

The design and management of cultural services on the WWW

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Abstract

This article deals with cultural web services in three fundamental parts: the conception of the interface (with special focus on underlying metaphors and the use of icons); the use of expressive resources (in relation to pre-web procedures, especially printing); and the problems relating to the direction and management of projects (especially the training of those involved).

Key words

Web sites, cultural interface, icon, typography, management, training.

Introduction

The planning of cultural services on the WWW is an especially exciting field. By its very nature, cultural content is wide-ranging, as are its users in the sense that they may have very different interests and skills. Therefore, the use that may be made of these cultural materials covers a broad range of possibilities.

This means that the areas of contact with the public function at different levels and very different depths, which tends to lead to the creation of complex web sites requiring a great deal of attention and complex maintenance. Of the many questions which may be posed as a result of this context, this article focuses on three main strands: the conception of the interface, the use of expressive resources, and finally, the problems relating to the direction and management of projects.

The interface

The initial consideration for cultural-type projects (or any other type of project, in fact) is how to conceive the point of contact with the users. As we have already mentioned, cultural projects are normally very gene-

ralized, and this means that there is no precise user model on which to base the design of the interface: we cannot know their experience of navigating, nor the technical abilities of their team, nor their specific interests. Moreover, and especially with content as volatile as that in the cultural field, we know that it will be consumed from all points of the globe, or rather, anything could happen...

One of the first questions which arises when designing an interface (whether generalised or not) is the decision of whether it should be aimed at new or regular users. This is normally resolved in favour of the former: regular user interfaces can always be personalised with the use of cookies or an entry register. Moreover, experienced users can go directly to the area which interests them by means of bookmarks as long as the site design allows for this. Other possible access routes are the periodic e-mail communications known as newsletters which are sent to specific points through links. The most common solution, therefore, is to orientate the front-page and the interface towards new users.

Interface metaphors

The choice of metaphor to access the web site is also fundamental. Broadly speaking, two types of metaphor can be defined for what appears on the screen: printed and spatial.

In the printed metaphor, the screen becomes the page of a publication, the front page is the front page of the publication etc. Logically, a range of very different solutions can result, but the front pages do not differ significantly from those of certain newsstand publications, the only innovation being some kind of shy animation, as there is little scope (network capacity and velocity) for luxuries.

Printed metaphors are those which have proved most efficient in recent times (e.g. in the famous portals). These are partly a result of a certain conservatism towards the medium at present, which has ruled out any possible more recent experiments, but which also reflect the need to offer a familiar and recognisable point of contact to the large variety of public who have recently begun to use the Web. We should not forget, therefore, that the textual content is still the fastest on the network.

In the spatial metaphor, conversely, the screen becomes a window. In VR (virtual reality or pseudo

virtual reality) systems, users may adjust their own position and examine their surroundings. Virtual reality in the true sense (technology for all-immersing telepresence controlled by the user) is very expensive on the Web, and it is therefore more common to see reduced versions, be they 360° panoramas or simple illustrations representing different perspectives that may be selected at will.

Previous to the expansion of the WWW, these interfaces were widely used spatially by CD-ROM. The zero or most obvious grade of metaphorisation is the virtual museum: the user may move around different rooms or galleries and by clicking on the exhibited works, may obtain a broader view from the presentation of complementary information, etc. Museums are well-founded in our experience as installations whose purpose is the exhibition of works, and as such, the transition towards the interface is simple.

In a leap towards abstraction it is the representation of a working environment in which familiar places and objects lead us to take certain actions. The typical case, of course, is the desktop (first in Macintosh and then in Windows), where documents may be examined and filed, and where different tools may be used.

Rooms, whether they are orientated towards work or not, become good interfaces (fig. 1). In an early example of CD-ROM for a collection of children's music (*Lenny's Music Toons*, Paramount Interactive, 1994), a living room became the interface for the program. Apparatus with directly transferable functions could be found there, such as a television and a hi-fi system (by clicking on them one could watch a film, listen to music, etc.) Other actions which do not use the apparatus are equally direct, such as choosing a book on a shelf in order to open it. There are more abstract examples, however, like for instance clicking on a toy box in order to play. Lastly, there may also be an arbitrary element, as in the possibility of activating the exit by clicking on the image of a taxi.

