

NEOTHEMI

ICT and Communicating Cultures

Edited by
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UNIVERSITÀ
DEGLI STUDI DEL MOLISE



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INTRODUCTION

The University of Molise has recently celebrated the opening of the University Library, an absolutely relevant structure in its relation with its territory, and a witness to the importance of the local realities in the national context. It is easy to host new guests in a real site and show its virtues, beauties and peculiarities. Not so easy, but as pleasant and most useful, is to lead new virtual publics through an interactive site and introduce the virtues, peculiarities and dynamics of a project that, through a pioneering use of ICT, spreads over Europe the cultural heritage of 10 different countries.

Neothemi – with its educational contents, its site, its publications and its tools, as well as its network - is the outcome of a culture of cooperation based on the creation of a network that, rising from the University of Molise, connects to each other numerous Institutions Europe-wide. It is worth underlining such concepts in introducing the products of the final conference – the third one, after Budapest and Helsinki – that took place in our own University. Young Universities have the moral duty to accept the challenges of the third millennium with regard to the international cooperation, culture, exchange of good practices.

The occasions of dissemination are crucial points in a project's life, especially when this links the intercommunication between different and distant realities to the educational use of the new technologies in their function of web weavers. The concepts of mutual acknowledgement and exchange between cultures, and of respect of the self and the other remain crucial, though just as important are the love and safeguarding of one's own background and, at the same time, the pleasure arising from sharing this very richness.

Local realities in Europe are richer than ever expected: our regional cultures are full of values that match with other local cultures: to know and respect them brings both safeguard and progress. Such process concerns not only the less visible local cultures, but seems to concern also those, better known, which are spoiled by superficiality and inattention arising from an exhausted experience.

“Neothemi - ICT and Communicating Cultures” not only reflected the efforts of three years of funding, investments, relationships and progress, but proved also an important start point for a culture enriched by the correct and wise use of new technologies. Such good use is not only related to the technical skill and tools’ versatility, but especially to the naturalness with which the ICT has favoured the real dialogue and the integration of diversities. We are convinced that the virtual museum of Neothemi – synergistically implemented by the participating countries – can be a vehicle of mutual acquaintance, a facilitator of access for the most diverse social categories, a tool of enjoyment and knowledge at the same time.

The impetus coming from pilot projects as Neothemi is a matter of pride for such a young and dynamic University as ours. It is time to open a century by starting experimentations, and show that in the era of global interconnections of knowledge, as well as competences and technologies, local realities can be leaders in the cultural and civil international progress.

Introducing such work is a further occasion, for our University, to celebrate for having welcomed and promoted such a significant project, and for having provided it not only with a suitable logistic support, but with a constant nourishment made of engagement and participation, that make its outcomes the sound basis for a better tomorrow.

Claudia SACCONE
Università degli Studi del Molise, IT

**A PREFACE:
NEOTHEMI METAPHORS
AND CROSSED PATHS**

*“This text is a galaxy of signifiers, not a structure of signifieds; it is reversible;
we gain access to it by several entrances,
none of which can be authoritatively declared to be the main one”
(R. Barthes, 1974)*

*“I produce texts, therefore I am, and to some extent
I am the texts that I produce.”
(R. Scholes, 1982)*

“Human beings are hardwired into the storytelling process – whether they are the ones spinning the tales or those listening to them....The difference between the eras is reflected in the way these stories are structured” (Lunenfeld, 2000). As editor I am the spinner of this tale and all the contributions are part of a story, a hypertext, which is not simply organized into a linear sequence of bound pages but is in itself a network of units with hot spots or interactive links.

Lunenfeld called ‘unfinished’ the aesthetic of the digital medias defined as discontinuous, dialectic and virtual as well; the introduction to a volume rooted in digital technologies is therefore a piece of writing ready to be completed, updated and ‘finished’ over and over again.

Is this volume about communication?

Is this text about digitalised culture?

Is this book a metaphor of a metaphor of a metaphor?

Communication is about exchanging information and it is a process where the sender is usually making the message maximally understandable, yet being able to read between the lines and especially to glimpse alternative views has become more and more important. “Interpreting a book...requires us to make a choice about what key to use to unlock it...” (Rabinowitz, 1987) and in fact F. Kermode stated, better than many others, the importance of an

interpretation in every form of narration. “Hope,” he says “is the fatal disease of the interpreter” (Kermode, 1979), therefore – despite the historical crisis of the theories known as the “death of the author” (Foucault, 1969 and Barthes, 1968) – hypertextuality brought forward once again the idea that reading a text, no matter what kind of text it is, still is a way to make your own text of it.

As G. Landow has pointed out, in fact hypertexts have become the standard way to convey information and to give readers a large freedom of choices which changes the parameters of the communication game. “Hypertext writing both emphasizes and bridges gaps and... brings with it implications for our conceptions of text as well of reader and author” (Landow, 1994). A text becomes therefore a work in progress, an open-ended piece of writing which calls for a writer who values collaboration and an active reader. A topography, the so called ‘topographical writing’ by M. Joyce (1995) is offered here to navigators who can choose a personal reading path through this book, thus making it into a totally different form; alternate routes are valued and the reader’s notes and responses to the text may take the form of more texts supporting or contradicting the one offered. The interactive reader who is invited to join a common and collaborative communication with the writer, seems to perfectly counterbalance the notion of the ‘impatient user’. The ‘waiting operator’ of the early automation has been replaced, as T. Nelson prophesized, by “a new kind of user: slam bang, sloppy, impatient, and unwilling to wait for detailed instructions.” (Nelson, 1977).

To organize the material in hyper-textual format and to address a creative reader is in line with a volume such as this, collecting contributions from eleven European countries (Denmark, Finland, France, Germany, Greece, Hungary, Italy, Norway, Portugal, United Kingdom) around the issues of virtuality, learning and cultural heritage. The World Wide Web is in fact the largest hypertext known, navigators are devouring information at incredible speed and culture in our post-modern world is dominated by media screens. And yet this collection of essays is not in favour of network idealists brushing aside any concern with the use of new technologies. Some of the contributors in fact express their worries about an uncritical use of ICTs; we would rather support a more objective position between the unlimited idealistic faith in progress on one side, and the ‘Luddite’ resistance to virtuality on the other. To favour a balanced position is to embrace M. Heim’s ‘virtual realism’ while being aware that “The cyberspace dialectic sustains opposition as the polarity that continually sparks the dialogue, and the dialogue is the life of cyberspace.” (Heim, 1998).


This book is a collection of selected papers presented at the Neothemi project (The New Network of Thematic Museums and Institutes) Final Conference held at the University of Campobasso, Italy, 8/9 October, 2004. Some are the result of parallel sessions and some of the workshops organized to disseminate and promote an interaction on the areas covered by the project. The multifaceted philosophy of the project is conveyed in the choice of organizing the essays both as a hypertext and in a traditional way, linearly following the five parts (Introduction to ICT and Communicating Cultures, Cultural Heritage and New Perspectives, Virtuality and Learning, Neothemi: Thematic Outcomes, Neothemi: Final Evaluation). This project develops around a virtual museum, as a clear metaphor of preserving and sharing different national cultural heritages through ten countries' pavilions, electronically constructed and each representing a different national identity. Neothemi chose the metaphor of the museum because of its being a network of institutions whose main aim was to find an open but regulated way of allowing local cultures to compare themselves and interact effectively in a global project. Cultural heritage, based on the recollection of the past, is a driving force in shaping the identities of both individuals and communities, and at the same time it travels with them towards the future and globalisation. We are well aware that a book is a highly sophisticated technological tool – as pleasurably and provokingly suggested by U. Eco in 1994 – therefore, even if the virtual museum is certainly the most powerful image to convey the project's ultimate aim, nonetheless both the choices and the same organization of this volume are consciously and strongly metaphorical.

Each country with an individual–national cultural heritage has built its own themed 'pavilion' but the project has encouraged the creation of links between the different perspectives gained from countries with different historical and cultural experiences. Neothemi itself being a website and a virtual environment is but a hypertext where navigators can choose their own path; the content of communication is determined by the way it is conveyed and the medium shapes the message. The organization of this volume is trying to translate the project onto the page, and computer screens have their paper counterpart bearing the same message.

The metaphor can be carried farther, has Neothemi simply produced contents or is it a network of institutions promoting collaborative learning, social and emotional involvement, and creative personality development? If the hypertext is one of the ways to stimulate a collective production, then it is again the best way of symbolizing a collaboration where all steps of the process have been negotiated stimulating a global perspective and critical thinking.

What are the hot spots encoded in this volume to allow the reader to navigate through its pages?

Neothemi key-principles have always been connected with education supporting collaborative learning through the use of new technologies and with the dissemination of cultural heritage through a virtual environment: our 3D museum. Therefore all contributors have concentrated their efforts around one or more of these issues: *Methodology, Experience/Practice, The Arts, Museology, Virtuality, Cultural Identity*.

In the first three parts of the volume different crossed readings are suggested every time the following icon appears  and two blank pages at the end of this preface are left for the reader giving space to personal choices and permitting more individualised paths.

