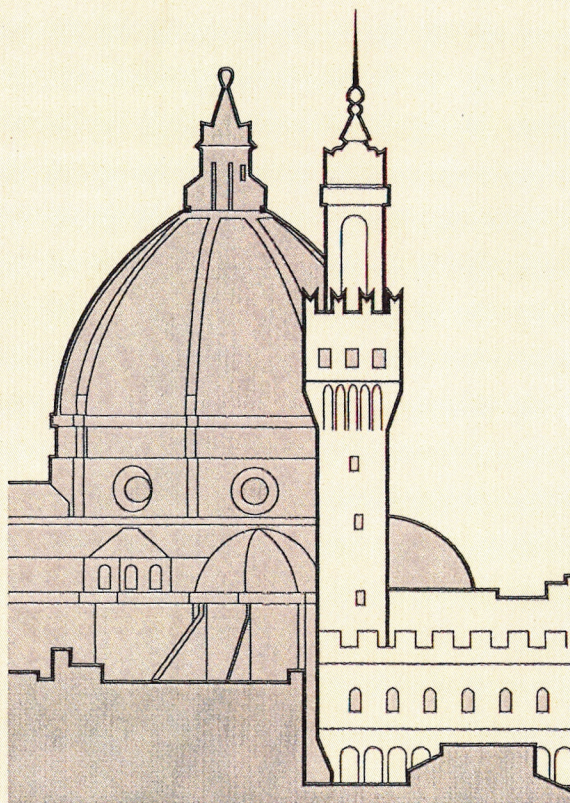


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PROMOTING CULTURAL HERITAGE ON THE WEB. METHOD PROPOSALS FOR SCIENTIFIC AND CREATIVE COMMUNICATION

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Abstract

The essence of this proposal is based on the conviction that:

- consideration of the materials and content to be placed online should take place alongside a reflection on a suitable form of scientific and creative cultural communication, to be designed for this purpose.
- exhibiting, permitting access, and promoting use are activities that are inseparable from the critical interpretation exercise.

Clearly, the considerations presented here are neither to be considered comprehensive nor decisive. Instead, they are intended to stimulate a constructive debate about an extremely relevant and compelling topic that is all too often approached generically and which follows habits that have become common, without grasping the precious opportunity offered by the Web, which, by its very nature and characteristics such as flexibility, implementability and updateability, lends itself well to highly innovative uses.

METHODOLOGICAL ASPECTS

In Europe, and more generally in the West, designing and managing a 'second life' on the Web already appears to be an activity that is not only desirable but also one that no cultural institution can postpone, independently from the role it plays in the respective geographical area, and so the greatly desired situation of widespread accessibility of cultural resources is becoming a reality.

The substantial difference, however, between the physical and territorial realm and that which is exclusively virtual appears to have not yet been acquired and so this needs to be established and satisfactorily managed. I believe that **attributing different tasks/functions/roles to the two areas**, adequately distinguishing the targets that can be achieved in each of them, is the first question that a correct approach to promoting heritage should answer. In projects involving innovation in knowledge management, this will broaden the possibilities of active integration between the two worlds, creating new and concrete forms of collaboration and participation that will work towards meeting end goals.

An exhibition of cultural resources on the Web should therefore always begin with a **specific feasibility project**, not only because it is an initiative that focuses exclusively on the Web, but also because it is a duplication of resources that are also physically accessible and intended to be made available - either fully or partially - online.

In any event, we should question how the concepts of management and promotion of tangible and intangible knowledge can be analysed and applied to the Web. Nevertheless, the heart of the matter is not whether the means at our disposal are obsolete or cutting edge, but rather their being instrumental to the cultural aims of the project and the capacity of these

means to fulfil these. Similarly, we must be capable of **designing projects that not only promote the material and immaterial assets at our disposal, but also put the potential and capacities of the chosen means of communication to their best possible use.**

Considering the features of the Web, therefore, I like to imagine a digital exhibition project as a **narration to be built from fragments (the autonomous and independent modules) that the user will be encouraged to piece together as a whole, according to freely selectable degrees of detail;** a narration that can be implemented over time with new modules, dedicated to integrations, enhancements, and even to discussion between field specialists, institutional experts or competent users (scholars and collectors, as well as simply students, enthusiasts and those interested in the subject).