Although it is simple, this kind of interface is very effective and intuitive (proof of this is its continual use in children's products, e.g. *Gran atlas del pequeño aven-*

turero [A big atlas for little travellers] Barcelona: Ediciones Zeta, 1998). In the context of a product for children, one of the potential problems becomes an advantage, namely, which of the elements in the room are really interface functions and which are not? Normally, interfaces (be they WWW or not) indicate where the hot points are by means of the cursor or changes in the image which is being 'travelled' through. However, they may also be disabled (especially in the context of play and exploration, normally for children).

But these points of feedback in hidden interfaces need to be actively explored (the cursor has to pass over all the possible areas in order to identify where the hot points are). Contexts which do not require exploration or play may highlight a priori the areas of the interface which have a function in the programme or the web site.

Whatever the solution, an additional problem is the hierarchy of commands. In fact, all interfaces contain many different functions: for example, access to certain services, communications to the project managers or internal searches. A command menu allows them to be conveniently organised hierarchically which an interface normally does not.

A reduced type of spatial interface would simply be a graphic representation (without the all-immersing aims of VR or pseudo VR). These include representations of web sites as plans (of cities or buildings), which were popular two or three years ago but are seen less frequently nowadays.

In my experience of the creation of the Centro Virtual Cervantes, I have to say that that the idea of a scheme metamorphosed in a plan turned out to be very appropriate and for that reason I shall talk about it in some detail here.

The plan for a site

The Centro Virtual Cervantes (CVC) was set up in 1997 with a risky communication brief: the parent institution, the Cervantes Institute, had around thirty centers worldwide offering classes and a range of dif-



Figure 1. The room as an interface in this 360° (or pseudo VR) panorama at <<http://www.jmaillan.com/curriculu.htm>>.

ferent cultural services. Since the CVC wanted to be the line of continuation for these activities, it occurred to us that it would be a good idea to link its on-line form to its actual form. However, we did not want this to be the first interface contact with the user, so a «publication» front page was set up, with the word «plan» clearly marked as the first element in the upper menu. This led to a front page where the logo of the institution acquired volume and became architecture, (fig. 2) and from there it moved to each of the floors (figs. 3 and 4).

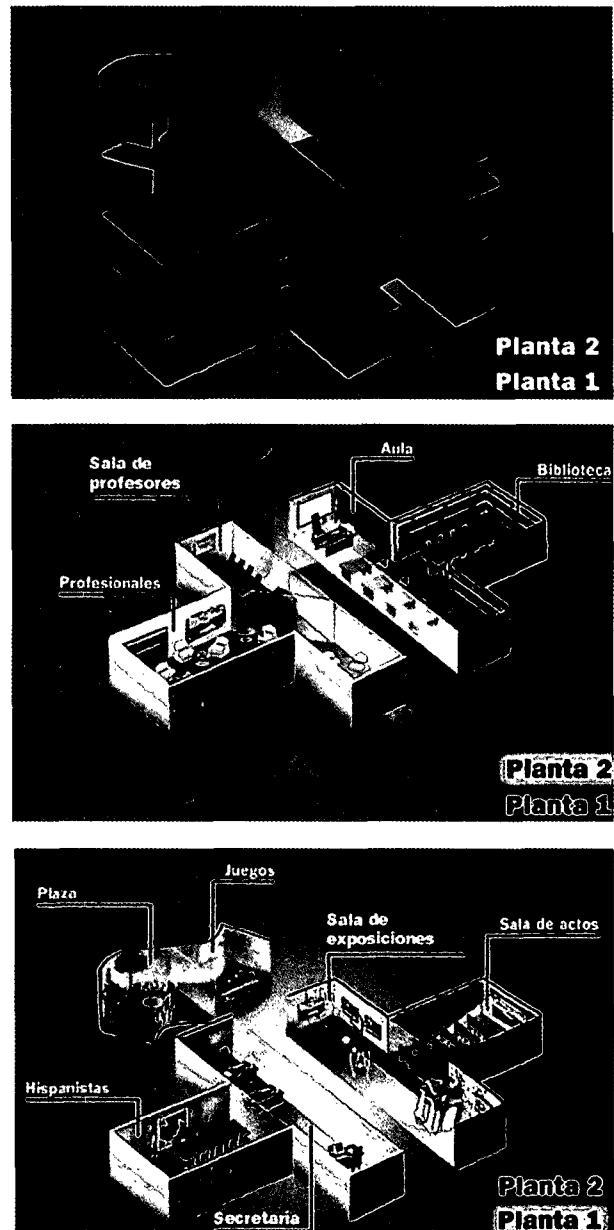
Our hypothesis (that of the original CVC team and the designer Josep Bagà) was that the schematic form of the different sections was able to clearly represent the services offered by the different parts of the web site. Moreover, the use of icons was backed by the names of the places, making the association even clearer.

