Position Paper on EU Added Value and post-Lund Strategy

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(version 2.0 in preparation)

Introduction

This document proposes the issues that outline a position of the NRG on EU Added Value. The document is being prepared under responsibility of the Dutch representative in conjunction with the Progress Assessment that is being prepared by the Italian and Irish presidencies. The aim of this paper is to trigger discussion on the elements that could make up a successor to the Lund Action Programme, while taking into account and building on the results, conclusions and recommendations of the Progress Assessment[1] and various strategic documents. The concrete elaboration of a post-Lund strategy will be actively supported by the Dutch presidency in 2004 together with the NRG and MINERVA. Essential comments by Antonella Fresa and Ciarán Clissmann have been taken into account in writing this version of the text, as have been some valuable suggestions for consideration by Bernard Smith.

Objectives

European cultural heritage does not consist of separated islands of national heritage, our collective heritage is a continuum, an infinitely fine texture of physical objects, forms, meanings, connections and associations, with threads passing through time and space from one geographical extreme to the other, from the dawn of living memory to the present day. If our collective cultural heritage is a continuum, so must our digitised heritage be. In the minutes of the 2461th Council meeting on 11/12 November 2002 the Council states that "the European added value of Community cultural actions is to be found in actions that cannot sufficiently be undertaken at Member State level and therefore, by reason of scale and effects, are better undertaken by the Community".[2] The same draft resolution states that mobility of persons and works is a crucial measure in achieving European added value. Therefore the Commission furthers the development of a "cultural area common to the peoples in Europe". If we interpret this European Cultural Area as a public space where cultural resources and cultural knowledge can be shared and accessed freely and without the impediments of time and place, then a shift into a digital dimension is a logical next step. The creation of a continuum of digitised cultural heritage, an infrastructure of content, ubiquitous and persistent and freely accessible to all citizens of the

European Community is therefore fully justified. Within the domain of digitised cultural heritage and eCulture the benefits of Community level cooperation become quickly apparent. The creation of a continuum of digitised cultural heritage can not be undertaken at member state level, it is a massive collective endeavour in which:

- national barriers must be removed
- content and services must be shared
- common policies must be developed
- common legal frameworks and a common approach to IPR must be elaborated
- a common set of EU standards must be identified and implemented
- a common framework of quality criteria must guide the development of content and services

For a European Cultural Area to be enhanced, augmented, and supplemented virtually, by the digital exchange of knowledge, of ideas and of manifestations, or surrogates of cultural and scientific works, the right of free and unimpeded access to distributed cultural resources and sources of knowledge, irrespective of the physical location, specific characteristics and abilities of the user, or the physical location of the resources, must be ensured. Digitisation of cultural resources and sources of knowledge may lower the threshold of access by bridging physical distances and by removing the barriers of time, but digital insularity is as great a risk as is insularity in the analogous world. The value and viability of a European Cultural Area will for a large part depend upon the creation of its digital counterpart. The creation of a "European area for digitised cultural resources" is, therefore, a necessary objective. This objective has been independently stated at the Corfu NRG meeting.[3] This digital area ideally must be a ubiquitous digital infrastructure that warrants free and unimpeded access. Impediments to this access are manifold. They span a range from technological issues, over content issues and organisation issues to economical issues. Each member state encounters these impediments on a national level, to take them away on an international level demands a thorough and coordinated approach that can only be organized and steered on a Community level. The European Area of digitised cultural heritage is pan-national by definition and therefore needs a Community level approach. As the original European cultural heritage is distributed by nature and scattered about all member states, so are the access points to their digital representations. However, the collective rules and procedures for caring for our distributed heritage in the physical world still have no counterpart in the digital world. Member states must take the necessary decisions and steps to create this public space of interoperable resources.

The Commission can support the process by providing coordination and multi-party exchange and by supporting the creation of a collective knowledge base and mechanisms for the transfer of knowledge from the vanguard to the heritage field. The concept of European added value has a significant impact on European cooperation within the context of an area of digital cultural resources by making actions that derive from the objective (e.g. digitization, contextualisation, creation of digital repositories and digital libraries, development of networked cultural resources) more coherent, structured and visible by providing a purpose and a guidance structure for national actions. Moreover, the European perspective might prove to be catalytic in the creation of national initiatives that look beyond short term considerations and strategies.

Important elements of the European Area of digitised cultural (re)sources are:

Accessible (re)sources
Easy and unimpeded access to cultural heritage resources is necessary to attain a desired level of knowledge, or familiarity with cultural heritage for education, for appreciation, for the acquisition of skills, or modes of expression and creativity, the creation or dissemination of knowledge, or for leisure, irrespective of time, location, nationality, and abilities of the user.