Aren't a hypertext, Neothemi, and more generally the World Wide Web, but a continuous work in progress?

Before weaving threads among pages and giving multiple entrances and suggested paths, which will be visually shown in the book, all the text units are presented in detail.

Borrowing Barthes' definitions, this 'writerly text' is more akin to a constellation and I choose to cut it up into fragments here called 'lexias' or units of reading. Abstracts of the contributions are offered in order to encourage valuable reflections and to help engaged readers in reshaping this book according to their own personal agendas. All authors of the following papers were active presenters in the parallel sessions showing the high value of cultural exchanges and cooperation across national barriers.

LEXIAI

Archaeology is the realm of earlier periods, it is the study of what history and culture have transmitted to our present. It is usually difficult to bridge the gap between tradition and modernity but keynote speaker *P. Mauriello* makes us understand how new technologies and tools can successfully help the reconstruction and preservation of the past. Nowadays, in fact, non-destructive ground surface geophysical prospecting methods are progressively more used for the investigation of archaeological sites and for physical and geometrical reconstruction of hidden artefacts.

Virtual excavations are the only means for local reconnaissance and discrimination, prior to any excavation work.

High-resolution data acquisition and tomographic processing procedures are applied in cultural heritage geophysics, as well as in micro-geophysics for

monument preservation. Two results are therefore described in detail: the study of the archaeological area of the city of Cuma in south-Italy and the assessment of the state of conservation of the Aksum obelisk.

LEXIA2

The use of new technologies, the branch of art chosen, and the methodology behind the research offer certainly a totally different insight in the text by *P. Worrall*. The investigation about ICT, communication, art and culture is glancing to the future with contemporary eyes. Sixteen hyperlinks constitute the media text by Worrall who invites the reader to think about the transformation of existing communities of practice into innovative knowledge communities. The large use of communication tools in everyday life is the technological counterpart of a new media learning where students can both gain experience being exposed to diversified materials and learn new cultural values. To enable the use of innovative tools, changes in the resources are required, and new approaches and **methodologies** can be either integrated within existing practice or be the central tool within a set project.

In **art** and design therefore new technologies can help to develop existing processes or produce new outcomes. While virtual galleries, museums and, more in general, exhibition spaces can be disappointing, an international network of practicing artists and art museums can help in overcoming unsatisfactory results. A selection of best **practices** is offered: firstly the European Schoolnet project, for an insight into the educational use of information and communication technology in Europe, and then one of its parts: The Virtual School with resources and services for learning activities. The Virtual School Art Department, in particular, aims at the development of new strategies for improving education through new learning models (new pedagogy), tools (materials and equipment) and environments (virtual platforms knowledge sharing). Some initiatives, like The Culture Box and Encounters Live, are described showing the use of recent approaches to respond to the 21st century digital citizen's needs.

LEXIA3

A critical look at the current situation of **archaeological museums** is offered by *G. De Benedittis*, who is warning the readers against the pursuance of the spectacular to attract the crowds, at the expense of quality. A description of the development of the role of the archaeologist and an overview on

weaknesses in the Italian archaeological museums is highlighted. Museums can testify to cultural heritage and reach the cultural enrichment of a community, offering a straightforward and objective reading of their contents. They have recently responded to this challenge by providing a **virtual experience**. The danger here is that a market demand for virtual reality in museums may give relevance only to an entertaining ‘show’ rather than to cultural communication. A proficient use of new technologies can certainly be reached without falling into the trap of technology for its own sake. The final suggestion is to recognize the intrinsic value of ICT, to favour an interdisciplinary approach where different skills and competences can together organize exhibitions, and a critical attitude to the use of virtual reality ‘The point is not whether to use the virtual, but how to use it.’

LEXIA4

In the realm of **art pedagogy**, suggests A. Kondoyianni, technology combined with an experiential approach can promote a new creative learning **methodology**. This paper shows how successfully drama exercises and techniques can be applied in educational museum programs. Drama is an appropriate method for experiential learning, and information and communication technologies can facilitate knowledge and offer a valuable sense of success and enjoyment. Modern **museums** through the application of new technologies, can become stimulating centres offering scientifically structured learning environments mixing art and science. Besides the school environment encourages the acquisition of knowledge and helps develop social skills. The school–museum interaction is therefore the proposal for a creative learning through an experiential approach based on education and culture through the application of ICT.

The objective of the survey presented is to find out which drama techniques were appropriate to each kind of museum in order to fulfil the aims of the programmes, which were cognitive, social, affective, and aesthetic. A description of different exercises applied in three kinds of museums is presented before drawing conclusions.

LEXIA5

The creation of a themed data base for numismatics is indispensable nowadays for the management of the enormous amount of data emerging on, for example, coins in museums, archaeological findings and private collec-

tions. *R. Lanteri* offers an overview of how the need for creating a database has been felt in different countries. Spain, Germany, France, Austria, Bulgaria, Italy, Portugal, Romania, Slovenia, Sweden, Switzerland, have all starter projects in this field and the most significant DBs are at the British Museum and the American Numismatic Society.

The example, chosen to prove the necessity of an organized catalogue with the help of a computerised system, is the experience of the Misurata (Libya) treasure, the greatest finding relating to the first half of the fourth century A.D. currently known in the world, consisting of 108,000 coins.

A database for numismatic research, has been created for cataloguing and handling the data proceeding from this enormous amount of materials. Once available on the web, it will offer a kind of *virtual* numismatic *museum*, with various levels of access to information and images, for students, researchers and connoisseurs. Educational activities will be organized showing once more how new technologies and multimedia tools can facilitate knowledge and the acquisition of culture.

LEXIA6

To bring archaeology in line with the most advanced technologies and to render national cultural heritage the patrimony of everybody are among the main goals of The Archaeological Park and the Palaeolithic Museum of Isernia: La Pineta. Considerable discoveries have been made in the area, interesting both from the anthropological point of view and because of the presence of prehistoric finds. *A. Minelli* and *C. Peretto* leads us in a visit to this site with its exceptional wealth of material to be studied and restored. The two structures, the excavation pavilion and the Palaeolithic Museum, harmonise perfectly with the particular nature of the site for the interdisciplinary aims of research, conservation, education and development within its present-day context. The excavation pavilion has been the setting of various activities which have transformed it into a *museum-laboratory* and the site is imagined as an archaeological park to promote a fresh approach to culture and to the archaeological heritage through new *methodologies*. Experimental projects for archaeological research with the use of advanced technologies can at this point ensure that it does not remain the prerogative of experts in the field. Thanks to the use of a computerised laboratory and to the possibility of managing this data with the tridimensional model, it has been possible to reconstruct the extension of the archeosurface in its original complexity; and currently multimedia supports are concentrating their efforts to communicate the information and to encourage a greater degree of participation.

LEXIA7

ICT **methodologies** can be used valuably in the analysis of ancient pottery. *A. Naso* underlines the value of petrographical and geochemical analysis in the study of ancient pottery, both in the case of fine types, like the Etruscan bucchero, and coarse types, like Milesian amphoras.

The paper stresses the findings which have emerged from the application of modern methodologies to the analysis of ancient pottery and related clay products. The first part of the analysis is carried out in Etruria where oriental customs merged with Greek influence. The choice of the characteristic black *bucchero* pots, a **national identity symbol** for the Etruscans, highlights how archaeological and geochemical evidence can help in drawing conclusions. The second example is the trade amphoras from Miletus, once the most powerful colonizing city of Greece. The use of new technologies helped the findings, showing once more how cooperation between specialists in archaeology and archaeometry can overcome the limitations faced by a single researcher and reveal new perspectives.

LEXIA8

Can practice offer rich stimuli and promote networking? *A. Pieroni's* research is based on **experiences** collected teaching **art** and visual culture in various contexts. Students from different backgrounds and courses are compared to show the strengths and weaknesses of their educational environments. University art history students, students attending a school of photography and industrial design students are shown through their works in the attempt to answer questions on **methodology**. Can an all-inclusive notion of visual knowledge be taught? The negative reply is followed by practical suggestions on how to bridge the gap between the educational aims of acquiring knowledge and expressing yourself through your work, and between conceptual students or practice-based students. Three different agendas, one for each of the groups examined, are offered supporting a common approach where creative reactions are encouraged within a conceptual framework.

LEXIA9

Music is the **artistic expression** chosen to analyse early childhood experiences of Finnish pre-service elementary teachers and their connections with their musical self-concept as students. *H. Ruismäki* and *T. Tereska* present the results of research both at a theoretical and at an empirical level through the use of a questionnaire to gather data.

The significance of music in the early stages of childhood and the close relation to the total personality and feeling of self esteem is proved, showing a considerable correlation between the individual's musical expertise and early **experiences** of music in life. The paper studies the development of children's singing abilities and the meaning of singing from an ethno-musical point in communities where culture is based on oral traditions and music plays a very significant role, like the Saami people in Fenno-Scandinavia and among Australian Aborigines. Folk poetry singing is also emphasized as an essential element of the Kalevala tradition, one of the main epic **cultural expressions** of Finnish culture. A relevant suggestion is consequently offered to music educators, pointing out the importance of a positive encouragement of the child's musical interests and the sensitivity required by students in daily work.