Therefore, the area of on-line reference works (basically planned for dictionaries and other consultative works) could be accessed via the «Library» on the plan, and the Spanish class exercises and other didactic materials, from the «Classroom». Both the «Conference room» and the «Exhibition Hall» led to different cultural events. A real «Secretary» led to the virtual secretary, whose task was to deal with enrolments, etc. A trickier question was where to place the meetings, but after a little deliberation we put them in the «Courtyard».

The plan received many visitors: more than half of those who visited the front-page went on to the plan, and subsequently it became normal to go from the various rooms to their respective web services. I believe that it managed to communicate the purpose of the web site more than anything else, and also to symbolize the transition between the traditional and the Internet-based institution. (The Centro Virtual Cervantes is still at <http://cvc.cervantes.es> but now, four years on, few of the original design elements remain).

Icons

An ever-present temptation for web sites or programs aimed at a broad indeterminate public is the use of icons. If we see how day-to-day objects become indicators of function in spatial interfaces, those based on icons are isolated figurative representations (although collectively they frequently make up a system) which establish communication.



Figures. 2, 3 and 4 The plan as an access to content and services. Centro Virtual Cervantes (1997): Entrance to plan and floors.

Interfaces based on icons allow a hierarchical availability of elements, and with that a certain «order» in the commands available to the user. However their meanings present a number of problems. It goes without saying that the most common tendency is to associate each icon with a text, thereby converting the image into a mnemotechnical support for regular visitors, rather than a key for first time users. Ano-

ther factor which favours the generalized use of icons is that their presence adds visual interest to the interfaces.

Logically, the most important point is what the image stands for. Even in the relatively closed world of icons which are used regularly in some of the most frequent programs, cases of polysemy may be found: the magnifying glass for example may mean «search» or «zoom», depending on the type of program. A second problem is found in cryptolinguistical icons, that is, those where behind the image is a literal description tied to a particular language. The typical case is the home page, where all reference to a house disappears when it is translated into most other languages, (as in the Spanish «página principal» or «main page»).

A similar thing happens with the image of a chili pepper to express interest: hot in English can mean both «spicy» and «interesting», but this is obviously not the case in other languages. It is possible however that these meanings become established and become genuine «metaphorical fossils» that work despite their lack of relation with their origin (how many of us recognize a bird's feather in a writing quill?).

Another additional source of problems is found where meanings are linked to cultural spheres. An extreme but true case of this can be found in the metaphors of spatial direction used to express time. The basic metaphor is forward meaning future, implying that whatever follows the reading/writing direction represents time to come: the arrow pointing left would mean the reverse «back, past». Obviously, in cultures where reading takes place from right to left this operates the other way round.

The cultural situation is also relevant in cases of antonomasias and other synecdoches. For example, what should the icon for Spanish language (in a site which gives a choice of different languages on its front page) be? One possible answer might be the colours of the Spanish flag, but in the United States, the Mexican flag is also used. Looking for a sign, an iconic symbol which reflects the Spanish language but is not marked by any particular nationality, perhaps the only choice would be the letter «ñ». Other languages, however, would not even have this kind of choice.

Given that there are no laws which state that a certain concept, whether navigational or any other type, should have a particular iconic tradition, one could in fact find it impossible to find any pictorial correlation for a specific content. Together with the various pit-

falls and problems that we have mentioned so far, this brings us to the basic question of whether there is any clear advantage to the use of icons in an interface designed for the general public. I do not think that there are any conclusive answers to this: the Centro Virtual Cervantes, for example, rejected the use of icons in order to reinforce the image of a cultural centre whose work revolved around language, but there are other solutions as I have mentioned.