In reality, even now this kind of communication project seems to be more a challenge than a habitual professional practice. You need only think of the state of most of the Italian websites dedicated to the enormous wealth of museum assets, which often still do not have an online version of even the most basic additional research material: inventories and catalogues. Nevertheless, I feel that this type of approach should be applied as early as the creation or adoption of databases for cataloguing assets. In doing so, we can truly give meaning to concepts such as dynamicity and interactivity, in order to establish a **truly innovative method that can free the Web project from being an un-critical yet sophisticated replica of the real thing,** permitted by its already widely experienced “technical reproducibility”.

Narrating certainly means to go-between, to encroach upon the relationship that is created between the user and the cultural asset, offering a key to understanding it. It means indicating possible interpretations of the cultural assets that are made available, and not just making them accessible. From this perspective, **exhibiting the asset also means exhibiting our ideas, publishing our theses,** declaring their references and acknowledging cultural paternity and conditioning; it basically means putting ourselves personally on the line, leaving ourselves wide open. It means contemplating the possibility of our knowledge being called into question.

Such an approach clearly comes from the humble awareness that **knowledge is an unstoppable process, a work in progress that relies on numerous contributions and requires continual adjustments and revision,** and from the consequent awareness that our keys to understanding are always partial because they are limited to our own field of discipline and more generally to the culture to which we belong. So the values of what we consider cultural assets are the bearers and are neither universal nor eternal. And despite this, our wish is that they be communicated and possibly shared. Possibly, but not compulsorily, because measuring oneself against values, and allowing hierarchies and opinions to be introduced, contributes to the debate.

I feel these are powerful premises for testing **forms of communication with outlines that are well-defined, clear and targeted yet ‘relational’ and open.** As such, they are also presumably effective, stimulating, and suited to the Web. Is it not the meeting and updating place *par excellence*?

What, then, are the elements that should make up this particular form of narration? First of all, I do not consider it fundamental for cultural operators or heads of the institutions who intend to promote and communicate cultural heritage online to have detailed knowledge of the technical characteristics of the means available, nor for them to improvise as hardware/software experts; we have IT experts for this. And if it is true that “the computer is not a limitless partner, but it is deeply versatile” and “to work with it we must understand what it can do, the options and the costs,” then it is the task of the IT experts to illustrate the possibilities for us. **Creating a cultural Website is much more than a mere technical exercise.** It is not just a question of understanding how the technical platform can convey a certain type of information but, above all, **imagining the arrangement and interaction of**

the content according to a dynamic and interactive structure, a creative process that most of us are unfamiliar with. For scholars and researchers, it is clearly not a question of taking cultural products that have been elaborated according to standards that have been tried and tested for traditional means of communication and putting them online, but of learning to communicate through trying out new theoretical schemes that are based on the **breaking down and re-assembling of content and the anticipation of interaction with third parties**. I hope it appears clear that this approach allows new projects to be tried out, which I like to define as ‘scientific and creative cultural communication’.

HOW TO OPERATE CONCRETELY?

A first Decalogue of “**Principles for the quality of cultural websites**” has been provided to us directly by the European Community, as part of the Minerva project, one of the many initiatives promoted to encourage the circulation of online knowledge. It consists of practical, easy to apply recommendations that are worth remembering in that they can be extended internationally: aside from desiring the adoption of “**technical guidelines and open standards**”, officially espousing a view towards the sharing of knowledge, dialogue, and a linking between systems, they acknowledge some of the most recommended requisitions for planning sites that are not simply intended as shiny display cases, but as instruments that are efficient and truly useful. According to the experts, **a quality cultural Website should therefore be: Transparent, Effective, Maintained, Accessible, User-centred, Responsive, Multilingual, Interoperable, and Respect legal regulations, Preserve content**.

These are certainly useful indications and obligations that are fully acceptable and widely needed, at least in Italy. However, they do not respond to certain questions that, for us, are fundamental, such as the surreptitious equivalence between digitalisation and promotion. Although the **determining function of digitalisation** (which, naturally, every project revolves around) is indisputable, in practice there are, in fact, two lines of thought that contrast what I would define as ‘**wild digitalisation**’, consisting in transferring the greatest possible quantity of documents, data, and information online, with the **inseparableness of the informative, explanatory and in-depth sources** that extend even beyond the so-called indispensable ‘additional research material’.