LEXIA 10

Technology should be mainly used to convey cultural contents thus overcoming the accuses of being only a cold communication tool. R. Sacchetti reports on two **experiences** of cultural exchange with secondary schools in Andalusia, based on theatrical activities. In both cases Italian and Spanish students worked together on an original text in Italian, Spanish, English and French, and performed it during their visits to Spain and Italy. The paper therefore recommends sharing cultural contents throughout Europe, the use of theatre as technique and of communication as method. Historical and social comparisons are created in the plays and the students-actors in the scene are like 'living clicks' in a general hyper-textual performance. New technologies used in the performances are effectively **communicating cultures** and the final products are but virtual reconstruction of universal ways of life which can be totally expressed only in the great poets' work.

LEXIA 11

To find an answer to the crucial question whether new technologies and multimedia applications can be effective in the learning process, K. Fitzgerald presents the results of a research on the impact of an interactive CD in teaching and learning Irish traditional dance. Dance is the form of **art** analysed in this paper and defined, from the eighteen century, as a complete system of education in Ireland. Is it possible to merge technology with dance? The pedagogical strategy to teach solo dance and the figure dance is consid-

ered in terms of the achievement of learners and teachers and the quality of the learning experience itself. Motivation appears to be the key of success; 'active learning' and 'learning at your own pace' are, in fact, at the foundations of an effective **methodology**. When dance is concerned, the medium must be capable of engaging the learner not only intellectually but instinctively, and the tutorial type system presented is, therefore, the successful computer-based educational method. The feedback from the potential users of the CD at an initial stage allowed modifications and the final product proved itself to be effective in dance education under three different perspectives: education, ease of use and entertainment value.

LEXIA 12

Virtual reality is far from being an obscure concept, *L. Giannini* and *C. Nati* involve nursery school children in an interacting 3D environment and chat-line with adults. Before the case study, a reflection on the nature of a network in itself is stimulated through a model borrowed from the economics environment. The educational system and, more specifically, the school system, is analysed as part of the larger learning macrosystem and the introduction of ICT causes an enlargement of the model to include virtual spaces. The experience with children and the use of 'Active Worlds' web applications shows how new technologies can be used, in conjunction with traditional tools, in an educational programme. The use of virtual reality together with everyday reality and imagination stimulate a more collaborative learning environment where the pupils are invited to take part actively in the production of knowledge. A **methodology** which strongly values childrens' **experiences**, also permits a constructive opening to the external world.

The whole programme of seven years of work is accessible through links in the text, and educational, didactic, relational and behavioural objectives are presented with a selection of further experiences to motivate teachers in using new technologies and favour a network of exchanges.

LEXIA 13

Metaphors, the earliest and the most central tools of learning, are studied with a mixture of theory and practice by *U. Oksanen*. A constructivist concept of learning is supported through an analysis which is focused on linguistic metaphors, mainly referred to concepts such as information, knowledge and technology. The examples provided are therefore also a study on how to

refer to the 'information and communication' society where new technologies are seen as predominant. The analysis shifts to the theory and **methodology** of structural semiotics, and visual metaphors are chosen to exemplify it. Concepts and views in visual **art** education and semiotics are, therefore, showing the adoption of an interdisciplinary approach.

LEXIA 14

Virtual reality is the focus of *Petrone's* paper and, after a brief historical survey, the term 'virtual' is analysed in its different aspects. As opposite to reality, virtuality is nowadays widely used in connection with the learning environment. New technologies offer open possibilities but the control, the selection and verification of the mass of information present in the virtual world is still a negative counterpart of progress.

Virtual museums are different from real **museums** and it is possible to highlight the positive aspects connected with the availability of information and the consumers' interaction.

Neothemi is rooted in the belief of the advantages of offering the consumer an interaction with the system and the possibility to travel along the road he chooses.

A model for integration of knowledge was set up to permit the exchange of information and the organization of a fruitful network of institutions. A working **methodology** able to provide a framework of reference is at the core of the possibilities offered by new technologies in the project facilitating the integration of working practices, experiences and learning between all the participants. The task of communicating and promoting culture has therefore been shared among a network of institutions.

LEXIA 15

M. Raevaara presents us a master degree teacher training programme to provide qualifications for **art** teachers in Finland. The experience in the Virt@ programme stresses the use of e-learning and e-pedagogy and the importance of changing practices and methods to teach art. More generally, reforming art and design education is recommended through the challenges of web-based art teacher education and networking possibilities.

How to combine students' personal freedom and teachers' ambition with collaborative learning? How to promote new **methods**? Sharing collaborative ideas and comments, together with a respect for a traditional audiovisual ori-

ented knowledge of art, can be the basis of a constructive use of new technologies and art education. The use of ICT plays a great significance in people's everyday life and art education, therefore it should develop motivation in teachers and students through new methods and updated contents. The paper shares with the readers the **experience** of how to overcome predictable initially encountered difficulties and encourages the teachers to reshape their courses and the students to reflect and assess their learning.

LEXIA16

Virtual Reality technology and its relationship with the World Wide Web, by the Virtual Reality Modelling Language is the content of A. Venditti and M. Granatiero's study. The way of looking at Virtual Reality Systems is by adopting a taxonomy: the Zeltzer's Cube, to classify the user's behaviour in terms of Autonomy, Interaction and Presence.

The technology used to create the Neothemi Virtual Museum is described according to the kind of "experience" offered to the visitors. VR systems can expose users to a transmitted reality, to a synthetic world model based on a real one or, as in Neothemi, they can offer a pure-synthetic imaginary world. The sophistication of the pavilions, the interaction with different objects in each pavilion, the possibility to move freely in the 3D environment all provide a complete and natural experience of the phenomena.

Part III of the volume is of a different nature, it is a collection of the contributions of Neothemi partners which were presented in the form of workshops at the conference in Campobasso. The authors have been the curators of each national pavilion and, dealing with the communicative function of the museum, they have contributed to support the interesting parallel between museums and the mass media. "Museums are in many respects like other contemporary media. They entertain and inform; they tell stories and construct arguments; they aim to please and to educate; they define, consciously or unconsciously; effectively or ineffectively, an agenda; they translate the otherwise unfamiliar into the familiar and accessible." (Silverstone, 1994). These partners' 'stories' could certainly be interweaved with the other papers but the intention is more pragmatic. The reader can experience the results of the practical educational experiences developed within the project and be stimulated to take part to similar cooperative networks. Collaborative learning and a revised role for both students and teachers together with the use of new technologies can help to go beyond traditional teaching. "Textbooks are

static and usually out of date by the time they are printed... Students have little opportunity to gain access to raw, unfiltered even contradictory information with which to challenge their critical literacy.” (Wilson, 1988), this is certainly not true any more with the internet and, besides, a self-aware use of the WWW can therefore make learning about different cultures and situations no longer one-dimensional but rounded and textual, as shown in all the following contributions.

U. Sørensen describes the valuable material created in the Danish pavilion “Folklore and Traditions” and its five sub-themes: Family parties and celebrations, Folk tales, Daily life, Folk songs, ballads and ditties and Prehistory. Danish and European teachers from both primary and secondary schools can benefit from it and use it as a resource website in their planning. Besides, the role of the Danish partner is summed up through the involvement in the Neothemi conferences. At the Neothemi Launch Conference on June 2002 in Budapest, the famous Danish bog pre-historical finds were the focal point. From this initial step the cooperation with local museums and libraries have directly resulted in the creation of an innovative educational website on The Tollund Man, a famous bog body of The Iron Age. At the second Neothemi conference in Helsinki in September 2003 the attention was centred on different topics of “Daily Life”, while at the final Neothemi conference in Campobasso in October 2004 the work was concluded by focussing on the famous national storyteller Hans Christian Andersen. “He was a man with demons, dreams, yearnings and visions. He was a man of flesh and blood.” able to communicate his culture and traditions. Famous authors are a valuable source of inspiration in education and new ways of sharing information are to be found.

Innovative models of cooperation between institutions is therefore the suggested methodology to provide educational resources to a broad variety of target groups.

Exploring cultural heritage and values as seen and understood by children and students is chosen by Finland, where the method of examination of cultural phenomenon is a socio-cultural animation. The aim is to encourage social communication and cultural interaction and to learn from the past. The theme chosen in the paper by *S. Karppinen* and *R. Kärkkäinen* is ‘Built heritage’ (buildings, sculptures and other constructions, artefacts, parks, and all hand made items) which contributes to create national identity. How can children capture these culturally meaningful elements as part of their own growth? The experience with students and pre-school children in a day care centre revealed how children see culture around them giving the opportunity to examine some historical buildings in the centre of Helsinki. The second issue

is how to benefit from virtuality in the art learning process, when the art process needs social interaction. ICT should therefore be also used to promote and intensify interaction in the learning process supporting a constructivist student-centred approach.

