
Tending the Garden or Harvesting the Fields: Digital Preservation and the UNESCO Charter on the Preservation of the Digital Heritage

YOLA DE LUSENET

ABSTRACT

The UNESCO Charter on the Preservation of Digital Heritage, adopted in October 2003, is important for affirming the role of (national) heritage institutions and extending existing systems for preservation of documentary heritage to cover digital materials. This approach has distinct advantages, but has also been criticized for taking too narrow a view of the dynamic diversity of the digital environment, particularly as found on the Web. To understand what digital heritage is, it is useful to look at the current debate on preservation of intangible heritage, as both share a number of characteristics. The charter is examined in the context of UNESCO programs on culture to indicate its relevance for UNESCO's mission and to point to political aspects of digital preservation that cannot be ignored.

BRIEF HISTORY

On October 17, 2003, the thirty-second session of the General Conference of UNESCO adopted a Charter on the Preservation of Digital Heritage, a milestone in a process that had started several years earlier and that continues to this day. The charter is one of the UNESCO activities for safeguarding the documentary heritage and is closely connected to the Memory of the World Programme, which aims to preserve and promote cultural heritage through digitization projects, the publication of guidelines, and the Memory of the World Register of well over a hundred works of exceptional importance.

The *UNESCO Charter on the Preservation of the Digital Heritage* was a response to the concern voiced by memory institutions that digital materials (primarily those digitally born) will become inaccessible in the near

future unless widespread and structural measures are taken to guarantee continued access. It is significant that the Conference of Directors of National Libraries was involved in the very first stages, and that the European Commission on Preservation and Access, which promotes the preservation of collections in libraries and archives, prepared a paper to open the discussion in early 2002. This was followed by a draft text for the charter that was reviewed during the phase of consultation taking place in 2002 and 2003. The consultation included extensive discussion of the draft guidelines for digital heritage written for UNESCO by the National Library of Australia (2003). The latter text, a substantial document of 170 pages, presents general and technical guidelines for professionals responsible for safeguarding access to digital materials, and is intended as a companion volume to the charter.

Both documents were discussed at regional meetings in 2002 and 2003 (for Central Europe, the Baltic region, Latin America and the Caribbean, Asia and the Pacific, and Africa), which were attended by some 175 experts from 86 countries (National Library of Australia, 2003, p. 7). Once the charter had been adopted, several workshops on digitization and digital heritage took place, most recently in Ethiopia in August 2006. This workshop was one of three—the others will be organized in Botswana and South Africa—to support regional implementation of the charter and the guidelines.

TEXT OF THE CHARTER

The charter (UNESCO, 2003a) begins with a broad definition of digital heritage as embracing “cultural, educational, scientific and administrative resources, as well as technical, medical and other kinds of information created digitally, or converted into digital form from existing analogue resources” and to include “texts, databases, still and moving images, audio, graphics, software and web pages” (Article 1). The text points to the variety of factors that endanger the life of digital materials; not only obsolescence of hardware and software, but also uncertainties about resources, responsibilities, and methods for maintenance and preservation, and the lack of supportive legislation (Article 3). The emphasis is on attitudinal change, which “has fallen behind technological change” (Article 3), on advocacy, policies, and legal frameworks. Thus the intent of the document is to emphasize that more will be needed than referring the matter to professionals who can provide technical solutions. As it aims to outline the principles of digital preservation, the text is general, leaving room for further specifications during implementation.

The document reflects priorities articulated by memory institutions, which have long been aware of the problem and have been working on models, technological strategies (emulation, migration), preservation metadata, storage, the requirements for trusted digital repositories, etc.

However, in order for them to be able to move forward, major legislative and organizational issues need to be resolved at the governmental level. The charter, as a standard-setting instrument, concisely presents principles in order to encourage member states to undertake the necessary action. Archive legislation and (legal) deposit are mentioned as key elements of a national preservation policy. The charter emphasizes the need for selection criteria on the basis of "significance and lasting cultural, scientific, evidential or other value" (Article 7) as well as for guarantees to ensure authenticity. It refers to the need for coordination and sharing of tasks and responsibilities, possibly "based on existing roles and expertise" (Article 10).

For publicly funded heritage institutions, it is important that their governments recognize and support the institutions' responsibilities. In most countries, national heritage institutions, unlike research libraries for instance, fall directly under the authority of a Minister of Culture and often cannot on their own initiative set priorities or allocate resources to specific programs. Official recognition of responsibility is therefore a condition for further activities, and it also enables institutions to assume national leadership. Governmental support is essential because the guidance they would be expected to give may well affect the organization and work processes within other institutions. As digital preservation needs to be considered throughout the information life cycle, producers of information preferably would have to comply with certain requirements, to ensure that access to materials can be guaranteed when they move into the care of a heritage institution. As stated in Article 5 of the charter, digital preservation "begins with the design of reliable systems and procedures which will produce authentic and stable digital objects." For instance, national archiving bodies cannot passively wait until digital records that are created today are transferred to them twenty or thirty years from now, but will have to be involved in the design of information systems for record-creating agencies. This may involve redrafting procedures or reshuffling formal tasks and can only be brought about when an archival institution can act from a strong position with government support.

