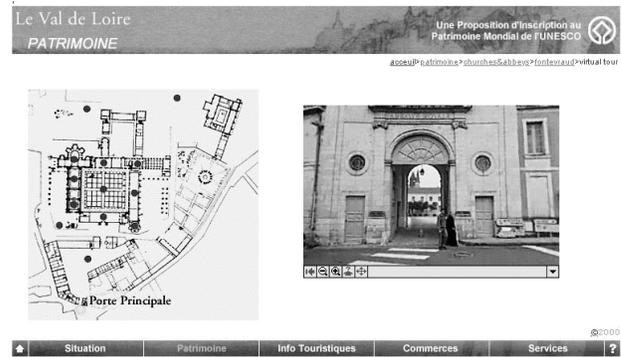


Figure 11: QuickTimeVR panoramas have been extensively used to help understand architectural complexes and natural sites.

CONCLUSIONS

The 4th International Workshop on Cities, Design, and the Internet succeeded on multiple levels, bringing digital media technology to bear on the issues of cultural heritage documentation, exploration, and narration. Although we built but the bare skeleton of what may someday be a vast cultural ‘portal’ and integrated management tool, our team of twenty some volunteers successfully demonstrated that the internet can be a powerful aid in the complex challenges of heritage documentation, management, planning, and access. The dynamic landscape of the Loire,

from the ever-shifting sandbars of its riverbed to its evolving historic towns, living vineyards, and many inhabitants, proved well-suited to the hyperlinked, media-rich structure of the internet. At the end of our ten day collaboration, we left each other and our colleagues in Chinon and Tours with new insights into the use of digital media as a vehicle for creating cultural memory and with the foundation of a growing internet window onto the Loire cultural landscape.

From small seeds planted in the summer of 2000 many flowers have bloomed, as government officials explore the idea of a cultural management training program in the region, and schools plan a larger workshop in 2001 that will continue development of the web site.

As important as the workshop was in creating a digital media site, it was also an event in time and place. For regional officials it stimulated renewed interest in the Loire Valley nomination, and served to bring multiple managerial authorities together around a shared management tool. UNESCO took a further step into the digital age, and learned that even with minimal time and resources and only a few dedicated volunteers, new media can be deployed as a valuable resource for cultural heritage.

From the perspective of anyone who participated in this improvisatory production—from the local historian who learned HTML as he helped students illustrate his town’s history, to the local sailor who worked all night with a young Italian designer to digitally reconstruct an ancient river boat—the workshop left its mark on the Loire and in the hearts and minds of us all.

AFTERWORD

The Loire Valley was approved for inscription in the World Heritage List in December 2000, as “an outstanding cultural landscape of great beauty, containing historic towns and villages, great architectural monuments (the châteaux), and cultivated lands formed by many centuries of interaction between their population and the physical environment.”

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