To explore a virtual museum potential in its epistemological and pedagogical aspects was the main reason why the French partner joined Neothemi. *J. Delclos* stresses the advantages of a virtual and extendable gallery where any temporary exhibition can be set. The theme of the pavilion, "Arts and Cultures", chosen with a pedagogical aim in mind, has involved the History of Art and Archaeology students whilst beginning the adventure with those enrolled in a new vocational degree course in textile and tapestry arts. The international seminar on *Textiles on the web* which took place in December 2003 permitted a deeper reflection on the theme and the exchange of experiences among experts involved in the textile arts and the use of new technologies. From these exchanges, three significant examples are chosen from the papers by Audrey Mathieu Girard, Jean-Paul Leclercq and Jeqan-Marc Sauvier, confirming the advantages of bringing together ICT and research in Art History. Audrey Mathieu Girard presented one of the oldest textile databases in France belonging to the Textile and Decorative Arts museum of Lyon, Jean-Paul Leclercq introduced the software in use at the Museum of Fashion and Textile (UCAD, Paris) and Jean-Marc Sauvier described the computerized colour chart of the Mobilier National in Paris, used for the production of tapestries and carpets in the Gobelins, Savonnerie and Beauvais manufactories. The other parts in the French pavilion are then introduced stressing the nature of a 'work in progress' project which will be constantly personalized and enlivened by the students' academic work.

A different potential in virtual reality is suggested by *R. Blasius* who focuses his attention on the use of virtual reconstructions as important medium of remembrance. The project "Synagogues in Germany – A Virtual Reconstruction" rebuilt the evidence of Jewish culture and architecture in Germany, which had been destroyed by the Nazis, by means of 3D CAD (three-dimensional computer-aided-design). Technology allows us therefore to visualise those elements of the architectural past that have not been reconstructed, like the synagogues. In the future it may be possible for visitors to meet in virtual spaces creating communication and stimulate an interactive form of remembrance. This hope for the future has a dark side, will new media stand the test of time? If the programs become obsolete, all data, which represent our era, are at risk to disappear with them and therefore ideas and suggestions are given to protect data for the future.

Virtual museums are especially useful for those who are not able to visit the sites personally, and this is the perspective offered by *C. Bánfalvy*. The socially or physically disadvantaged and those without appropriate financial background for travelling can profit from virtual museums enormously. This is why Hungary has chosen to represent culture and heritage through the theme of how “Europe works”: what forms of work can be found in different countries, how work is perceived and performed in different countries, how the ordinary citizens of Europe are integral parts of a European division of labour and how people participate in work and migrate between labour markets in a united Europe. Work is an organic part of culture and it is directly related to the everyday life, so all the elements of work are socially determined. Work is culturally shaped and besides it appeared in art from the most ancient carvings and paintings found in caves. An interactive presentation of the culture of work in Europe is therefore not only enjoyable intellectually but useful in social terms as well. It serves the interests of learners and it is a useful material for educators.

The same concept is stressed by *A. Gallivan* who choose ‘Ordinary People’ as title of the Irish pavilion. The universality of the theme is connected with the specific skills of craftspeople who worked in stone, bronze, iron, gold and timber. They were artists and the historical and cultural importance of work is confirmed in Ireland through examples from Neolithic to the Modern Age. A methodology involving students is then described where the contributions were dedicated to preserving traditions, through the medium of film, web pages and CD-ROM presentations of local museums. The analysis of the theme is carried on showing links with the other countries; material was provided for the section dedicated to student work in the Norway pavilion, a common interest was shared with ‘Buildings, Nature and the Environment’ in Finland and more linked readings are suggested in a reflection whose last note is for the development of the peace in Europe.

Students’ involvement and the necessity of a new methodology in teaching is confirmed by the experience described by *L. Molfese*, *G. Lazzari* and *A. Briante*. Traditional ways of teaching are obsolete, considering the inputs coming through multimedia which have caused a change in the way children’s minds work. Their experience with the first two classes of a primary school near Naples shows how reframing teaching can encourage a more spontaneous approach and, through creativity, promote a critical awareness of new technologies. The children were introduced to the use of computers through activities teaching basic multimedia concepts and eye and hand control (hand/mouse). The first adopted teaching methodology was ‘from scribbling

to shapes' where the pupils were asked to produce some simple graphics through virtual scribbling. The second teaching methodology 'the meaning of the puzzle' stimulated effective team-work asking children to draw pictures, to cut and shuffle them and then re-build the drawings. Both experiences exposed the children to the rich cultural material created through Neothemi giving them the possibility to come in contact with other countries and new perspectives.

In Italy a different experience is described by A. Panzera in Rome. The initiative 'The Colours of Thought', originated in Neothemi, was presented at the Casale della Cervelletta and formed part of the project 'Adopt a monument' for schools. The active participation of secondary school students made them totally responsible for the nature of the material produced. Two different moments of the project studying the relationship between 'the city' and 'knowledge' are described within the Italian theme of the city. In the 2001/2002 the work was centred around well-known places providing knowledge like the Laurentian Library of Florence, the Vatican Library, the most famous Italian literary cafés, the University of Padua, the Neapolitan coastline redolent of the past, named after Admiral Caracciolo. In 2002/2003 the research needed to be more dynamic, exploring knowledge through a close contact with an artist who could make the students understand the interaction between the personal dimension and the physical world. Veronica Montanino taught about her experience of contemporary art and helped the organization of a creative workshop. The paintings created by the students were exhibited in the park and the farmhouse of Cervelletta, the 'monument' chosen by the school, which was badly in need of restoration and refurbishment. The value of the experience and its outcomes are described with a particular emphasis on the team group approach.

Methodology is the target of M. Peluso's piece of writing which presents the positive effects of adopting cooperative learning techniques in working with students. In the three year activity learners have become more flexible, able to solve problems and to adapt their different views in order to reach a common agreement. Dealing with different perspectives has given a deeper knowledge of the Italian cultural heritage and the opportunity to feel part of the even wider European cultural heritage. The last part of the contribution is about the organization of the Danish-Italian-Irish workshop which can offer supplementary material to realise the approach favoured within the Neothemi network. The activities to encourage participants to start new Comenius I projects were organized in a sequence (Warm up activities, Slide show presentation of each national pavilion, Group discussion and Feedback),

and a copy of the Worksheet handed out to participants in Campobasso during the conference workshop is provided at the end.

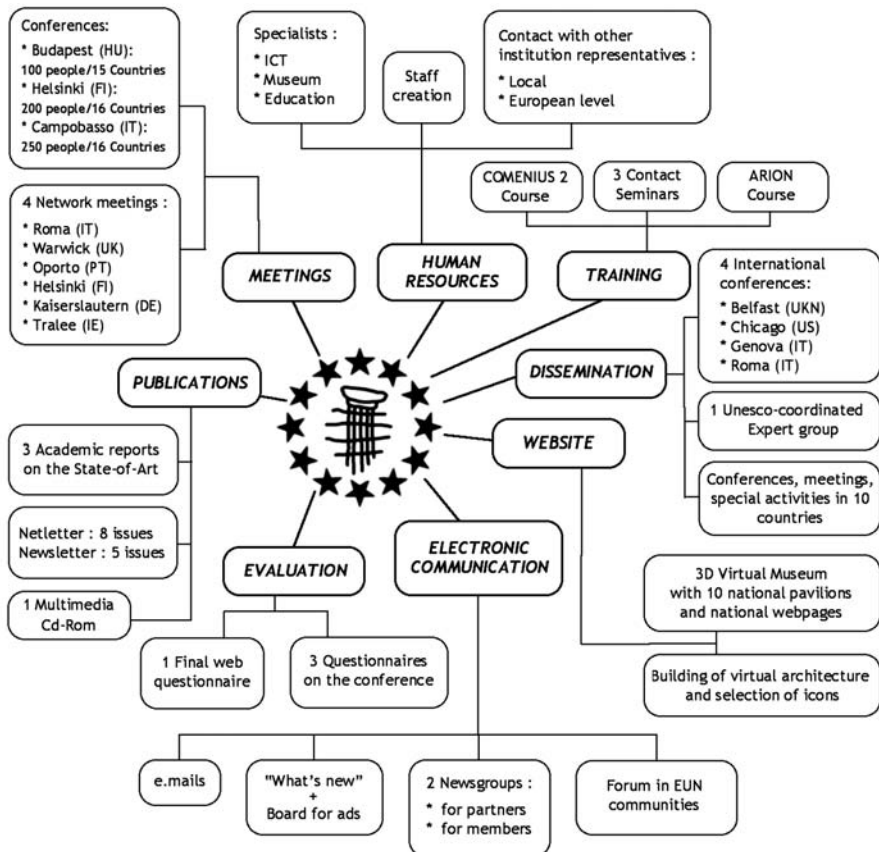
What approaches were favoured in Neothemi, and the reasons behind these choices is given by *I. Langseth* and *S. Neill* in a paper which encourages situated learning. All the strategies used promoted a more active participation of learners and stimulated an active users engagement. Discussion in the class was often suggested to motivate a more dynamic student commitment even if often the educational material is generally engaging enough in itself. To be faced with themes chosen and produced by other students of different nationalities helps discussion between different groups, and encourages individual choices and the presentation of personal views. The strategies widely used include problem-solving activities like guessing activities, pictorial quizzes, true or false questions. Besides an additional approach has been to make hyperlinks within and between national pavilions to encourage learners to view a topic from different angles. Different examples and suggested paths are given providing a support for educators in using the website.