Old and new resources

Cultural content is naturally closely linked to language and text. Literary and historical content is basically textual and pictorial or documental elements are normally accessible by means of linguistic descriptors. This implies that working with cultural materials in a web context should be guided largely by textual technology and, given that we find ourselves in a field where a highly perfected kind of traditional technology (typographic) already exists there is no reason to abandon it.

However, there are limitations in the use of the typography in a web context which are mainly the result of restrictions caused by the client or the computer of the final user. We can only use those typefaces which are present in the user's browser or programs. Similarly, the layout of the page also depends on the size of the user's screen. It is always possible to offer the image of a text, but this tends to make the content difficult for the searches to pick up. It also complicates the search facility of the user's browser, and it is therefore not recommended.

The limitations which result from the web site developers' lack of experience of typography and graphic design, have led to under use and, in some cases, ridiculous use of the resources.

In order to recap for a moment, what does the use of typography imply? Nothing more than the establishment of textual hierarchies (the level of importance of each fragment), as well as the functional characterisation of the elements, that is, the different types of accessory which accompany the text (main texts, prologues, notes, annotations, bibliographies, appendices, etc). The possible hypertextual dispersion of a work does not mean that typographical markers have to be abandoned. On the contrary, they are needed more than ever as a sign of identity (in a context where a simple

click can take us out of the work altogether!) and in order to clarify the weight of each of the texts.

I believe that the integration of typographical technology and new technical possibilities are on the whole still awaiting their revolution and have yet to yield their best results. The new method brings with it three basic differences. One comes from the easy use of colour at virtually zero cost. Of course, colour has been present in typography for a long time, but always at a high cost. Web graphics should reassert the freedom to use colour, whether or not it is linked to other typographical resources (fig. 5).

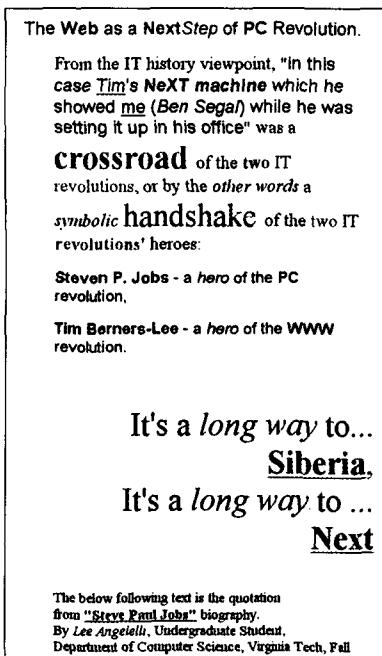


Figure 5. Even within the limitations of browsers, the interplay of font-size, colours and links provide interesting solutions, such as in the History of Internet at <<http://www.internetvalley.com>>.

The second difference is the introduction of time. Animation or the introduction of text or moving images provide an additional dimension. By way of an anecdote (albeit a significant one), in the world today cultural projects –whether on the Web or not– are very often sponsored by numerous organizations: public entities or private companies. So the front or back covers of their publications end up becoming involuntary catalogues of corporate logos (I have counted up to twenty in one particularly unfortunate case). In some of the projects in which I have been involved, this situation has been resolved by reducing all logos to a uni-

form size and rotating them over time. Each new one takes the place of the old one where they occupy minimum space on the front of the web page. And as an added subtlety, the time allocated to each one was proportional to the importance of their sponsorship.

The third difference is the incorporation of interactivity: a new means of provoking user intervention and the responses which this sets off (graphic feedback or other types).

Together, these three revolutions ought to give rise to very profound changes, but really these have not yet been properly seen. The combination of new challenges and opportunities ought to lead to the same kind of breakthroughs as the typographical experiments of the beginning of the 20th century. But, where are the Malevichs and the Lissitzkys of the web?

The management of a web project

Cultural web projects necessitate typographical work, preparation of text and illustrations, and all the processes of layout and editing associated with the creation of a good quality printed product (a magazine, for example), right up to the so-called pre-printing stage. Logically, they also demand all the processes of the web itself: interactive and hypertextual architecture, and specific technical processes. In addition, they require other skills associated with the hotter media (for example, radio and TV) such as user interaction, real time interventions, etc.