The text of the charter only refers to legal frameworks in a general sense and steers clear of any specific suggestion that preservation of digital heritage requires changes in copyright regulations. Whenever rights are mentioned, the right to access is carefully balanced against the rights of owners. There is no explicit recommendation to widen copyright regulations so as to allow copying of digital materials for preservation purposes, which would have been an important addition for heritage institutions. This was no doubt a strategic choice; mentioning a sensitive issue like copyright carries the risk that it will dominate the discussion on the political level, taking away interest from the core of the text and ultimately

blocking adoption. From UNESCO's point of view, there are other platforms where copyright issues should be resolved.

From the many references to issues relating to national responsibilities it is clear the charter builds on existing systems for preservation, which have been developed on the principle that each country should take care of its own heritage. The approach toward the new challenge of digital preservation is pragmatic in that it uses the lines drawn in more or less familiar territory and extends them to as yet uncharted terrain. A concrete example of the same strategy is the revision of the deposit regulations, which has been undertaken in many countries, to include all published materials irrespective of the carrier on which they are published.¹

DIFFERENT VIEWS OF DIGITAL HERITAGE

In November 2005 the Netherlands National Committee for UNESCO and the Koninklijke Bibliotheek, the National Library of the Netherlands, organized a conference "Preserving Digital Heritage: Principles and Policies" as a follow-up activity to the charter.² The conference focused on two aspects of the charter: selection for preservation, and roles and responsibilities. The papers from the conference demonstrated that in a number of countries national organizations are applying existing expertise and frameworks to the new environment. Deposit regulations are part of this, as are revised versions of concepts like "publication" and "archival record." The paper by Catherine Lupovici of the Bibliothèque nationale de France, who is program officer of the International Internet Preservation Consortium,³ very clearly outlines the relationships between deposit and preservation of Web materials from the perspective of national libraries. Lupovici describes how, since the introduction of legal deposit for printed materials in France in 1537, the law has been periodically revised to ensure continuity of the national collection. Each time new technologies were introduced, the scope of deposit regulations was extended to cover the contents distributed on the new media, from printed illustrations through photographs to audiovisual and offline digital materials.

Deposit differs from collection building in that it does not select on the basis of user requirements but constitutes a comprehensive coverage of a class of materials; extending this principle to the Web environment logically leads to a harvesting approach in which everything in the national domain is collected. Another characteristic of the deposit system, the participation of the producers that submit materials to a national heritage institution, opens possibilities in the Web environment for collecting information in the "deep web" that cannot be retrieved by harvesting (Lupovici, 2005). Arguing for the existing practice for deposit Lupovici advocates that national libraries with responsibilities for Web archiving use a complementary approach of broad comprehensive harvesting, de-

posit by producers, and limited selective preservation of Web resources around specific themes.

There is a strong realization among heritage professionals that the task at hand is extremely complex and will depend for its success on the investment of substantial resources, and on the development of new technical expertise and cooperative structures. Judging by the number of conferences, working groups, task forces and pilot projects for digital preservation, the professional world takes the problem very seriously indeed. Their preference for an approach that builds on recognized roles and existing experience is a logical one and may well work best to bring things a few steps forward in a rapidly changing environment. Yet, at the conference in The Hague heritage institutions saw themselves confronted by criticism from the keynote speakers, who took a more academic line to the issue and characterized institutional efforts as an attempt to carry on "business as usual" in the face of digital hurricanes sweeping through the information landscape. Heritage institutions were described as "myopic," "defining the digital world in terms of the institution instead of defining the institution in terms of the digital world" (Mackenzie Owen, 2007).

The emergence of the e-culture of blogs, podcasts, digital photography, webcams, gaming, mobile phones, Flickr, and MySpace, calls for radically new directions in preservation. Discussing social software and the virtual worlds of "massively multiplayer on-line role playing games" Uricchio (2007) raises the (rhetorical) question whether we can ignore all this, "fixating instead on the extension of traditional 19th and 20th century cultural forms in our digital and networked present?" For efficient and effective preservation of the digital environment, networked or distributed storage should take the place of institutional repositories, so as to make optimal use of technology's potential for dealing with ever growing amounts of information and for increasingly powerful searches. Institutions, then, would no longer invest in selecting objects for preservation, but users would find their own way, with institutions providing access, context, and interpretation to a digital environment in which interaction and processes can be traced. As Bearman (2007) describes the position of archives in this future model: "Rather than trying to apply traditional archival methods of appraisal of *records*, archives define algorithmically what records will be retained for how long, after capturing all transactions at the time of transmission." This vision contrasted markedly with the pragmatic views of professionals looking for workable solutions to preserve from the flurry of virtual activities what future generations may find worthwhile.