The explanation of how the Portuguese website 'Educational Heritage' is organized and how to use it in a scholarly context is given in *M. Felgueiras'* contribution. 'School buildings' is the main theme because from the different typologies of buildings one can interpret the changes in education politics and pedagogical orientation. Knowing the history of school buildings is to travel through time and be aware of the importance that communities gave to scholastic education and the place which children had in society. Buildings are not only physical places but they are 'lived spaces' which can communicate a lot about cultural and social values. For example, the localization of buildings within a city reveals the social importance given to education in that period and in that part of the country. The comparison of different realities is stimulated in a journey within cultures. In addition an historical survey of school buildings in Portugal is given, showing how they were inhabited in different epochs, and links are offered with the other sub themes: games on the playground, books and didactic material, and school furniture.

Part IV Neothemi: Final Evaluation is by the keynote speaker *S. Neill*, who was in charge of drawing conclusions about the project both at the conference and within the partnership. In his paper he presents the assessment of the on-line survey carried on to investigate why and who had been using the Neothemi website. "Firstly, it was desirable to assess whether the intended educational audience had in fact been using the site, though the site was intended to be available to general users as well. Secondly, there had been

concern at the planning stage of the project that factors such as inadequate computing provision, and fears of children accessing unsuitable sites if allowed to use the internet, would inhibit usage. It was also desirable to assess how general attitudes to using the Internet for education related to attitudes to the Neothemi website.” (Neill, 2005) The benefits and problems are shown and differences between teachers and students are explored by factor analysis and shown into separate tables. On the whole Neothemi seems to have reached its main targets making cultural heritage more accessible, helping students to understand their own and other cultures better, and offering an educational use of new technologies.

To conclude, here is the mind-map of all the Neothemi outcomes in three year activity.



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Here is the list of suggested crossed paths, if you are interested in one or more just look for the right icon in the volume's pages.

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As previously written, these two blank pages are left to the readers to list their own individualised paths.

A preface

Acknowledgements

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On behalf of the Neothemi partners I would like to thank the European colleagues who contributed to this publication. They have made this volume special for all readers, kindly sharing their expertise and knowledge.

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Claudia Saccone
Neothemi co-ordinator

K E Y N O T E S

Introduction to ICT and Communicating Cultures

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LOOKING AT THE PAST WITH MODERN EYES

Nowadays, non-destructive ground surface geophysical prospecting methods are increasingly used not only for investigation of archaeological sites, but also for physical and geometrical reconstruction of hidden artefacts, which we can frame in the definition of a virtual excavation. The problem is exactly the same encountered in medical sciences, where tomographic techniques for imaging the interior of the human body are widely adopted. For as concerns archaeological sciences, non-invasive geophysical prospecting methods are to date the only means available for local reconnaissance and discrimination, prior to any excavation work, especially when a consistent multi-methodological approach is adopted, according to a logic of objective complementarity of information. In fact, a detailed representation of the invisible configuration of the explored areas and of the space-time evolutions of the interaction processes between artefacts and their hosting matrix, are primary knowledge in the case of archaeological research.



For this reason, high-resolution data acquisition and tomographic processing procedures are increasingly applied in cultural heritage geophysics, as well as in micro-geophysics for monument preservation.

In this paper, I present two geophysical results obtained in different fields of application: a) the study of an archaeological area located in south-Italy and b) the assessment of the state of conservation of the Aksum obelisk.

The geophysical study of the ancient town of Cuma

Cuma, the most ancient western Greek colony, founded by the Greeks of Eubea, in Campania in the second half of the VIII century B.C., constitutes one of the fundamental links in the study of the ancient city-planning of colonial Greek cities. Paradoxically, we know just a little bit about the urban space organization of that city, which lies almost unexplored under private orange

grooves and vineyards. Aside from public and holy buildings on the Acropolis and in the Forum in the lower town there are few elements pertinent to the urban texture. We know almost nothing about the spatial organization of the oldest period and we can rebuild a little of the road grid of the Roman age, for which the only evidence is formed by some short features still visible and by those found in the excavations, both emergency and systematic, carried out in the 70's and 90's. Different from the other Greek colonies, the city of Cuma has been recently the object of systematic archaeological research. In this context geophysical prospecting was performed with the aim to image the urban texture in the area between the Forum and northernmost walls. The whole set of geophysical maps (Mauriello, 2002) are shown in the sequence of horizontal tomographies of figure 1.

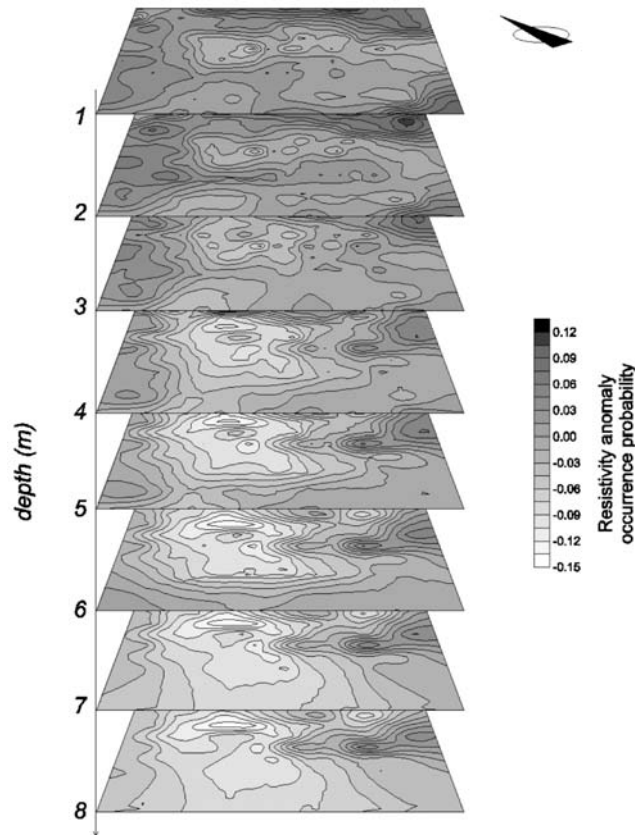


Fig. 1 – 3D tomography of the ancient town of Cuma

Many anomalies are evident in the tomographic plot, principally in the shallower part; here, strong and well delineated lateral variations denote a great complexity in the urban texture. A high resolution tomographic slice at the depth of 1.5m is shown in figure 2. A three block conductive system is present in the central part, whereas two resistive lines with directions N–S and SE–NW, respectively, are equally well resolved. The first set of anomalies are probably related to foundations of monumental buildings; the second one is probably the effect of the road grid of Roman age.

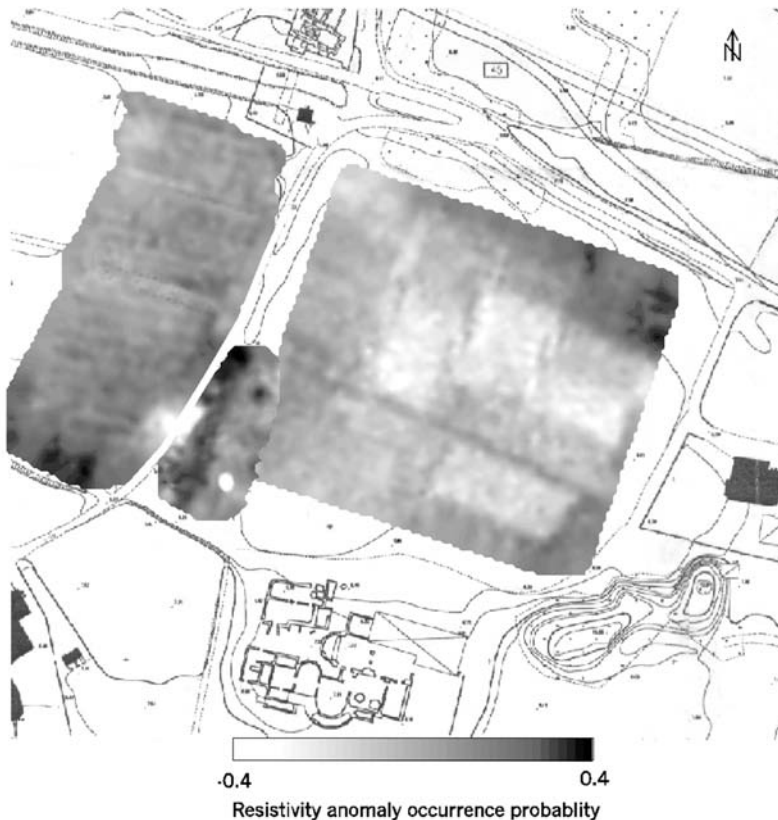


Fig. 2 – High resolution tomographic slice

The Aksum obelisk

The Aksum obelisk is a 24m tall column dating back to the 4th century B.C. (Cammarano F., Di Fiore B., Mauriello P. and Patella D., 2000). In 1937, it was transferred to Italy from Ethiopia in five separated blocks and then raised in Piazza Capena, in Rome. In the framework of the operating plan for the relocation of the obelisk to the original archaeological park of Aksum, Ethiopia, it was decided to perform detailed micro-geophysical surveys. These surveys were required to assess the state of conservation of the obelisk and to try to identify the exact position of the metallic pins that were used to reassemble the different blocks forming the obelisk. The obelisk rock material is a phonolytic nephelinite, easily alterable by weathering. Its exposure for more than 50 years to a polluted atmosphere conferred a notable importance on this tomographic study which did not expose the monument to the risk of further damage.