Networked (re)sources
For heritage institutions to play a significant role as value added producer of reusable content they should be embedded in an international network in which memory institutions and knowledge institutions are merged. Aggregates of cultural sources function as content nodes within this network. Indexing services, metadata harvesting services and portals act as service nodes. Emerging semantic Web technologies at various stages of sophistication might add the rich texture of semantic metalayers through which agents and other intelligent technologies might perform the tedious and laborious task of harvesting knowledge and information that is tailored to the needs of individuals, or groups. Radical semantic interoperability is a precondition to achieve this level of refinement of meaning. Interoperability of content lies beyond the present horizon, but not too far. Research in the field of ontologies and semantic modeling languages is a prerequisite. This research is being conducted on a sufficient scale, but a coordinated international approach to the ontological universe of cultural heritage is needed to guide it in the right direction. Semantic modeling and ontological meta tagging should be built in authoring environments and authoring tools. Therefore, industry and the private, or public sector

research institutes should become important contributors to bringing about any successor to the current Lund Action Programme.

Transparent (re)sources
For the user there is one decisive factor. Being able to combine source material from a heterogeneous set of collections without the need changing search strategies and without time consuming separating the relevant from the irrelevant. A collective vision on the value of digital cultural heritage should be paired with the collective support of transparency. Details of where content comes from are only important if the user chooses to extend his inquiry to the original, or to other sources, or objects close to the original. Presentation and marketing should be channelled through regular 'folder' sites. The separation of networked content from PR strategies is a deliberate and conscious decision to be made by the management of institutions. Presentation of, and access to networked (re)sources should be the main concern of quality assurance.

Persistent (re)sources
Stable, consistent and persistent access to cultural sources and resources must be ensured to secure investments in digitization and the necessary public and political support. Issues of Long Term preservation are high on the agenda's of the European Commission (Firenze Agenda) and Unesco (Draft Charter on the preservation of the digital heritage).[4] This status of urgency should be maintained and supported by necessary actions. Support from the Lund Action Programme and its continuation could come from a focused monitoring of emerging issues, the coordination of research agenda's and the dissemination and transfer of knowledge. Though, persistent access not only is a question of persistent digital collections and functional environments, resources discovery structures and ontology-based metadata schemas will play an equally important role, as access not only depends on 'being there', but also on 'being visible (i.e. 'discoverable').[5]

Rights Management
Effective rights management should safeguard creative originality and original productivity that adds value by editing or contextualising. It also creates a lasting commitment and is an incentive for creative individuals and organizations to produce new works, or adapt material for specific use, or users. Acceptable use and reuse of original creations, knowledge, or value added materials should, however, not be stifled by excessive protection of rights of exploitation by parties that contributed little, or nothing to the original creation or value of the material. A complete overhaul of the legal framework of intellectual property rights is maybe necessary to counteract the massive lobbying that has

been practiced by commercial partners for a long time. The needs of the user, the needs of the creator and the needs of the agent that either adds value by enhancing access, or by creating a context of use, must be the point of departure for a legal framework that supports the European Area of digitised cultural (re)sources.

Quality

To ensure the integrity, completeness, discoverability and usability of digital cultural (re)sources a quality framework should be in place. Much work has already been done within the Lund Working Group on User needs and Quality. A possible Post-Lund approach could be the elaboration of a quality framework that carefully maps the quality aspects that surround the creation of a European Area of digitised cultural heritage. Presentation of, and access to networked (re)sources should be the main concern of quality assurance. Folder sites are important communication channels between institutions and the public, but belong to a different quality regime.
Elements that rely on a European approach might be identified as added value could be summarized as: the perspective of integrating internationally distributed cultural sources and resources into a network, or a continuous infrastructure of content.
The counterpart of this network must be a network of cooperating institutions and other agents that either add value by creating access, or by the contextualisation and enrichment of source material (e.g. in education, tourism, or the media); the perspective of creating an international infrastructure for the transmission and exchange of knowledge; the opportunity to reach a wide international audience, and learn its needs; the opportunity to foster a sense of European citizenship.

Connecting European Citizens through networked cultural heritage

The Lund Action Programme focuses on interoperability, user needs and quality, best practices and inventories. The benchmarking action is the methodology chosen to monitor initiatives, projects, policy and programmes. Interoperability and inventories are technological issues that find their point of departure in the current status quo where content is synonymous with digital collections that must be accessed by websites. The creation of portals, in this view, is indeed a logical step that entails the aforementioned issues. A digital continuum, which is an infrastructure of content, will more closely resemble the Web at its best, but without the need of hard-coding every link to associated source material. It will be content connected to content, not hard-coded, but dynamic and with a scalable semantic 'horizon'.

Ontologies will become essential. Modelling languages and agents must be able to process multiple ontologies, ontology mapping will take its place at the side systemic, syntactic and semantic interoperability of databases. The Area will rapidly move beyond the limitations of portals and websites. The workspace of the user is the place where things will come together.
To lay the foundation of a European Area of Digitised Cultural Resources a follow up on Lund-MINERVA work packages is required:

- analysis of the current harvest of good and best practices, creating scenario's for the attainment of the next level, a European Area of digitised cultural (re)sources;
- take the current work on quality to a stage refinement where it focuses sharply on content and access issues and on issues pertaining to transparency and persistent availability;
- refine benchmarking activities to monitor and guide digitisation as well as contextualisation. The current benchmarking methodology should be extended to create a benchmarking framework that enables national steering groups to adapt the benchmarking data structure to their specific needs. The framework then has to be supplemented by mapping rules and evaluation strategies;
- current work on inventories and resource discovery within MINERVA[6] yield important information to support the development of European ontologies for the cultural heritage sectors. The focus on collections should be extended to the concept of a more network-orientated view of sources;
- interoperability of content should be a target of research and Community activities. The development of smart tools should have particular attention. When content creators and creators of added value are supported through their authoring tools application of standards will become a common feature that requires a less specialist approach. The development of authoring tool will not become part of any post Lund action, but an active dialogue with industry and research institutes probably will. Therefore an additional post-Lund action must be the coordination and realisation of this productive dialogue;
- the creation of feedback mechanisms to harvest and analyse user requirements, needs and experiences, and to develop demand-driven digitisation pipelines. Domain-specific ontologies must be the object of a large and multi-national review similar to the benchmarking action. But more important, digitised sources must become available in a form and configuration that enables the user to tailor it to his own requirements. Monitoring use should replace assumptions when building dynamic requirements specifications;

- organisational issues must be addressed. International consensus on the basic strategies to promote a European area of digitised cultural resources based on a common vision is not sufficient if it only exists on the level of those institutions actively engaging in the European dialogue, for example, representing member states in the various working packages, or expert meetings. This vision must be embedded deep into the fabric of institutional practice and it must also guide the practice of value added commercial, or non commercial, but non-institutional producers of cultural content. This means that the development of tools, procedures, very practical and low threshold guidelines and off-the-shelf production and authoring environments that implement a major part of the necessary standards without interference of the operator, or authors, must be on the agenda of a Post-Lund action programme (see point made above). Research and knowledge-transfer must be stepped up. National research programmes must be 'tuned' to EU themes, but to achieve that the dissemination of knowledge and experience from EU projects must be more effective and must reach a larger professional audience;

- issues originating from divergent cultures and ambitions and objectives of member states, translated in differences in policies and practices must be acknowledged. It is becoming apparent that, despite the common vision that inspires meetings of experts and national representatives, national agenda's, expectations and ambitions differ and influence the course of actions and the functioning of working groups. Standardisation of content, or meaning is not an answer. This complexity is part of the value of European cooperation and of a collective infrastructure of content, not a disadvantage. Mapping these national characteristics might be a valuable part of a next phase of the Lund Action Programme, as it can be seen as a supporting action to the development of an adaptable benchmarking framework and the foundation of a pluralistic approach to ontology development;

- the development of technical infrastructures is a matter of national concern. The definition of requirements and the creation of markets can, however be influenced from the multi national level. As national research and development projects often turn to EU Frameworks for funding a successive Lund action might act as ' trait-d'union', assisting and guiding national agents to EU cooperation and participation while laying out the course of the developments on the basis of acquired knowledge. This closing of knowledge gaps can be beneficial in the process of assisting New Access States to join the activities of the Lund Action Programme.

Elaboration

Lund envisions interoperable services, accessible digital collections and high quality cultural websites. Barriers created by the need to adapt different strategies for searching and accessing distributed information at different sources are engaged through consensus on standards and through channelling the information using portals. The Lund perspective still is institutional, rather than user centred and network-oriented. This institutional perspective may well be one of the main impediments to the objective of a European Area of digitised cultural heritage. A larger (or different) vision is needed. The semantic Web might be a phase in the evolution towards a network of heritage resources in which the only portal is the workspace of the user. This requires some form of embedded 'intelligence' or 'image of the whole', but it also requires for institutions and other cultural agents to become a part of an infrastructure of content and play a much more discrete and subdued role.

MINERVA

The role of MINERVA is to reach the desired objective is paramount. MINERVA offers the environment in which representatives of member states, supported by their advisors and experts can draw on the collective efforts to monitor and study digitisation activities on a multinational level and it offers an excellent vantage point from which new strategies can be designed. The National Status Reports, the first Progress Report of the National Representatives Group, the Brussels Quality Framework and the first version of the Quality Handbook that derives from it, and the Parma Charter together with a host of working documents and position papers form the rich elixir of knowledge, experience and vision from which the blueprint of a truly European Area of Digitised Cultural Resources can be drawn.

[1] A "Progress Assessment of the 'Coordinating Digitisation in Europe' Initiative" is currently being produced by Mr. Ciarán Clissmann of Pintail Ltd. (Ireland).
[2] Document 13747/02 (Presse 340), p. 7, item 4.
[3] Minutes of the 4th official meeting of the National Representatives Group, Corfu 26th June 2003, p. 10.
[4] Unesco document 32 C/28, 19 August 2003
[5] Many digital sources that existed during the nineties in networked directory structures, so-called ' Gophers' persisted for a long time after the 'creation' of the World Wide Web. This network of directories vanished from view after the Hypertext Transfer Protocol became the predominant mode of interaction between users and the internet. Many digital sources, mainly texts, may still linger on, undiscovered and unused.
[6] Cf. Foulonneau, M. (ed.), *Digital Resource Discovery. Specifications to set up inventories on digital content creation in the cultural heritage field.* Draft v. 3 09/2003.