

5.11 ITALY

A. D'Andrea, University of Naples "L'Orientale"

Policies

The role of cultural institutions

The institution responsible for cultural policies is the Ministry of Heritage and Cultural Activity (Ministero per i Beni e le Attività Culturali), divided by heritage type (archaeology, historical-artistic, monuments, etc...) and by administrative areas in different sections. Particular cases are the Special Soprintendenze (Pigorini, Pompei, etc.), with specific competences and administrative status, established to answer particular needs. These are also financially autonomous from the Ministry.

The Ministry of Heritage and Cultural Activity has a department of research, innovation and organization, which acts within a general framework of innovation and promotion, and is in charge of managing information systems.

With the recent introduction of the constitutional reform, the Regional Governments may now manage and administrate, either directly or co-involving mixed (public/private) companies, the Cultural Heritage in their areas. However, the precise definition of State competencies and Regional competencies on culture is still object of negotiation and changes are expected in short. Some regions, notably Emilia-Romagna, have regional agencies or active departments for culture, which are also in charge of cultural heritage. Others are less active and limit their action to the management of current affairs. The Emilia-Romagna agency IBC (Institute for Cultural Heritage) has a long experience and manages a very useful web site (in Italian, with English summary information) from which additional information can be acquired: <http://www.ibr.regione.emilia-romagna.it>.

The Regional Soprintendenze are in charge of coordinating the management of the various institutions and public financing in their areas. Worth noting is that there is no centralization regarding activities involving IH,

each entity (central/periphery, national/regional) deciding what and how to finance activities in the field of IH.

The Ministry of Education, University and Research (MIUR) and the Ministry for Innovation may launch national programmes for the financing of research or technology transfer in the field of IH applied to CH.

Specific regulations

There are no regular funds exclusively dedicated for the digitalization of CH. However, there are various financing sources, which are managed by the relevant, either regional or national entities as mentioned above. Often financed projects regard the use of information technologies for the communication (portals, web-sites, multimedia, etc.) for scientific research (remote-sensing, GIS), documentation (GPS, laser-scan, photogrammetry, etc.) and data management (digitalized archives, data-bases, etc.).

The main funding sources are through periodical calls opened following the PON (National Operative Plan) and managed by the MIUR, at a national level or Ob.1 regions, and through the POR (Regional Operative Plan), activated by the regions under the Information Society sector, the transfer of technology and specific research areas. Other specific actions regard the base scientific research (FIRB) and the university one (PRIN), financed by the MIUR.

The National Council for Research (CNR) financed and managed the large-scale project "Safeguard of Cultural Heritage", a large part of it was dedicated to the implementation of IT applied to CH. The project started in 1997 and was active for five years. Its overall budget was about 115 billion Italian lire (about 88 million Euro).⁵¹

With the exception of special financing in the 80s, (so-called law for "cultural mines"), no systematic and rational policy of digitali-

51 Cf. The DigiCULT Report. Technological landscapes for tomorrow's cultural economy. Full report. January 2002. Luxembourg: Office for Official Publications of the European Communities 2002, part: VI.9 Case Study, pp. 73-78. <http://www.digicult.info/pages/report.php>

zation of CH has ever been formulated in Italy, which today has a negative impact on the efficiency of the management of CH and the opportunity to guarantee the exchange and the inter-operability of information.

Sometimes, competitive calls are launched concerning the implementation of specific projects for the exploitation of local heritage with an intensive use of ICT. These may range up to some million Euro and follow the rules for public procurement.

Priorities for ICT applications to Cultural Heritage

The absence of a comprehensive plan of financing aimed at the transfer of IH to CH makes the realization of coordinated projects a difficult task. Quite often projects aim at a particular formation plan for the personnel involved and hardware solutions and software property. Moreover, the personnel of the Ministry and its periphery seats do not have a proper technical competences adapted to coordinate actions towards a true policy and a “modern” management of CH. Therefore, a “centralization”, i.e. a rationalization of interventions is needed, in order to avoid a fragmentation of solutions and policies. This would require a strategy which apparently conflicts with the most recent constitutional reforms. A possible solution would be a policy of formation of the Soprintendenze personnel, capable to determinate the development of horizontal actions (digitalization, conservation, rescue, etc.).

Associations and networks

No network or association, neither on the regional nor at the national level exists which would support the development of IH. There are some regulations established by ICCD (The Central Institute for Cataloguing and Documentation) of the Ministry of Heritage and Cultural Activity for the creation of “standard” archives, regarding format (type files to store) and forms. However, outside the institutional context, i.e. activity performed outside the relevant Soprintendenze, each institution may autonomously promote its development of the IH support. As an ex-

ample we may mention that the Campania region established a Regional Competence Centre for the Development and Transfer of Innovation Applied to CH and Environment.