A micro-geophysical survey carried out with non-invasive electrodes indicates a complex pattern, due to the presence of the metallic pins and of pieces of similar rock added to replace missing parts. In particular, there was a diffuse inhomogeneity characterised by the presence of many close-to-surface sources of anomaly ascribable to an advanced state of alteration of the stone, all around the obelisk. Figure 3 shows a 3D tomographic reconstruction of the geophysical state of the obelisk in correspondence to a fracture.

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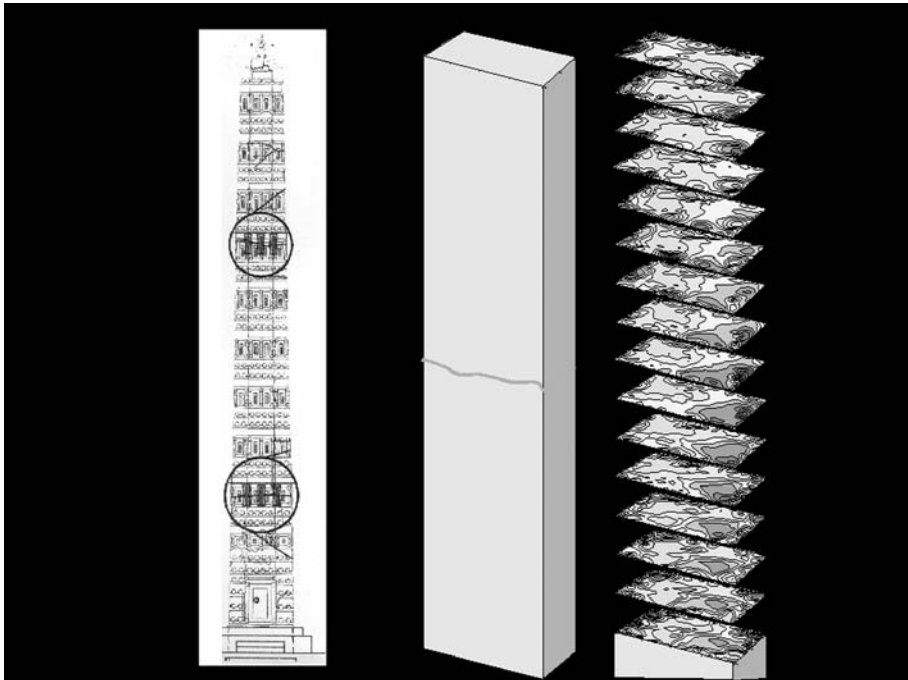


Fig. 3 – 3D tomography of the Aksum obelisk

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ART MUSEUMS AND ICT – THE FUTURE? New media text

Hyperlink 1 – Hello Future... maybe

In 2005 text messages on mobile phones, email and the internet are powerful professional communications tools and data such as video, sound and images, produced, can be transmitted with text messages, in different configurations across the world. This new electronic space presents opportunities for instantaneous exchanges of ideas and professional dialogue. Pupils in art and design can use these tools to share their creativity across a network, linking directly with art museums, artists studios and universities. This constitutes a technological brand of 'new media learning' as pupils gain first hand professional experience to communicate as art critics, commentators and curators of exhibitions. It is clear that the future hardware tool will be the mobile phone – currently Nokia are offering customers (on specific mobiles) downloads of 15 to 20 second videos made by international artists.

'Art is about communication between the artist, the viewer and their interpretations of the world – overall this means connecting people' Eero Miettinen, Nokia Design Director.

www.nokia.com/art.mobile



Hyperlink 2 – Who am I?

I am a teacher, lecturer and practicing fine artist. For nearly 20 years I have used computers as a significant new medium to develop my theory and practice in the arts. In 1993 I was employed by a Microtechnology Unit in Birmingham as an Advisory Teacher, with a remit to support ICT in Art and Design across the curriculum. The Unit developed software, and peripheral devices, evaluated corporate software including beta test copies of forthcoming releases and provided professional advice and curriculum develop-

ment. The technological developments I was involved with in the early nineties were email and internet experiments and the use of the first digital cameras and scanners. At this point in time technology was in transition, moving from the analogue to the digital.

These technological transitional points in history are interesting, as they only really become visible years later, through examining the output and resolution of the technologies available at the time. In many respects the nineties represented an era in which computers were regarded with suspicion by the art and design education community.

‘Electronic pedagogy in school requires a culture shift – a renewed interest in experimentation and risk in art and design workshop practice in the context of the use of new media interfaces’ Prometheus Conference presentation Paris 2003

http://prometeus.org/PromDocs/hb_arttic_be_10-10-02_09-15-39.doc

Hyperlink 3 – Super shiny machines

New technologies are more mature nowadays and they enable me to attend an internet meeting through a web cam, with my fellow collaborator, Jukka Orava at UIAH in Helsinki. The live, low resolution, video simulacrum of my colleague stares at my video simulacrum in a small window on the screen, sharing a conversation and points for action regarding our Virtual School Art Department website developments, to be uploaded shortly after the meeting. Perhaps it comes as no surprise that my friend and working colleague is Finnish, living in an advanced technological society, ‘where the cell phone is a broadband browser, a smart wallet, and a passport to the wireless community of the future and fellow citizens are content, 24 hours a day’. Wired Magazine

<http://www.wired.com>

Hyperlink 4 – Digital Rationales

A rationale provides a logical basis for or explanation of beliefs, practices or phenomena and as digital media has become embedded in our working lives, there is a need for generic and subject specific digital rationales. The application of ICT’s in art and design may be viewed in their integration with existing practice or used as the central medium within a set project. The

following bullet points provide a speculative ‘concept map’ of digital points on the visual compass:

- i. Infrastructure – redesigning studio / gallery spaces to site new media.
- ii. Electronic Tools – the selection and use of small, low cost portable, wireless / blue tooth, peripheral devices in studio and external environments.
- iii. Electronic Pedagogy – the use of new technologies such as data projectors and interactive whiteboards in developing conceptual understanding and communication in the arts.
- iv. Electronic Media Histories – understanding the historical context in which the ‘resolution’ of new technologies have developed and evolved to date.
- v. Electronic Curriculum Content – including timebased studies in curriculum models as a statutory requirement, as it provides ‘the only significant’ new ICT component in the Arts.
- vi. Electronic Interfaces – managing the creation of personalised e-portfolios in website format, life long learning on a memory card.
- vii. Electronic communication – developing art education networks, understanding effective email use, establishing creative cultures of e-collaboration and exchange through virtual learning environments and video conferencing.
- viii. Electronic ethics – understanding issues regarding the digital divide, copyright, personal privacy and governmental control agendas.

‘Networked societies/ communities are on the edge of a virtual electronic communication culture shift / revolution that will expose aspects of the art and design system as inadequate to meet the future needs of the next generation of creative citizens in the world of work’. New Media group

<http://emedia-art.org/about/index.html>

Hyperlink 5 – Digital Content Zones

Currently, art and design curriculum content, taught in most schools consists of two and three dimensional media with a limited use of digital technologies. It is clear that the strategic use of ICT is occasionally used to extend the outcome of traditional processes, conversely, ICT can be used in teaching and learning to produce ‘pure’ digital outcomes. New digital content zones of experience are beginning to emerge such as:

- (1) Digital Timebased Multimedia – controlling, processing and locating information objects such as interactive audio visual recordings in time, and space.

- (2) Interactive Whiteboards – maximizing their use as a hub for the communication of abstract visual concepts, curriculum delivery, shared learning models and assessment (pupil and teacher use).
- (3) Web sites – developing relevant local cultural resources through personalised interfaces (eportfolios) and customizable interactive environments.

Hyperlink 6 – The Citizen as Data

In the future all citizens will be entitled to carry their personal interfaces on memory cards. It will be possible to upload these interfaces into larger online databases to communicate other users ID's and access / create new knowledge libraries. The individual citizen will be the content at the heart of this information revolution. Billions of interrelated and cross indexed, copyright free information objects will provide the challenges for art educators and museums.

Hyperlink 7 – Digital Toolkits

In 2005 multi purpose portable devices such as digital video cameras can record audio, video and still images. Laptops with wireless connectivity are providing more flexible 'location-related' solutions for artists and designers whilst teachers are beginning to make use of interactive whiteboards. Art educators should work with corporate software developers to produce less expensive programs. There exists a need for research relating to the usability and suitability of software interfaces for different users special needs pupils, teenagers, university students and adults. Finally companies should consider developing and marketing customized, (one stop solution), digital toolkits for different client groups and institutions.