In addition to these requirements, right from the start there should be a great degree of flexibility towards the introduction of changes and variations in the function of user retro alimentation, whose reactions are constantly available (either directly, in the form of opinions, or indirectly as the «click vote» or user statistics).

This inevitably leads us to ask, what kind of professionals are best able to pilot these projects, and where do they come from?

The answer to this ought to come from the definition of the projects themselves. Perhaps as a result of my professional background (although in my opinion, only by being realistic) I think that web projects –at least cultural ones– are basically publishing projects. Or, to put it another way, if they are similar to anything in the past, they are more like publishing projects than anything else. Even more precisely, they

are rather like a cross between a magazine publisher and a small television station. What they are not –ever– are computer projects (although they use computer methods), nor are they marketing (although user attention and loyalty are frequently clear aims).

In more general terms they are communication projects, which use the kind of skills historically linked to the world of publishing and the media, and as such, like any other new skills, are undergoing contact change.

What does the person responsible for these projects need to know? They need to have a model for the user of the web site, of their expectations and skills. They need to identify the content and services they want to provide, and know how to shape them using the available technical means. In the recent past, publishers knew perfectly well who their public was, how to get the most from their authors and how to present the material in the most accessible form for their clients. They were able to graphically plan the inside and the outside of the publication (either alone or in collaboration with professional designers) in order to achieve their aims in the best possible way. They knew enough about production methods to achieve lasting, attractive results within their budgets, and they knew about the mechanisms for promoting and selling their product, always aware of market changes and the reception of their product.

Mutatis mutandi, the web project manager should be able to provide all of this. Whereas the publisher knew about print typefaces, paper weights, offset quality and different types of binding, the web manager should know about XML, animated gifs and java applets. Whereas the publisher worked with sales statistics, drawing conclusions from these and modifying the programs accordingly, the web manager needs to analyse access statistics. If the publisher worked with paper manufacturers and printers, the web manager needs to deal with programmers and web housing servers. If the publisher knew about authors' rights in publications the web manager should know about digital authors rights. Whereas the publisher organized advertising campaigns and published leaflets, the web manager should organize metatags and exchange banners, etc.

I hesitate here for a moment as I realise that I am using a somewhat complex circumlocution («the web manager») to talk about the person who is head of the project. But really this person is a professional who does not yet have a name a fact which demon-

strates the newness of this figure. We could give this person the name of a figure which already exists (like when we use the nautical term pilot to mean the driver of an aircraft, or we could create a new name *ad hoc*). I do not want to take a particularly nominalistic stand, but I believe that one of the problems in shaping this profession is the lack of an appropriate title. A few years ago in the multimedia industry, there was an attempt to use the term integrator to define the person coordinating all the different areas (visual, audio, programming) involved in the production of a CD-ROM. I do not particularly like this term, because it appears to suggest a series of agents working autonomously, followed by a simple task of tying up the ends instead of the integrated task of conception and development which the role involves.

Web managers (or whatever we end up calling them) conceptualize the web site (if working autonomously) or create the web site project for their clients, using their own materials and services. They evaluate the costs of creation and maintenance. In order to carry out the project, they contact graphic designers and navigation designers (who hopefully are one and the same person), programmers and housing suppliers. Finally, they select staff to work with them, who will basically cover both the contents and technical side. Normally, the managers or creators of content should be specially trained people who already have experience in content management, albeit in other media (publishing or audiovisual). The technical staff will be people who come from a web media background, and who additionally will only be asked to demonstrate flexibility and adaptability to the many demands involved in a cultural project.

The problem, both in choosing collaborators in the area of contents and in the role of the web manager itself, is that in Spain there have never been standardised training courses in the field of publishing. It has been an activity where learning took place as it did in the Middle Ages: one went into the publishing house as an apprentice (let's say a corrector, or whatever) and worked one's way up through the organization finally ending up (with a bit of luck) as a manager. It is only recently that Masters courses and other types of training in publishing have appeared. So, in order to create web professionals what is needed is classical publishing training, focusing on the material aspects of production (printers, paper), and reinforcing new communication technology. It is as simple, or as complicated, as that.