Funding sources for IT projects

Public

As a consequence of the above problems, it is difficult to assess a single funding entity:

PRIN – MIUR – Annual – Competitive Call
PON – MIUR – Periodic – Competitive Call
FIRB – MIUR – Periodic – Competitive Call
POR – Regional– Periodic – Competitive Call
Soprintendenze – Periodic – Competitive Call, Direct Contact
Ministero Innovazione – Periodic – Competitive Call
Ministero Beni Culturali – Periodic – Competitive Call, Direct Contact
Local authorities – Occasional – Calls for tenders on specific projects

Private

Private Foundations and Bank Foundations – Periodic (mainly yearly) – Competitive Calls
Several institutions, mainly bank foundations – Sponsoring of local projects, direct contact

Practices

An extensive survey of projects in Italy in the relevant area would be very extensive and will be carried on in future versions of the present report. Here, we focus on the situation of the Campania region. This is somehow exemplary, because it is a representative of regional activity in Southern Italy, mostly supported by the European Social Fund and the additional funding provided by the Italian Government for Southern regions. Such provisions make much more money available here for cultural heritage than in the North.

On-going and past projects

A major digitization project, “Cultural Mines” (Law 41 of 1986), was carried out with no

follow-up, what led to the dispersion of the work. Some of the data of this project have however been recovered by the DICE project (www.progettodice.it) and S.I.A.V. (Sistema Informativo Archeologico Vesuviano) of the Soprintendenza archeologica di Pompei (<http://www.pompeisites.org>).

A worth to note project is the one launched in 2004 by the Campania Region, which financed the establishment of a consortium INNOVA (managed by CNR, with the participation of all Campanian Universities), as a Regional Competence Centre for the Development and Transfer of Innovation Applied to CH and Environment, which has among its various research activities several particularly dedicated to the development of informatics tools and technologies (intelligent platforms, Web-based GIS, simulation, GRID, etc.) for CH and Archaeology. The centre involves most of the regional researchers (ca. 150) in the areas of archaeology, philology, engineering, informatics, mathematics, geology, and medicine. URL: www.innova.campania.it

Another interesting project, managed by ICR (Central Institute for Restauration), is LabSTECH (<http://www.beniculturali.it/labstech3/default.htm>) which aims at linking and promoting cooperation between European research centers in the field of scientific and technological applications to cultural heritage. The ICR is responsible of Joint Activity 3 which has the task of collecting information on databases and conventional archives dealing with scientific contents. The present database is filled with the data collected from significant European infrastructures but allows for new entries.

Other projects promoted by ICR may be found at: <http://www.icr.beniculturali.it/progetti.htm>.

Projects realized by the Ministry of Heritage and Cultural Activity, such as an information system for general cataloguing, norms and standards, may be found at: <http://www.iccd.beniculturali.it/>

Projects in the Vezuvian and Pompeian areas may be found at: <http://www.pompeisites.org>. these initiatives include virtual

tours and virtual reconstructions realized with 3D scanner and on-line databases.

Worth mentioning in the field of web interfaces is the project DICE – Distributed Infrastructure for Cultural hEritage (www.progettodice.it). It is an innovative project for information regarding the Italian CH. The aim of DICE is to demonstrate the possibility of integration of information originating from all actors involved in CH, which would promote a more efficient valorization of the CH, by creating a technical platform capable of involving all stakeholders (such as e.g. administrative bodies, research organizations, museums, tourism agencies, etc.)

In the same field of web applications is the project ARCHAEOZONE (a portal for classical archaeology), developed by the Institute of Oriental Studies of the University of Naples (under the PON Avviso 68/2002). ARCHAEOZONE aims at the valorisation of a vast *corpus* of archaeological knowledge accumulated in dozens of years of archaeological investigations and studies conducted by the Institute in various European and Far East areas.

Another initiative, managed by the CNR, is the EACHMED (*European and Mediterranean Agency for Cultural Heritage*) portal www.eachmet.org, which provides valuable information on the Italian research in the preservation of CH. The portal suggests various methodologies for the valorisation of CH, formation of qualified personnel and the creation of SME in this area. EACHMED is divided into 13 channels, such as Data Archives, Editorial houses, events, technology and formation, etc., and several services, such as direct contact, for contacting users, partner search, for the creation of a network between the enterprises, the expert replies, for the clarification of arguments and useful sites, for a panoramic view of the CH.

Various projects are developed in the area of financing university research (PRIN), base research projects (FIRB) and national calls on PON. Generally, in these projects IH is a tool for research and valorisation of archaeological resources (GIS, intelligent platforms, multimedia, virtual reconstructions, etc.).