A dilemma that is wrongly considered pointless by some in theoretical terms, whereas, in fact, it is unavoidable in everyday life when we address the issue from the perspective of destination, waste, or the finiteness of available resources (which we possibly have unparalleled experience of here in Italy).

While aware that I can arouse perplexity and expose myself to harsh criticism, I am freely in favour of an ‘**advanced**’ use of the Web. I would like to think that the era of the enthusiastic online transfer of the sum of human knowledge has passed and, while thanking with unchanging gratitude those who continue to give us quantity, being assigned a position of disciplined reflection, I encourage a more aware interpretation of it and one which is directed towards quality. **Digitalising without paying attention to the specific characteristics of the assets, without adequately contextualising and studying how to communicate them, can probably serve to arouse curiosity and to generally inform, but turns out to be unsound for purposes of study and scientific publication**. However one may object that the mere act of **making material sources that are otherwise inaccessible publicly available, or the desire to preserve them from becoming obsolete, inevitably aggravated by direct consultation, are already cultural projects in their own right**, and this I would certainly agree with, but I simply believe that more could be done.

Moreover, we scholars all too often delegate online communication to IT experts, who are specialists in something different, basically because we consider it to be quite a simple and not very intellectually stimulating matter; one that, in any case, is in a lower division. And yet it is up to us to promote the circulation of ideas, the transmission of values shared by the scientific community, as well as **to acknowledge the changes that have occurred in learning with the advent of the so-called IT revolution, changes that have deeply affected the time scales, the language and the structure of communication.** In view of this, how can we fail to consider digital exhibitions as **ongoing learning opportunities?**

Similarly, the other very important question posed by the sudden development caused by the introduction of IT into a disciplinary sector previously considered sedentary and secondary must be mentioned, namely **the cataloguing and description of cultural assets.** Being located at the source of the whole promotion process, we can include them among those factors that can most greatly and, above all, irrevocably condition results. **Designing a database can also reflect the logic of depth-of-knowledge levels, if it is to be structured in independent sections, providing for the compilation of obligatory and optional fields with identification, information, and explanation functions.** In this kind of database, some sections can already be assigned to indicate direct and indirect sources, others for updating, whether it be extemporaneous or programmed, and others for the gathering of documentation, at the discretion of the researcher (or researchers), to whom it is naturally possible attribute responsibility for the compilation of the single part of the files or of later contributions, due to second thoughts or advances in research.

Having such a wealth of **data and sources, grouped according to themes,** at our disposal, we can therefore only extract from the database whatever corresponds to the specific project aims of potentially infinite **'narrating exhibitions',** which we can divide into:

- **permanent sections,** which are not changeable because they contain information that is considered objective, such as the physical characteristics of assets and certified historical knowledge.

- **temporary sections,** which can be changed, where everything considered useful and to be included can be added, even if debatable, controversial or simply not definite.

Experience gained in the field allows me to introduce some relevant suggestions that respond to questions which seem apparently obvious but which are nevertheless rarely raised. I refer first and foremost to the criteria used for the **choice of images.**

Let us analyse, for example, the most basic level of presentation of the exhibited object: those who have a certain experience of navigating sites dedicated to cultural heritage will have certainly noticed that **often information about items is not accompanied by adequately taken images.** By adequate, in this case, I don't just mean scientifically, and I am not necessarily exclusively alluding to how the document is cropped, but I am referring to the **appropriate representation of the item's characteristics,** including cinematographic or theatrical, a **representation that, in any case, is not neutral but is instead eloquent, i.e. able to signify and underline whatever we desire the viewer to grasp.** Naturally, this does not involve disregarding technical skills and the quality of the image, which cannot be left to chance but must be accurately evaluated in relation to the **resolution** to be offered to visitors, and, equally, the necessary **framing** for every type of object as well as other more subtle interpretation factors that are certainly less easy to establish *a priori*, but are absolutely decisive when dealing with cultural heritage. The aim, in fact, is not to illustrate, but rather **to communicate a precise message through the image.** Just as we do with the **written word.**

So that, independently of the modality used, which depends upon the intended emotional impact on the visitor, an unpredictable variable which is part of the creativity and originality of every communication project, all the elements taken from the fields of the catalogue lists that allow the **immediate 'personal' identification of the item** (such as measurements,

materials, supports, creation techniques, dates, authors, locations, etc.) should come together in a form designed as a type of **identity card**. Naturally the competent user, or those interested in further study, can also access the fields of the catalogue list that provide detailed analysis of the characteristics and more detailed information about the work (such as consolidated documentary information, the results of scientific research, etc.), as well as common historical/iconographical interpretations with accompanying attachments. It seems clear that every exhibited work should necessarily be provided with this kind of **extremely specialised information ‘baggage’**, in which some protected areas, from contents that cannot be revealed, can be reserved to ‘certified’ users who are able to prove their own institutional status.