The diverging ideas at the Preserving Digital Heritage conference, on what preservation should encompass, uncovered some of the ambiguities inherent in heritage policies that can also be traced in the text of the charter. These ambiguities are inevitable, not just because the text is a

compromise resulting from a long review process, but also because there has to be room for different interpretations and emphases in a document meant to support digital preservation worldwide. For instance, in order to be universally applicable the definition of digital heritage refers both to information products and cultural works, which makes for quite a mixed bag of materials that originate in very different worlds. Information is a conveniently elastic term that can mean almost anything; in the context of heritage in libraries and archives it stretches from governmental documents that may be classified as records to be archived, to scientific publications for an international audience of specialists. Whereas a nation's archives contain direct records of its history, most research literature is international in scope and has very little to do with concepts like "national" or "heritage" (except that there happens to be a convention that every national library preserves the publications produced in its own country). Moreover, for scientists themselves, when it comes to preservation, even the distinction between published articles and research data has become blurred; over the last year, Europe has witnessed a growing interest from the research world in preservation and access of "the record of science," which includes the published literature as well as research data and is perceived only in some ways as akin to heritage.⁴ So if all these things are put under the umbrella of "digital heritage," the strategies and requirements for their preservation will still be very different.

Culture is an equally diffuse term that is loosely employed in discussions on heritage, in a strict sense to refer to works of artistic expression, in a much broader sense to almost anything created, performed or enacted, or even to the way of life of a community, group, or nation. Eriksen has critically analyzed how the term *culture* can refer to different concepts in UNESCO documents (2001, Two Problems of Culture section). Even one type of *cultural* institution may at the same time have different functions due to the flexible application of the term. Archives, for instance, have a role as historical-cultural centers holding collections of regional publications, local radio programs, photographs, videos, private documents, etc., as representative of a "culture" in a certain period. They also preserve the records of administrative bodies and as such function in a highly regulated national system in which they safeguard the evidence of actions of official bodies. All of this is considered cultural heritage, but it comes to an archive for very different reasons and along different routes.

Moreover, the recognition that what is considered trivial today may be of serious interest to future generations thwarts any attempt to demarcate *cultural heritage*. Letters or diaries dealing with everyday concerns in the seventeenth century, popular novels from the nineteenth century, films from the first decades of the cinema, advertisements from the 1950s, pop music from the early 1960s—all these are now highly instructive and material for serious study. The growing interest in popular culture has rein-

forced the tendency to consider a wide variety of materials worth keeping, so that libraries are now preserving free local papers next to literary master pieces and scholarly monographs, and audiovisual archives are keeping quiz shows, soap operas, sport programs as well as cinematographic heritage.

What can also be seen here is that nowadays, contrary to what the term *heritage* may suggest, memory institutions are for a large part engaged in collecting cultural products of our own time as part of their preservation responsibilities. It is not exactly true that time is always the Great Sifter of cultural or scientific production and everything comes to heritage institutions only decades after it was first created. Countless organizations acquire contemporary materials or document contemporary practices with the primary aim of preserving them for the future. This is what archival legislation and deposit regulations do as well, outlining paths that materials follow from the moment they are created, to ensure they are kept for posterity. It may seem paradoxical that a television program broadcast tomorrow should be saved in the framework of *heritage* policies unless we understand heritage (also) as “what we wish to pass on to future generations” (Deacon, 2005, p. 7). Preservation is in this view not so much a matter of keeping the past as of projecting what will be valued in the future. This involves judgment and a process of selection by professionals which, as it were, lifts present-day cultural production to a status of “heritage-to-be.”

Because selection on the basis of contents is always subjective, institutions tend to resort to formal criteria, to make the decision process more manageable and transparent. The downside of this solution is the risk that because no judgment of value is involved, anything that meets the formal criteria is saved, and this sometimes leads to obvious anomalies. If any video brought out for circulation in a country needs to be deposited, institutions end up preserving the xth copy of a popular BBC television series just because it has subtitles added in the national language. If every book printed in a country has to be deposited, library shelves fill up with (translated) pulp novels all telling varieties of the same seven storylines. This may be regarded as a case of erring on the safe side, but it is legitimate to ask whether we can always afford to do so. Acquiring deposit materials may not be expensive, but cataloging them and preserving them is.

In the digital environment this situation has become even more pronounced. The point at which materials are secured for preservation is moved forward as digital preservation is supposed to take place “throughout the life cycle” and “starting at creation”—which does not mean “when an object has been created” but rather “while it is being created”—or even before. As part of their preservation responsibility, national archives provide guidelines to record-creating agencies because, as mentioned above, digital preservation “begins with the design of reliable systems and proce-

dures which will produce authentic and stable digital objects” (UNESCO, 2003a, Article 5). Metadata defining how digital objects were created and documented in the design and functionality of software applications have become vital for their preservation, which adds yet another layer of preservation work.