Hyperlink 8 – The Texture of Technology

Digital content is predetermined by the users capacity to understand how to control and maximise the potential of the technological tools available.

Older technologies produce unique electronic resolutions and art and design education 'users' should integrate and combine the qualities of these output resolutions within the creative process. On the other hand new technologies continue to emerge as significant visual enablers such as time based media. It is clear that video conferencing systems will provide pupils in school opportunities to visit geographically remote locations such as artists

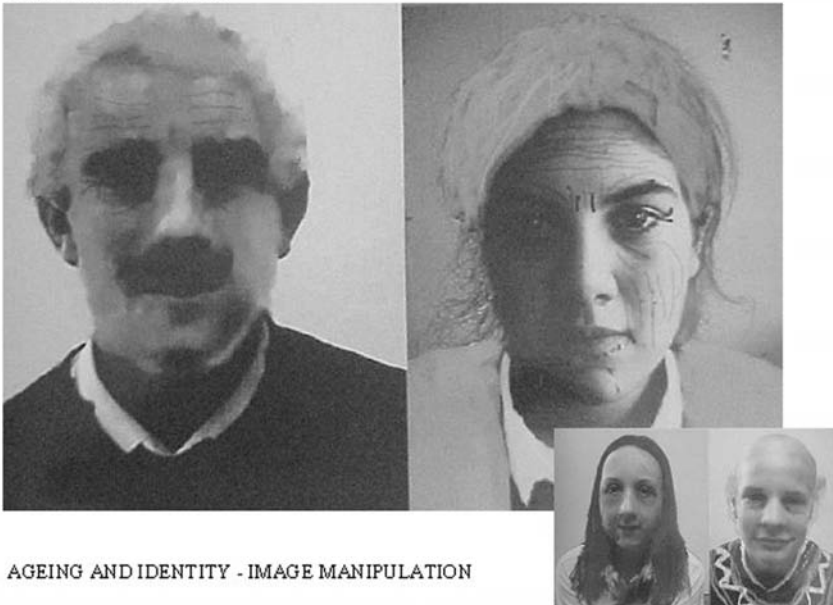
studios, universities and art museums. In the future, course content will be accessible through interactive whiteboards and websites for pupils to develop their autonomy and creativity as learners 24 hours a day.

Hyperlink 9 – Digital Orthodoxy or New Contemporary Practice?

Digital imaging output in schools can be recognised by an over reliance on computer filters and special effects, combined with cut and paste techniques.

This predominant digital style has little to do with creativity and contemporary practice and very few art and design teachers attempt to accurately contextualise the origins of these visual tricks and illusions. It is clear that digital media has more to offer – for example, digital photography does not always require software manipulation... Pupils should understand that craft, skills and the appropriate selection of digital tools should be developed progressively over a period of time. They should be engaged in film as a fine art medium using contemporary themes such as personal identity, family, conflict and spiritual issues. This new media practice involves professional, collaborative production skills through the integration / sequencing and editing of sound and movement.

CASE STUDY - YEAR 8



AGEING AND IDENTITY - IMAGE MANIPULATION

Hyperlink 10 – Interface and Content

The limitless and unregulated range of information contained on billions of web pages generated in the name of the arts through museums, cultural centres community groups and commercial companies provides a chaotic learning and research scenario for students and pupils. Quality control and ethics play a small part in the self motivated, interests of the majority of web company entrepreneurs. Questions regarding the quality of websites, particularly relating to usability and accessibility are largely unanswered. Whilst information access and retrieval remains the motivation for the average web user, an increasing number of websites provide additional automated functions to invite the user to engage in other forms of activities such as community discussion groups, online exhibitions, live projects and virtual collaborations.

Corporate and governmental websites provide models of high levels of design, sophistication and functionality and these sites are updated on a regular basis, whilst in complete contrast the quality of the infrastructure and content on the majority of school websites is poor and static. In my experience, museum and gallery websites can also be disappointing as many are presented in an orthodox corporate style with the content replicating existing printed material. There is often no language translation for international users, and most websites are not 'user friendly' for pupils and adults with special educational needs.

Hyperlink 11 – A Critical Context

The publication *A Critical Context: Art and Design Education on the Edge*, Cascade publications, 2004 provides evidence of 21st century curriculum development through the direct interventions of practicing artists and art museums. It offers an international perspective, in that it samples material from a growing network of global collaborators, and it asks questions of practice in relationship to the connectedness of shared aims and objectives in learning through art and design experience. Authors such as Rowena Riley (UK) challenge accepted and established views on access and use of galleries particularly as they relate to new audiences and special educational needs, whilst Marie Fulkova (Czech Republic) outlines a thoughtful and controversial choice of contemporary art practice in a school in Prague and Lucia Pimentel (Belo Horizonte) reminds us of the cultural divide in the development of digital technology in Brazil. The accompanying CD ROM presents a visual summary of the 10 papers through an interface designed to accompany

and further exemplify the text. For further information regarding purchasing this new publication please contact Pete Worrall on Pjworrall@aol.com

Hyperlink 12 – Cultures of Communication

The European Schoolnet is an international partnership of more than 26 European Ministries of Education developing learning for schools, teachers and pupils across Europe. They provide insight into the educational use of information and communications technology in Europe for policy-makers and education professionals. This is achieved through communication and information exchange using innovative technologies and by acting as a gateway to national and regional school networks. Their activities are determined by the needs of the constituent members in collaboration with the European Commission and technology/business partners.

European Schoolnet

http://www.eun.org/eun.org2/eun/en/index_eun.html

The Virtual School is one of the projects within the European Schoolnet and is designed as an electronic space, where you can find resources and services for learning activities structured, initially, by subject areas. The Virtual School is a site for teachers to meet other teachers, a place for colleagues to exchange materials, ideas and having discussions on everyday problems. The Virtual School helps teachers to find quality resources with a European added value, on the Internet. The Virtual School Art Department is supported by the Finnish Ministry of Education and the National Board of Education and their representative in the steering group is producer Katja Nieminen (Finland) from the National Board of Education and Jukka Orava (Finland) who is the coordinator of the Art Department.

The departments objectives and activities include:

- Bridging the gap between theory and practice of the digital technologies by considering both the learners and teachers perspectives and experiences.
- Understanding of specific and varying pedagogical processes to be able to produce digital materials and learning environments that meet the criteria
- Based for teaching and learning in the information society objectives.
- Developing new strategies for improving learning through new learning models (new pedagogy), tools (materials and equipment) and environments (virtual platforms knowledge sharing).

- Identifying barriers regarding accessibility and use of new technologies for teaching & learning and looking at solutions and priorities on a national and European level to improve access to technology.

Virtual School

http://vs.eun.org/ww/en/pub/virtual_school/depts/art.htm

Hyperlink 13 – Networking New Media

The Virtual School project ‘Culture Box’ presented an opportunity for artists of all ages to share and exchange their personal identities, life stories and cultural traditions through a virtual gallery situated on the Virtual School Art Department. At the time there was no multilingual translation tool available on the website and the following extract introducing the project attempted to take into account visitors to the site who did not use English as their first language.

Here is an extract from the website – ‘Our culture is one of the most important influences in our lives, in fact we can’t escape it. A culture box is a time capsule, it could be expressed and celebrated through a painting, drawing, collage, print, sculpture, installation about YOU – this could include your personal feelings about your ambitions, interests, friends, games, places, dreams etc. in the year 2003. Your culture box could relate to the things that you value most in your life, for example, your contemporary influences – music, sport, travel, people, art, architecture etc.’

Hundreds of culture box art work and supporting text were submitted and exhibited electronically by artists of all ages from countries including Brazil, Romania, USA, Russia and Sweden, Finland and the UK.

A teacher from Sweden provided the following text to support her constructed image ‘The woven pieces are made on a two-shafted handloom. The weft in the blue warp is made of birch twigs, one of the most common tree species in our surroundings. I pick them as winter gives way to spring before leafing. The weft in the red warp is made of straws of rye, cultivated by my father in law in a field next to our school. The warp can contain almost anything out of ones life. It’s the web of opportunities.

In complete contrast a Romanian seventeen year old pupil writes about her painting: ‘Every silent breath of an apparently quiet nature is filled with the deep-est sense of life. The same guarding force is present everywhere, in every movement and every rustle of a wild nature and at the same time in ourselves, in the shape of a restless eye – the eternal witness of things done but never

spoken. No one escapes its piercing look. We are all constantly being watched by something or someone above our reach and understanding and our darkest thoughts and most sinful deeds are easily revealed to a mysterious, restless eye.

Culture box democratically presented all pupils, students and adults responses which were emailed to the Virtual School Art Department team. It was a unique exhibition as it brought together different pupils cultural imprints and texts in a range of media, presented together to a European and global audience. As a model for curriculum development, it signposted the potential for coursework to be contained on the web in eportfolios.