In Italy, the Central Institute for Cataloguing and Documentation has long understood the extreme usefulness of these refined research instruments, but unfortunately the cards that they typically produced, in compliance with international standards and intended for sector specialists and all public organisations, proved difficult to consult. For some years now, as part of a research project commissioned by the Region of Lombardy that I coordinated for Milan Polytechnic, we therefore designed and tested the validity of a **brief textual card** model. Known as a **Valorisation Card**, this is dedicated to the historical framing of the asset’s circumstances and the description of its particular details: it represents, so to speak, the **Life and Portrait** of the asset and serves as an introduction, as well as an alternative, to the catalogue file. Quantitative aspects, such as the number of characters, and formal aspects, such as the type of language, the structure of the period, the confidentiality of the tone and, above all, the method to use in the descriptions, are all variables that we have had to accurately evaluate with regards to the type of audience we intend to address.

In the context of the same research project, we also experimented with innovative online connections between ministerial asset catalogue cards and description cards from the relevant documentary sources, accessible both from the above-mentioned Valorisation Cards as well as from the so-called **Contexts**, which I specifically designed to be compatible with the system’s features and the available funding. Although fraught with criticism, this experiment allowed me to verify how determining these factors actually are in an online cultural communication project.

Whether they concern **time, place or subject, the Contexts open the path that guides the user towards knowledge of the cultural asset**, giving the item a context, and together with the **In-Depth Information** and Itineraries (virtual and real), they should **free people from passive reception, substituting it with personally motivated evaluations, even if partially created by our choices**.

How, for example, when displaying contemporary works of Art, can we disregard the implications that derive from ‘critical promotion’, from attributive aspects or ‘authoritative’ interpretations of meaning? These are certainly ephemeral factors, destined to change over time, but they are decisive in establishing market success and influencing acquisition by private collections first and foremost, followed by public collections (if not direct acquisition, then at least as legacies or donations). As such, these are factors that are worthy and suitable for Web documentation and monitoring, precisely because of their **provisory nature**.

The usefulness of such apparatus is also clearly seen in supporting researchers’ **ethical/deontological concerns**, allowing them also to safeguard non accredited interpretations: if I had to organise, for example, an online presentation of the frescoes in the Basilica of Saint Francis of Assisi, famous throughout the world and traditionally attributed to Giotto, I would willingly mention the doubts expressed by Federico Zeri in his “heretical” documentary for the purpose of igniting debate among experts.

Contexts, Further studies, and Itineraries will not be exclusively textual, but will be provided with the most effective instruments (from documentary sources to hypothetical

reconstructions) to describe artistic styles and theories, to outline periods as well as taste, fashion and trend orientations, to represent territorial spheres and cultural environments, to explain concepts and specialised terms, to reveal unpublished facts and discoveries, to offer comparisons, retrace the critical fortunes of a work and provide information about the asset's condition and any restoration work that has been carried out on it.

Is this a naïve, utopian proposition? I do not think so. It is simply a matter of capturing and bringing together in a dedicated space what would probably be difficult to reach otherwise, because it is dispersed throughout university labyrinths and the immensity of the Web. I hope that digital exhibitions behave like supernovas, as places with a high concentration of cultural material that generate culture, and not like black holes, which swallow and accumulate energy, immobilising it. I also hope that the virtual cultural space I am trying to depict here will resemble an initiatory maze, to be negotiated room by room, an industrious workshop or the forging of ideas, rather than a perennially 'under construction' container, holding information that is ridiculous or that will soon be obsolete and forgotten.