Materials on the Web, however, are an amalgam of content and applications. Those responsible for preservation have no insight in nor any control over the way they are created, nor can there be much hope that they will be kept accessible because their structure and functionality can be understood from accompanying documentation and metadata, which is often incomplete or lacking. In the digital world of change and flux there are no discrete entities with a beginning, a middle, and an end that can be defined and classified. There is no point in time when a finished product is created, and the contents of the “object” are not fixed. Consequently, the system in which cultural production is selected for preservation on the basis of formal criteria and judgment of future value is now coming apart at the seams.

DIFFERENT ROUTES

The route of harvesting complete national domains that heritage institutions are exploring solves the dilemma by doing away with selection and judgment of value entirely—and leaves it to future generations to decide whether they wish to keep what is handed over to them as “heritage.” This approach has often been criticized as mere storage of materials instead of preservation, the more so as many technical and rights issues are as yet unresolved, so that it is unclear whether access can be provided and what this access would amount to. The answer to this objection is that if things are not stored now, there will be nothing left to preserve. Harvesting and storage is in this view a first and indispensable step toward some kind of preservation that cannot, however, be defined at this stage. For the time being, the question of “what we wish to pass on to future generations” is left open.

The other route that has been followed is to concentrate on archiving objects that are essentially digital varieties of paper documents, as has been done for electronic journals. Even these relatively static documents pose serious problems to institutions used to working with things that are tangible and fixed, for they may still exist in different versions and change locations, and when links die, linked content disintegrates. That the majority of Web sites present a mixture of media complicates preservation in a technical sense. These issues are emphasized continually by heritage professionals and they have made efforts to deal with them by developing metadata standards and persistent identifiers. Databases also bear some resemblance to their predecessor the good old card system, and the parallels to the analogue world help to grasp the concept and develop

preservation strategies. In terms of contents, the databases that heritage institutions would be interested in are serious projects that contain a lot of stable, solid data that are not constantly revised. It is therefore conceivable that acceptable preservation is achieved by keeping periodical snapshots, similar to making regular backups. The next step is archiving discrete Web sites of known organizations selected for the quality and relevance of their content. National libraries, archives, and research institutes are now working on this and bring their professional expertise to the processes of selecting, appraising, describing, and maintaining that finds its roots in the analogue world.

This approach is in line with the advice given in the UNESCO Guidelines: "Where necessary, it is usually better for non-comprehensive and non-reliable action to be taken than for no action at all" (National Library of Australia, 2003, p. 21). For institutions the primary goal is to get a grip on the digital universe, conceptually and technically; their efforts are directed at keeping problems manageable and at "taming this flow, channelling it into thematic, geographical, linguistic or formal categories, and organizing this prolific and polymorphous data mine" (Abid, 2005, p. 8). But against this image of heritage professionals bravely tackling the anarchic mass that is the Internet, others paint a picture of institutions set in their ways whose response fails to do justice to the challenge of the networked environment. In fact, the idea that individual institutions can preserve digital heritage is a misconception; heritage institutions lack the resources, the skills, and the necessary understanding of digital culture. The only effective way to manage digital information and keep it accessible is in the network (Bearman, 2007; Mackenzie Owen, 2007). According to Bearman, we need "to move our efforts from the individual repository level to the systemic level," and he believes that most of the solutions envisioned for preserving digital heritage "will not succeed because they attempt to solve a systemic problem, with fixes applied institutionally." The attempt by heritage institutions to channel or organize Web content is the equivalent of dissecting it into isolated sections; the object takes precedence over the process, what is dynamic becomes static, what is distributed becomes contained.

This will do nothing to preserve the new cultural space where users have become participants and create their own, shared environments. Social software enables information consumers to contribute their own knowledge, views, ideas, music, images, and videos to an ever-expanding aggregate, branching off into different directions, linking to other sites, reusing materials made available in other contexts. This participatory culture manifests itself as blogs, wikis, forums, games, and any combination of these. *Wikipedia* is not only a product but also a process created through comments and continuous revisions. The interaction between participants is an essential element of these sites; even music and images

are not posted simply as end products, but as contributions inviting comments, reuse, and links from a community.