Culture Box

<http://vs.eun.org/eun.org2/eun/en/vs-art/content.cfm?lang=en&ov=8737>

Hyperlink 14 – Live Global Interventions

The Newmedia Group in Europe represents an international group of art educators who are beginning a new ‘conversation’ regarding curriculum development in the arts. On Saturday the 11th October 2003 Drumcroom in Wigan UK hosted a one day conference for NMG called ‘Encounters Live’ to explore some of the issues surrounding the potential use of ‘New Media’ in art and design education. The LIVE part of the event involved the use of e-mail and fax to exchange images with students in Finland and Brazil. The event was carefully synchronised in real time, so that electronic artwork was created, exchanged, developed and returned to the user, creating new website content on the same day as the conference. This raised questions regarding the ownership of the work through the cultural / artistic intervention of the students in other countries.

Encounters (Live)

<http://www.eun.org/eun.org2/eun/en/vs-art/content.cfm?lang=en&ov=30174>

Hyperlink 15 – The Future of Art and Design

Business communities interest in profit margins feed on the elusive future developments of technologies. Conversely, rather than pursuing the future, we have much to learn from the past. The wired world has yet to materialise for most of the inhabitants of our ‘global village’. Embedding technologies is problematic, for example, digital photography, since its inception in 1990 has

taken 14 years to begin to replace the chemical equivalent and it is worth considering that perhaps we are guilty of embedding ICT into a questionable 19th century art and design curriculum.

In the preceding hyperlinks I suggest that time based media, electronic interface design, navigation systems, issues related to the digital divide, virtual learning environments, and personalised interface content may constitute the future, for our visual inter-media (art and design) practice – and this vision was presented in New York at an INSEA conference in 2002 through the Wholearthmediatrix website.

<http://arted.uiah.fi/virtuelschool/matrix/>

Hyperlink 16 – Knowledge Communities

Projecting governmental planning into the future, it may be that a micro (local) rather than macro approach is required. Pedagogy embedding electronic communications such as mobile phones, digital television and wireless connections will mean that local studio based arts workers or curators in art museums can become ‘virtual’ teachers in schools transmitting broadcasts live to school art departments creating live content for websites.

The transformation of existing communities of practice into innovative knowledge communities will take time and requires significant curriculum changes to enable 21st century digital creativity, new visual knowledge and employability in the new media and cultural industries, however it is beginning....

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Website: New Media Group Europe <http://emedia-art.org/>

P A R T I

**Cultural Heritage
and New Perspectives**

Gianfranco DE BENEDITTIS

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IF WE CAN CALL THIS AN ARCHAEOLOGICAL MUSEUM... From the museum's archaeology to the archaeological museum

The interest in archaeological museums has been increasing in Italy over the past few years; in some cases there has been an attempt to revitalise them through a series of initiatives, more often driven by enthusiasm than by a proper understanding of the problems that need to be tackled, as though communication with the museum itself on their own ideas were a secondary issue. Increasingly the archaeological museum has come to be thought of as redundant; a kind of repository of the collective memory and for this reason maintained as part of the Cultural Heritage. It is nevertheless time to take a more critical look at the current situation. In many museums, there has been a drive towards increasing the number of paying visitors as the only valid measure of an exhibition's usefulness, in the American style, which has encouraged the pursuance of the novel and the spectacular to attract the crowds, rather than an emphasis on quality. The present crisis is the result of an overdue realisation that the museum is not the place we wanted it to be. In Italy, after the 1970s, the role of the archaeologist to some degree lost its way; English archaeologists tended to take the leading role in classical archaeology, while medieval archaeology was dominated by the Poles. In the past too the archaeologist used to adopt the role of historian of the art of ancient times, reading objects as iconographic documents of a past era; nowadays he has become more of an historian–anthropologist, concerned more with stratigraphy than with the objects themselves; and yet, despite all these changes, the archaeological museums have not adapted themselves at all.

This crisis also reflects the changes in post–industrial society which, while claiming that museums should be open to everybody, also asks for exhibitions which provide straightforward, honest and objective readings of their contents. Such a crisis is evident not so much in the big art galleries, where the



iconic message is self-professing, but in Italian archaeological museums, where, in spite of the requirement, the rigid layout of the 1800s has not yet been altered. The archaeological materials are often still shown by category, with little attention to their cultural content. The object is not displayed as the testimony to a culture, but as an object of great value which, in the eyes of the observer, means economic value; for example, Etruscan or Italic inscriptions displayed in museums and exhibitions: the preference is for spotlights which tend to hide the text of the epigraph, but to emphasise the support, whether it is bronze or some precious metal. The object which fits with the Roman–Greek aesthetic canons tends to be preferred, whereas anything else is dismissed as low culture, as for instance, the documents of Italic art, which actually represent other cultures very well.

On the other hand, display cabinets can be filled with a whole range of objects, which ignores the fact that this prevents the public from getting any historical–cultural message at all. In spite of the Hegelian lesson on art, we are still bound to a vision of the archaeological object as something unique, unrepeatable, untouchable, the product of an almost divine and mystic “ancient era”, instead of as a document produced by the activities of men, the fruit of an ever–evolving culture.

In other cases, we see displays put on only for experts, where objects find no relevance other than in references to texts written by specialists for specialists. This allocates archaeological culture to an area reserved solely for connoisseurs, making conservation more important than discovery.

The organization of the routes round the museum, or the archaeological site, or even the exhibit, are considered secondary or unimportant aspects compared to the undisputable value of the container; sometimes, the communication which should arise from the route itself can even be subordinate to parts of the container, which have nothing to do with the message itself.

This leads me to the view that a museum should be judged on how well it embraces the notion that its role is all about developing knowledge. Users today expect that a museum will respond to their requirements: what is displayed should be comprehensible; there should be a stimulus to deepen one’s understanding of the themes presented and to enrich one’s own personal cultural experience. In some cases, museums have responded to this challenge by providing a virtual experience and high quality displays which have developed their ability to communicate with their audience despite the lack of any clear communication objectives. The danger here is that a market demand for virtual reality in museums may turn visits to museums into a numbers game in which archaeological exhibits become part of an entertain-

ing 'show' rather than a type of cultural communication. The other danger is that in an attempt to be more educational and worthy, museums can fall into the trap of being unimaginative, banal and obvious. I emphasise again that the value of the work a museum puts into preparing its displays cannot be measured in terms of paying visitors: what is important is the cultural enrichment of a community. The key to achieving this is the conscious harnessing of new technologies in communicating knowledge and culture.

The first requirement when designing an exhibition or display is to recognize that a museum is the bearer of scientific knowledge, and not the provider of a show; if we want to make good use of the technology that is available to us without falling into the trap of technology for its own sake, or style without content, we have to know how to recognize the intrinsic value of that technology. We need to use technology to simplify and find synergies within the complex, rather than to unnecessarily complicate the commonplace or simple by the application of technology. One of the first steps towards achieving the right balance is to realise that various skills are involved in producing a 'virtual' communication of an excellent quality. A traditional architect or an information designer cannot alone come up with the perfect design for an exhibit in an archaeological museum; there are other people whose skills will have much to contribute: interaction between the supervisor, the designer and the historian, for example, is more likely to create a good multimedia product appropriate to the museum. Along the routes round the exhibits one needs to consider ways of attracting and interesting the public. The brevity of the text in the panels and in the windows, for example, is important, so as to avoid people becoming bored. On the other hand, in a picture gallery time is not so much of the essence: what is important is the visibility of a picture. It is often thought that the introduction of screens with virtual images may satisfy the requirement for explanation of what lies behind an archaeological exhibit, either related to its context, or linked to the culture it is part of; and yet the screen can actually put the visitor off because it seems out of place within the museum, especially if provided in the form of a kiosk or with a keyboard which may seem to sit uneasily with an archaeological exhibit. This means that expensive multimedia systems can be under-used. Some recent works (Simone, 2000; Ong, 1986) have underlined the separation between alphabetic writing and the oral and non-alphabetic vision, which still characterise two forms of intelligence: sequential and simultaneous intelligence. The former proceeds in steps, codifies its thought and creates knowledge; the latter has the ability to deal simultaneously with more data, but at the same time does not identify their order and hierarchical

sequence. The latter type of vision, the one referring to images conveyed through multimedia, and in the past through the cinema and the TV, has generated what Sartori defines as the “homo videns”, characterised by an impoverishment in reasoning. It would be possible to organize the museum to satisfy the simultaneous intelligence, and accept without argument the current trend towards measurement of success by numbers, but there is no doubt that increasing the number of visitors would not favour the cultural growth of a community. It may seem that I am advocating not using virtual techniques in archaeological museums: this is not what I am saying. The point is not whether to use the virtual, but how to use it. The point is to know where the entertainment ends and the learning begins. One last observation: many people think of the virtual as being only to do with what arises from computer science, which is also graphically more complex; this would seem to be a limited view as we should remember also that the virtual includes also sound, words and light.

Our museums are considered to be quiet, contemplative places, where sound is perceived as a disturbance and a desecration; surely this is a misconceived view? Or, at least, we could start with the principle that the shorter the texts, the less bored will be the visitors?



Fig. 1 – Museo Civico di Baranello (CB), Italia.



Fig. 2 – Museo Civico di Baranello (CB), Italia.

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