ROOM A

16,25

SESSION 3 – VIRTUAL PRESENTATIONS AND MUSEUMS

Chairman: Francesco Guerrieri, Università Internazionale dell'Arte, Firenze, Italy

"Digital Images, Now Part of the Cultural Heritage"

Jean Barda
International Imaging Industry Association,
Garglesse, France

"An Adventure into the Alinari Archive: From 19th to 21st Century"

Andrea De Polo, Sam Habibi Minelli
ALINARI 24 ORE S.p.A., Firenze, Italy

"Works of art in the age of digital Reproduction"

Renato Parascandolo
RaiTrade S.p.A., Roma, Italy

"Uffizi Touch®"

Marco Cappellini, Paolo De Rocco,
Leonardo Serni
Centrica Srl, Firenze, Italy

Friday, 23 April

ROOM A

9,10

INTERNATIONAL FORUM ON "CULTURE & TECHNOLOGY"

Chairman: Vito Cappellini, University of Florence, Italy

The structure of the FORUM is presented.
Actual developments and perspectives are outlined:

- Cooperation Groups
- Funding Opportunities
- Proposed Projects

10,45

Coffee Break

11.00

SESSION 4 – 3D TECHNOLOGIES AND APPLICATIONS

Chairman: Bernd Breuckmann, Breuckmann GmbH, Germany

“Rapid Conversion of 2D Video to 3D Format Using Random Forests”

M. T. Pourazad¹, A. Bashashati²,
P. Nasiopoulos¹, R.K. Ward¹

¹Electrical & Computer Engineering Department,
University of British Columbia, Vancouver, Canada

²Terry Fox Laboratory, British Columbia Cancer
Agency, Vancouver, Canada

“ISEE: Advanced Open E-Learning Authoring Environments”

Laura Pecchioli

Insitut für Geodasie und Geoinformations technik,
Technische Universität, Berlin, Germany

“A Responsible Modelling Framework for a 3D GIS Archaeological Prototype (The Pompei Case-Study)”

Benedetto Benedetti¹, Marco Gaiani²

¹Scuola Normale Superiore di Pisa, Italy

²Alma Mater-Studiorum, Università di Bologna, Italy

“3D Movie Camera Using Commodity Components for Digital Archiving of Cultural Heritages”

Tsuyoshi Yamamoto

Graduate School of Information Science and
Technology, Hokkaido University, Sapporo, Japan

Multi-camera Human Re-identification in Video Security of Museums”

Giovanni Garibotto

Elsag Datamat S.p.a., Genova, Italy

13,00 Lunch

ROOM A

14,30

SESSION 5 – ACCESS TO THE CULTURE INFORMATION

Chairmen: Giovanna Damiani, Soprintendenza per il Patrimonio Artistico ed Etnoantropologico e per il Polo Museale della Città di Firenze, Italy and James Hemsley, EVA Conferences International

“Digital Cultural Heritage Network-ERA-NET supporting cooperation for research infrastructure in the Digital Cultural Heritage Field”

Rossella Caffo

Central Institute for the Union Catalogue
Ministry for Cultural Heritage and Activities
Roma, Italy

“The Digital Encyclopedia of Italian Renaissance paintings – A multilingual academic Web site”

Christian Lahanier, Jiro Shindo

C12editions, Paris, France

“THE WALL - A high-tech, interactive presentation of Copenhagen as a historical and contemporary metropolis, and the challenges for the picture archive “

Johan Møhlenfeldt Jensen
Picture Archive Museum of Copenhagen, Denmark

“Online International art exhibition using interactive tiled display wall via world wide gigabit network”

Rieko Kadobayashi¹, Masaki Chikama¹,
Kaori Fukunaga¹, Shinji Shimojo¹, Miho
Bokuda²

¹National Institute of Information and Communication
Technology, Kyoto, Japan

²Studio Buddha, Firenze, Italy

“DAVID: Discernment Analysis for Verification of monuments in Image Data”

Alberto Del Bimbo, Walter Nunziati, Pietro
Pala

Dipartimento di Sistemi e Informatica, University of
Florence, Italy

“Promoting Cultural Heritage on the WEB.
Method Proposals for Scientific and Creative
Communication”

Elisabetta Susani

Dipartimento di Comunicazione e Didattica
dell'Arte, Accademia di Belle Arti di Brera, Milano,
Italy

“Copyright Protection and Management in Peer to
Peer Cultural Heritage Networks”

Dimitrios Tsolis¹, Georgios Stylios²
Theodore S. Papatheodorou¹

¹Department of Computer Engineering and
Informatics, University of Patras , Greece

²Department of Applications of Informatics in
Management and Economy, Technological
Educational Institution of Ionian, Lefkada, Greece