

Experiments into web-based museum design within Turkish culture

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The Department of Communication Design at Yildiz Technical University organised a design project workshop on the preservation and exhibition of cultural and scientific knowledge, and non-material cultural heritage. The goal was to conduct research into more effective ways of presenting such content.

First the designers investigated the concept of ‘Turkishness’, which is not widely understood. Starting from this point, twelve topics were selected for projects; cinema, theatre, contemporary art, fashion design, history of science, flora, fauna, political history, sports history, medical history, literature and music. For example, a search showed that there were not any significant websites concerning Turkey’s flora and fauna.

In creating the designs, the conventional means of attraction employed in physical museums were a starting point. It was felt that if these means were neglected then there was risk of turning the project into an e-book rather than a museum. But the designers also thought that making an electronic copy of the physical museum was not the only or best way to create an attractive museum in the electronic environment.

During the projects they tried to combine components such as image, sound, movement, light and pattern — which together help form a space — with texts. They created the feeling of touch in the physical environment using the interactive capacity of electronic media. In this way they could design equivalents of the real museums, which we can both see and touch.

Although VR systems are more effective in the creation of realism and in making museums more attractive, these systems need

peripherals such as helmets and gloves, which are not very attractive for users. In order to overcome this disadvantage, systems like 360 degree panoramic or spherical screens are being designed that will provide a 2.5-D virtual reality. But none of these systems are as cheap, handy and easy to use and update as the World Wide Web. This makes the World Wide Web —the commonly used media for the creation of attractive 2D electronic museums—the only practical solution for now.

Two of the projects best demonstrate these design ideas. The first is the *Interactive Botanic Museum of Turkey* (IBMT) [<http://www.siyah.net/oxy/botanic/html/index.html>] (Figure 1). In this project the designer shows the characteristic plants in seven geographical regions of Turkey. The user can access a data card for each plant. This card consists of an illustration and an abstract of information about the plant (accessed by clicking the map at the bottom left of screen). After this selection the data list of the selection appears in the middle of the screen.

The data list consists of clickable sub-menus. This makes the user first access the main groups and then the details. Also another matrix menu at the top right appears when the geographical regions are clicked. This ‘see-also’ menu gives the user the opportunity of viewing similar plants. The ease of navigation is created by this flexible structure. In the future there will also be a QuickTimeVR image of the plant, which will make the experience richer and this will be embedded in the data card.

The main success of this project is the designer’s way of using the ‘map’, ‘list’ and ‘see-also’ menus in an original graphical interface.

poster

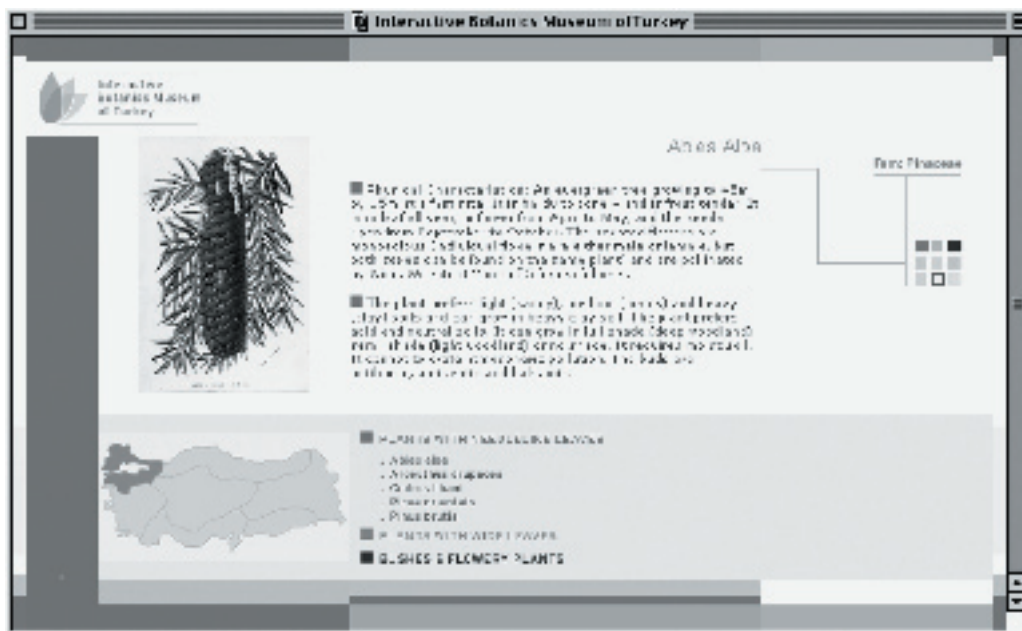


Figure 1.
Interactive Botanic Museum of Turkey.
Designed by Filiz Örgen,
supervised by Ahmed Öktem.

Instead of the common vertical and horizontal linear layout found in many web pages, the menus are successfully inserted in the composition in an irregular way. The designer presents the data within an original, more artistic and flexible layout. There are some simple attractions, which also illustrate this approach. For example, the plant illustration on the vertical bar at the left of the screen grows larger as the navigation gets deeper. This way the designer manages a better user experience without detracting from the layout.

The second project is the *Interactive Museum of Turkish Clothes* (IMTC) [<http://www.s-enerji.com/turkishwardrobe>] (Figure 2). This project is about the progress of Turkish fashion design since the fifteenth century. The designer solves the navigation problem with the use of a timeline. The screen is divided into three vertical spaces. The first part shows the time, the second is a content-sensitive cloth menu and the third contains the detailed information. There is also a linear menu at the top of the screen that shows an exhibition calendar and contact information for the museum.

In order to start navigation the user first chooses a century. When a century is selected in the timeline the clothes in the second space slide right or left to make room for the clothes of the selected century. The clothes are drawn in outlines. When the pointer is over one of the clothes the outline changes to a photographic image with a transition from centre to edge.