Perhaps the most significant consequence of these characteristics is that modern culture is represented by the use of digital materials and the social and cultural processes they invoke, rather than by the materials themselves. Heritage preservation, therefore, implies not just storage and maintenance of digital artifacts, but the capturing of dynamic processes and patterns of use. (Mackenzie Owen, 2007; also see Uricchio, 2007, for a discussion of participatory culture)

The problem here is that preservation of cultural heritage would then become more or less synonymous to documenting human interaction on the Web. Are we simply going to keep everything because it is possible? What has happened to the idea that heritage has some value attached to it? A lot of what is going on in Web forums or blogs resembles conversations over a cup of coffee more than anything else, and to preserve all this as heritage would be casting the net very wide indeed. (It may even be illegal to capture such conversations with a view to keeping them accessible—or unethical.) The objection to Mackenzie Owen's proposal to "capture the digital fabric of society" from heritage professionals was that this is not what heritage is about. Memory institutions do not preserve cultural processes, or social activity, but documents and artifacts that are valued for what they may tell us about a culture. Mackenzie Owen suggests that for the preservation of the digital fabric of society a new type of organization should be established alongside the existing heritage institutions specializing in preservation of "high" culture. Apart from the fact that this term implies more of an opposition than actually exists—unless one regards quiz shows and free newspapers like *Metro* as high culture—it is not clear whether what is kept by this new organization should be seen as *heritage*. Many a historian probably dreams of time travel that would take them back for a couple of days to their favorite historical period for some first-hand observation of what life was really like at the time—but that is exactly what they would be looking at; life, not heritage-to-be. So when does documentation of cultural processes become preservation of heritage?

INTANGIBLE HERITAGE

Although the UNESCO charter sees digital preservation as linked to the existing system for managing documentary heritage, the context of other UNESCO programs for culture and heritage should also be taken into account. The General Conference of October 2003 not only adopted the charter on digital heritage, but also the *Convention for the Safeguarding of the Intangible Cultural Heritage*, a document that promises to have much wider implications. The process of ratification by member states has been a rapid one, and the convention entered into force in April 2006;

by the end of August 2006 already sixty-two member states had ratified the convention. In 2005 the general conference moreover adopted the *Convention on the Protection and Promotion of the Diversity of Cultural Expressions*. These two conventions along with the 1972 convention concerning the Protection of the World Cultural and Natural Heritage for UNESCO constitute the three pillars of the preservation and promotion of creative diversity.

Both these recent conventions have been prepared in years of study and debate, which cannot possibly be summarized here (the “brief history” of the convention for intangible heritage on the UNESCO Web site goes back to 1966!), but it is relevant to understand that the general ideas on culture, heritage, identity, and diversity that have been developed during work on these conventions also inform the charter on digital heritage, which can be regarded as an addendum to these major documents, zooming in on one particular area. Particularly the discussions on intangible heritage, have in recent years, seriously influenced the thinking on preservation and heritage and have dislodged them from their solid base of materiality. For preservation of intangible heritage does not only concern the materials that somehow represent or document intangible cultural expression, but the preservation of this intangible culture itself. As the convention defines it:

The “intangible cultural heritage” means the practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artefacts and cultural spaces associated therewith—that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. (UNESCO, 2003b, Article 2)

The preamble to the convention recognizes “the deep-seated interdependence between the intangible cultural heritage and the tangible cultural and natural heritage” (UNESCO, 2003b). In a thought-provoking article on the relationship between heritage and (intangible) culture, Kirshenblatt-Gimblett (2004) calls the distinction between the three types of heritage “arbitrary”; natural heritage sites often are what they are because of human interaction, and “tangible heritage, without intangible heritage, is a mere husk or inert matter” (p. 60). Challenging the dichotomy between intangible heritage as *events* and tangible heritage as *things*, she quotes the existential philosopher Stanley Eveling who has remarked “A thing is a slow event” (p. 59). Kirshenblatt-Gimblett qualifies this as “a perceptual issue,” determined by how we experience time and change.

How digital culture fits into this picture is only beginning to be dis-

cussed. It has been asserted that when people start using new technology, this will have an impact on cultural practices and may change, for instance, ritual behaviors, or even give rise to new ones. More concretely, it has been proposed to mention cyberculture explicitly in the text of the convention on intangible heritage, as a space where older elements from popular culture are adapted and recreated, as in fantasy games that draw upon folklore and fairytales and construct complete virtual worlds peopled by cyber-versions of characters from traditional stories (Jacobs, 2005a, 2005b). This proposal was not accepted, and one can imagine it was too much of a leap in a discussion that centered on local customs and traditional crafts. However, it is recognized that digital media have an important role in the documentation of intangible heritage, and moreover the characterization of cultural expression as renewable and adaptable in response to a community's environment leaves the door open for implementations that include digital manifestations. Uricchio (2007) also points to similarities between intangible and the digital cultures:

The rapid circulation of digital texts has also stimulated the growth of cultural hunters and gatherers who cut and mix, collect and reassemble, borrow and repurpose, and who do so as collectives. These practices are not so distant from those evident in pre-industrial and agrarian cultures . . . consider the work of quilters, folk singers and storytellers that might be characterized in precisely the same terms.

But for him there is an important difference too, in that cultural manifestations on the Web, unlike folk songs or dances, are also embodied as text, image, and sound that can be captured.