Typology of products

Data-bases: structure and organization of data (excavations, monuments, sites, etc.)
Integration of data and inter-operability
Methodologies for intelligent interfaces (portals)
Web based representation of geographical data
Methodologies for data capture (laser scan, GPS, photogrammetry)
Animation, landscape reconstruction, interactive navigation
Multimedia kiosks

Good practices

Due to the extreme heterogeneity of the realized projects, identifying best practice is not an easy task. Neither project aims at a national nor international context, and often Italian partners participate in EU projects as (CH) data providers and not as developers of operational methodologies. There is a lack of a true analysis of success and failure which leads to the adoption and abandonment of various strategies within each project. Perhaps a better coordination and more focused training would promote a more efficient valorisation of many projects which are often good examples of scientific studies but lack applicative and operational impact. Both in the database and GIS sectors (where IT had a greater impact) there is no standards for metadata and formats. No project escapes these observations. Both the large project on "Cultural Mines" (Law 46 of 1986) and the "Progetto Finalizzato" (finalized project) of CNR on CH (<http://www.pfbeniculturali.it/index01.asp>) did not have a significant impact on the management, valorisation and preservation of CH; the latter, however, provided some support for research activities in the field.

Journals and links to sites of interest

Books and essays

Archeologia e Calcolatori, a yearly journal on ICT applications to Archaeology

Relevant articles/work

D'Andrea A., Niccolucci F., L'Informatica

dell'archeologo: istruzioni per l'uso, in *Archeologia e Calcolatori*, 12, (2001)199-220.

M. Azzari (ed.), Workshops. Beni Ambientali e Culturali e GIS, in *Geostorie*, Bollettino e Notiziario del Centro Italiano per gli Studi Storico-Geografici, 10, 1-2, (2002)

M.P. Guermandi, *Rischio Archeologico. Se lo conosci lo eviti*, Bologna 2001.

Perceived needs

Digitisation is without any doubt an extraordinary resource for the valorisation of CH and for the definition of an efficient management policy. Given the lack of transversal policies, able to define "rational" developments of the various IH projects applied to CH, a main need, raised both by the scientific community and by the policy makers, is the definition and application of a coordination activity. However, this contrasts with the recent constitutional profiles of administrative decentralization applied in Italy.

Any kind of intervention must therefore integrate within the national policy framework for a harmonious development of a new culture for the CH, which allows to view our CH not as a "risk/obstacle" in the urban development, but as a means for a gradual, positive growth. The action to be taken in the field are various; a first need would be the definition of a new constitutional chart for the CH, able to correctly define what is CH and which national and cultural interests must be primarily saved and preserved for the future generations. This document must contain indications and suggestions for the definition of the empowerment of the administrative apparatus (a national museum network) and at the same time define updated and updatable criteria and modes for a digitalization of the CH (formats, solutions, architecture, etc.). Only in this way financing, research and training will be able to benefit from latest developments of information technologies. On the other hand, it would avoid misinterpretation, duplication of effort and havoc existing in the field of IH applied to CH, due to the lack of a "centralization" of projects to be developed.

Final comments

Impact of IH on the civil society

Digitisation may serve as a basic resource for the definition of a new policy for the CH, for its “efficient” and “effective” management and for its different valorization, capable to overcome traditional modes of communication (exhibitions, museums, etc.). IH can broaden the valorization and exploitation of CH, restricted today to the “physical” dimension of the museum. The creation of portals and web-sites can overcome geographic and cultural barriers by applying a multi-level policy of communication, not limited only to the scientific community or online exhibitions. Unfortunately, IH is mostly viewed only as an area in need for (public) financing and, without a comprehensive communication strategy, the society cannot perceive the positive effects that IH may have on the management, communication and exploitation of CH - also on a regional level. Even nowadays, the competences of the Soprintendenze are viewed as “obstacles” and “brakes” to the urban development. In the absence of a policy of integration of a “cultural planning” as an element for urban and territorial planning, the society cannot value the impact of the local and national policies on the IH.

Training

The training of personnel is practically absent if we exclude the limited initiatives promoted usually by local entities (museums, parks, etc.). Lacking is a policy for the formation of personnel at a base level and at a high profes-

sional level. There are no educators at higher education levels at the base university levels, Ph.D. and postgraduate studies. Moreover, there is no defined methodology and agreement upon a transversal competence, the existing initiatives being fragmentary and local. The personnel of the centralized and periphery institutions defined as technical staff (archivist, photographer, archaeologists, etc.) lack a formal preparation in the field of IH. Therefore, these competences are asked from external collaborators as consultancy, which limits the correct development of the personnel and its professional training, which often find themselves acting in projects of technological transfer, developed by external consultants.

Dissemination

There is a lack of an instrument for the dissemination of results. For this purpose, thematic portals are useful since they are usually oriented to a specific public and interest group of specialists. Neither conferences and congresses or exhibitions can assume this role.

Other

The European Community should push towards a “rational management” of CH, in order to avoid duplication of effort, projects and development of methodologies incompatible between various countries but often in the same country as well. A single subject should be defined, capable of coordinating the interventions and projects, in order to avoid fragmentation.