This makes the user pre-informed about the materials. There are four outlined images, which are clothes for a man and a woman and accessories, for every century. With the selection of an outlined image the third space is filled with information consisting of photographic images and text. The user browses among the photographs using the numerals under the frame.

The real success of the project is the three-part structure consisting of the timeline, outlined images, and detailed information. In the path through the information the designer provides the user with enough attraction, which also makes the corporate identity more effective and that is necessary for a subject like fashion design.

The two projects mentioned above show that the common menu and interaction structure of the World Wide Web is not sufficient for the representation of a museum in 2D electronic media. The linear vertical and horizontal menus and standard interaction structure may be suitable for e-books but they are obviously inadequate for a web museum. That is why the designer has to create experimental ideas. The examples above show two ways of doing this.

The first is the deconstruction of the vertical and horizontal menu structure. In the *Interactive Botanic Museum of Turkey* project the map, list and 'see-also' menus are organised with reference to the horizontal axis and the use of different sizes creates a dynamic layout. Hence this method uses a horizontal menu structure.

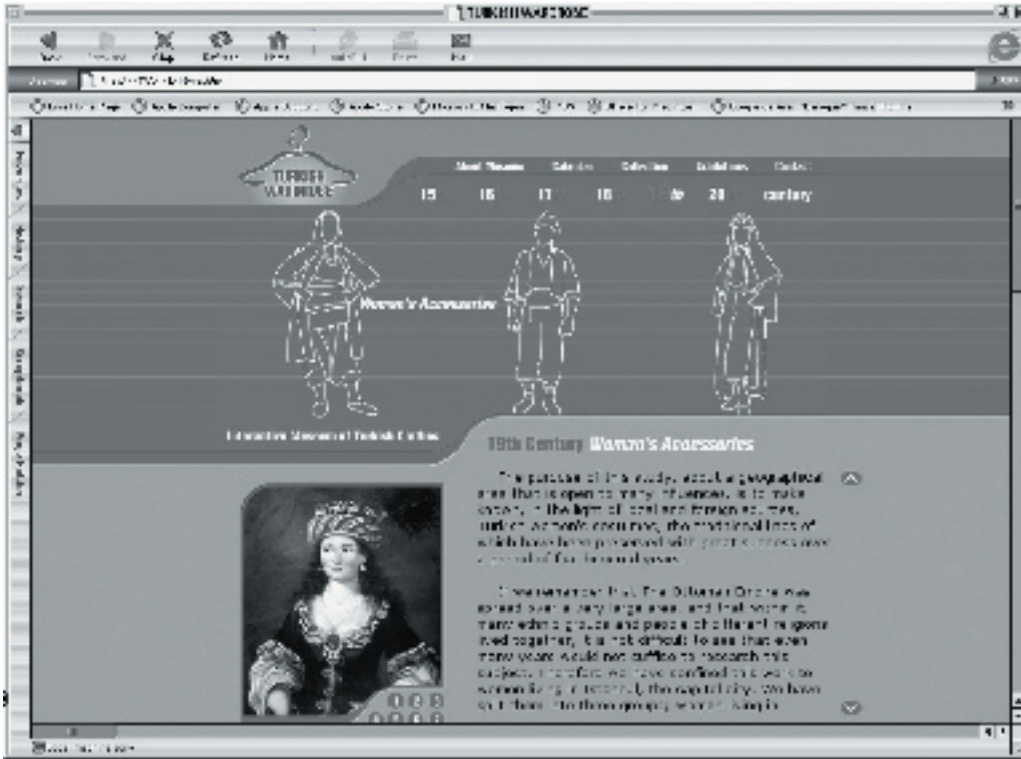


Figure 2. Interactive Museum of Turkish Clothes. Designed by Arif Ersoy, supervised by Ahmed Öktem.

The second method uses visual effects and a more artistic language in interaction design. In the *Interactive Botanic Museum of Turkey* project, the 'see-also' menu is designed as a matrix structure and cube form rather than a text and this makes the web museum usage closer to a 3D environment (Figure 3).

Certainly it is not possible to know the usability of the designs without proper tests. But the designers have got to be encouraged to create experimental designs that will effectively function like a museum in an electronic environment. With more practice, future communication designers will be able to further improve the communication possibilities.

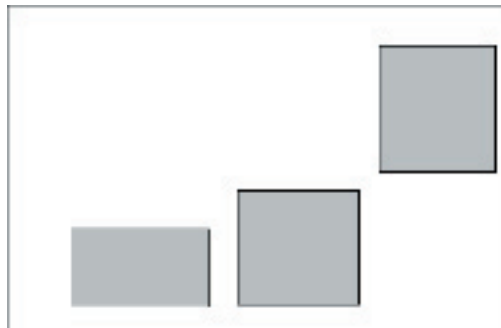


Figure 3. Deconstruction of horizontal menu structure in the *Interactive Museum of Turkey* project.

Oguzhan Ozcan, current Chairman of the Department of Multimedia Design at Yildiz Technical University, completed his PhD dissertation on a multimedia system for the Topkapi Palace Museum in 1993. He worked on various web museum projects such as the *Istanbul Museum of Painting and Sculpture* (1995), the *Topkapi Palace Museum*, *Dolmabahce Palace*, *Rahmi Koc Museum* and *Interactive Museum of Turkey* (1998).

Ozcan has written a number of articles in this area, such as 'Mathematics and design education' (*Design Issues* 2001), 'Virtual museums in Turkey' (*Museum International* 2001), 'Teaching interactive media design' (*International Journal of Technology and Design Education* 2002) and 'Traditional shadow play and interactive media' (*Design Issues* 2002).