If the distinction between the different types of heritage is arbitrary, the question whether cultural activity on the Web is intangible or not can be left undecided, but tracing similarities and differences may still be instructive to gain a better understanding of digital culture. The tendency to project concepts and strategies from the very tangible paper environment onto the sprawling digital universe, in an effort to classify and categorize it, can be counteracted by a view from the intangible side that opens new perspectives. Culture as process instead of product, performance, and enactment rather than artifacts, the role of communities or groups as bearers of culture; these aspects of the intangible debate all have a bearing on digital culture. The definition of intangible heritage as both transmitted and recreated by communities and groups, has led to considerable discussion on the relationship between cultural practices and preservation of heritage: Who assigns value to cultural practices of a community that "promotes" it to heritage worth safeguarding? To what extent does such a promotion in itself change cultural practices? Isn't there a risk that states appropriate or "revitalize" cultural manifestations as showcases of a rich national heritage, instead of sustaining the system and communities in

which they originated? Can a cultural process or an event that is continually recreated actually be safeguarded without “fossilizing” it? As Kirshenblatt-Gimblett (2004) puts it: “Change is intrinsic to culture, and measures intended to preserve, conserve, safeguard, and sustain particular cultural practices are caught between freezing the practice and addressing the inherently processual nature of culture” (pp. 58–59).

The debate on these issues will no doubt intensify now that the convention has reached the stage of implementation and countries are expected to draw up inventories of their intangible heritage. One of the most controversial points is the selection of cultural expressions that constitute a community’s heritage. Some favor selecting “masterpieces” of exceptional importance that should be safeguarded; on the other end of the scale there are those who reject singling out individual instances as more important than others and would prefer to document representative examples of a category of cultural practices that may take several forms. The exploration of the field of intangible heritage that this will involve is relevant for our view of heritage as a whole as it will encourage thinking across national boundaries and revisiting the process by which value is attached to cultural forms. “Also, it raises the question of whether our understanding of “heritage” should be restricted to what is old, traditional, indigenous, tied to ethnic identities, and so on” (Deacon, 2004, p. 11). New ways will have to be developed to deal with the intangible heritage, and these mechanisms may also apply to the management of tangible heritage, which would be particularly relevant for an emerging field like digital preservation.

POLITICAL CONTEXT

UNESCO takes digital heritage seriously, but probably not because they are particularly interested in teenagers in the wealthy Western world romping about as cyborgs with identities taken from *The Lord of the Rings*. The mission of UNESCO is to make the world a better place by giving people access to information and education and the chance to live their own culture in their own language. Education, science, culture, and communication for UNESCO are the means to a highly ambitious goal: “to build peace in the minds of men,” as it is phrased on their Web site. The human rights and fundamental freedoms as defined in the charter of the United Nations are the basis for the work of UNESCO, which is directed at governments that should create opportunities for their citizens to live full and rewarding lives. Culture is one of the ways to promote collaboration among the 191 (as of September 2006) member states and build mutual respect and understanding between people.

Digital media, and particularly the Internet, are extremely relevant for many aspects of UNESCO’s work because of their possibilities for furthering free exchange of ideas, access to information, and freedom of ex-

pression. An initiative like the Community Multimedia Centres (CMCs), which offers local communities in poor countries access to computers and communication media in combination with local radio, is described as “a gateway to active membership of the global knowledge society,” which “empowers the community by giving a strong public voice to the voiceless, and thus encouraging greater accountability in public affairs” (UNESCO CMC, n.d. a). Bringing information and educational materials to those who have limited access to books, libraries, television, newspapers, archives, and museums serves higher goals of development, equal opportunities, and good government. The Internet has become a key component of UNESCO’s cultural programs not only for its potential to distribute information widely and cheaply, but because it can do so across borders to encourage participation and share in the creation of communities, instead of being a one-way channel through which information is received. The “digital divide” is high on the list of UNESCO priorities as an obstacle to development—development not as something imported into countries, but as an activity of people:

New information and communication technologies are not a solution or a goal in themselves. They offer the means for communities to identify and implement their own solutions leading to their own goals in the field of human, social, cultural and economic development. (UNESCO CMC, n.d. b)

Governments are expected to support development, for example, by providing access to public information; the fact that many governments have adopted policies to computerize public services is characterized in a document on digital heritage as “one of the effects of modernity, perhaps, but more than that, one detects in these policies a concern for improving relations with citizens” (Abid, 2005). The observation that governments are eager to use digital media from a desire to be part of the modern world is echoed as a note of warning in the text of the charter where it says “Digital evolution has been too rapid and costly for governments and institutions to develop timely and informed preservation strategies” (UNESCO, 2003a, Article 3). The message here is that if governments want to go digital (and hence come to depend on digital media for their own administrative processes), they will have to invest in the creation of a stable infrastructure and pay serious attention to digital preservation. If they fail to do so, the introduction of digital media will prove to be no more than a veneer of modernity while underneath, valuable data and knowledge will seep away through the cracks.

The centrality of a sustainable information infrastructure for development issues explains why UNESCO’s efforts at building a support base for the charter and its promotion of the guidelines for digital preservation have been focused on emerging economies and the developing world,

where the Internet can make a real difference in people. Often this ties in with a strong ambition to use digitization for promoting and preserving the national heritage in an effort to maintain cultural identity in the face of globalization. The meetings UNESCO organizes as follow-up activities to the charter prove to be focal points when, depending on needs and developments in the region itself, a variety of topics are discussed relating to preservation and access. The workshops in the Caribbean (2005) devoted special attention to preservation of audiovisual heritage; these meetings and the recent one in Ethiopia (August 2006) provided platforms in which to develop regional action plans, strengthen cooperation, and work on capacity building. In this way the charter acts as a catalyst for activities fanning out over a very broad field.

When seen in this light, the adoption of the charter gains much more weight than a discussion in the context of (Western) heritage policies might suggest. It has a strong political dimension that is easily overlooked from the comfort of a national heritage institution in northwest Europe. In fact, the political dimension of preservation itself is usually largely neglected in a debate characterized by an emphasis on technical solutions and forays into cultural activity as an innocent pastime. Yet, the relation of the Internet to political realities is immensely complex and deserves further disentangling before strategies for preservation of digital heritage are fully implemented. At this stage of rapid development when many different groups are applying the technology for a range of activities, it is opportune to hold preservation policies against the light for their practical implications in the new, global environment. In the debate on intangible heritage, attention has been drawn to possible conflicts between safeguarding of cultural practices and human rights issues. For example, what about customs that are clearly oppressive for women, cruel to children, or discriminatory? The text of the convention states: "consideration will be given solely to such intangible cultural heritage as is compatible with existing international human rights instruments, as well as with the requirements of mutual respect among communities, groups and individuals, and of sustainable development" (UNESCO, 2003b, Article 2). The first problem here is that in real-life situations the same principles are not always given the same precedence; what one group would see as freedom of expression, another experiences as disrespect for religious beliefs. One could also take the position that irrespective of ethical considerations any cultural activity is worth documenting and studying (but not protecting) because it is part of our society; deleting it from the record would be a distortion of historical fact. What would then be preserved is the documentation of an abandoned tradition, with different (negative) values attached to it. But would this still qualify as preservation of intangible heritage in some way?

For libraries and archives this situation is somewhat easier to handle as

the heritage in their care is in documentary form to start with and can be preserved without recreation or enactment. When it concerns offensive or seditious materials, libraries and archives usually have procedures to limit access. They tend not to publish sensitive materials on the Web, especially as they can be much more easily abused when they are out in the open. To historical materials on the Web that present opinions that might give offense, commentaries are sometimes added to explain that they should be interpreted in their historical context. All this is manageable because it concerns collections within institutions that have been described and whose content is, in principle, known. If institutions use an inclusive strategy for archiving Web content, however, aiming to capture cultural manifestations in their entirety or harvesting complete national domains, this will bring a lot of material into the care of institutions of which the content is either not known or of a doubtful nature. From the academic point of view, all this is documentation of our society that is openly available on the Web and constitutes an invaluable resource for research. But it raises the question whether institutes studying, for instance, political or religious extremism and store materials from blogs and forums on their own servers (which they would prefer to, as these sites tend to come and go rapidly) can legally do so. And if they can, how is this material to be kept for the future? Does making it accessible involve risks for the right to privacy? Are we going to treat it as “heritage”?

It may not be too difficult to formulate a policy for such extreme cases, in which publishing the content may have been illegal. But there are numerous Web sites that have a function for creating cultural or national identity that can not so easily be classified. Numerous dispersed nations, exiles, minority groups, or emigrants use the Internet to build virtual communities, often across physical distances, to establish or strengthen their shared background as defined by language, religious beliefs, history, or ethnicity. Many of these forums include cultural content, because a lot of discussion is devoted to language issues⁵ and to historical events. Depending on the contributors and the level of interaction, what is shared may be informative, or highly biased and unreliable. The shared “virtual identity” that is constructed may just as well represent the real values of a real community or be far removed from reality. There may be honest debate among a representative group, or the process may be heavily influenced by the input of only a handful of people—which obviously carries risks of manipulation and misrepresentation, and ultimately division and conflict. That makes it quite hard to assess the relationship between the virtual world and the political reality that lies behind it. How do we understand such material: is it documentation, and of what exactly? In an e-seminar of anthropologists on the building of national identity in cyberspace one of the participants, Daniel Miller, observes that “it is much harder to assess the significance of a web presence than we have admit-

ted in the past" (European Association of Social Anthropologists Media Anthropology Network, 2006, p. 7). In original research in Trinidad he found "there were Indian nationalists who had a major presence on line which basically signified only that no one would take them at all seriously in any other media" (p. 7).

It is relevant to consider what would happen if these diverse manifestations of cultural identity would be preserved as cultural content or social interaction. Often this is material that cannot be properly evaluated without a good knowledge of the real world in which it originated. Should all this be indiscriminately and automatically collected and placed in the care of heritage institutions, leaving it to posterity to construct their own story from a wealth of documentation? To what extent does keeping materials as "heritage" constitute an appreciation or legitimization of their contents? Should they be cataloged, described, or classified, or can the Web be expected to sort itself out as it were because everything will be preserved—the discussions, publications, dissenting views, analyses by researchers—with powerful search engines bringing sources and secondary materials together (which are now often published in academic journals with restricted access). Would distributed or networked storage be the answer, with a special role for researchers to provide access within a context based on their study of the real world? Or is this superfluous as the context is already present within the whole of the preserved documentary universe accessible on the network?

CONCLUSION

Everyone may agree that we need to preserve our digital heritage, but that does not mean we agree on what we need to preserve. The *UNESCO Charter on the Preservation of the Digital Heritage* speaks of digital resources of "lasting value and significance" (UNESCO, 2003a, Article 1), but in the Internet environment, that leaves a lot to be defined. Just as the digital world is rapidly evolving, so the strategies for preserving what we consider heritage will have to be revised in a continuing process of adapting established practices to new ideas of what future generations may want to know about us. The digital revolution has created an alternative world that theoretically could be preserved in its entirety, but the question is: What purpose would it serve to hand over the disordered and undifferentiated record of all our virtual activities? Harvesting the fields yields useful crops only if these are cultivated fields, and the "world wild web" is hardly that. Tending the garden may be more akin to preserving our heritage, provided we let some wild flowers roam.

ACKNOWLEDGMENTS

I would like to thank Michelle van den Berk (Royal Netherlands Institute of Southeast Asian and Caribbean Studies), Marc Jacobs (Flemish

Centre for the Study of Popular Culture), Marcel Ras (Koninklijke Bibliotheek, National Library of the Netherlands), and Vincent Wintermans (Netherlands National Committee for UNESCO) for their helpful suggestions in the preparation of this article.

NOTES

1. For instance, in Denmark the law on legal deposit was changed in 1997 to include all published works "regardless of medium" (Henriksen, 2001). In the revision of South African deposit law in 1997 generic terms like *document* and *medium* were introduced to extend legislation to audiovisual, electronic, and broadcast materials (Letshela & Lor, 2002).
2. See http://www.unesco.nl/main_6-3.php.
3. The IIPC is a consortium of national libraries and the Internet Archive with the mission "to acquire, preserve and make accessible knowledge and information from the Internet for future generations everywhere, promoting global exchange and international relations" (IIPC, n.d.). See <http://netpreserve.org/>.
4. See the Web site of the European Task Force Permanent Access, established in 2005, <http://tfpa.kb.nl/>.
5. By way of example, a thread from a forum discussing the language of the Pomacs, who live in Bulgaria, Greece, and Turkey http://www.allempires.com/forum/forum_posts.asp?TID=12780&PN=2.

REFERENCES

- Abid, A. (2005). Preserving our digital heritage: A UNESCO perspective. In *Preserving the digital heritage: Principles and policies*. Retrieved September 8, 2006, from http://www.unesco.nl/main_6-3.php.
- Bearman, D. (2007). Addressing selection and digital preservation as systemic problems. In Y. de Lusenet and V. Wintermans (Eds.), *Preserving Digital Heritage: Principles and Policies*, Selected papers of the international conference organized by the Netherlands National Commission for UNESCO and the Koninklijke Bibliotheek (National Library of the Netherlands), 4–5 November 2005, The Hague, Amsterdam: European Commission on Preservation and Access. Retrieved July 18, 2007, from <http://www.knaw.nl/ecpa/publications.html>.
- Deacon, H. (with Dondolo, L., Mrubata, M., & Prosalendis, S.). (2005). *The subtle power of intangible heritage: Legal and financial instruments for safeguarding intangible heritage*. Cape Town, South Africa: HSRC Press. Retrieved September 13, 2006, from <http://www.hsrcpress.ac.za/freedownload.asp?id=2044>.
- Eriksen, T. H. (2001). Between universalism and relativism: A critique of the UNESCO concepts of culture. In J. Cowan, M.-B. Dembour, & R. Wilson (Eds.), *Culture and rights: Anthropological perspectives* (pp. 127–148). Cambridge, London: Cambridge University Press. Retrieved September 6, 2006, from <http://folk.uio.no/geirthe/UNESCO.html>.
- European Association of Social Anthropologists Media Anthropology Network. (2006, May). *E-seminar on Thomas H. Eriksen's working paper 'Nations in cyberspace'*. Retrieved September 13, 2006, from <http://www.media-anthropology.net/workingpapers.htm>.
- Henriksen, B. N. (2001). *Legal deposit from the Internet in Denmark—experiences with the law from 1997 and the need for adjustments*. Retrieved September 7, 2006, from http://www.deflink.dk/upload/doc_filer/doc_alle/1023_BNH.doc.
- International Internet Preservation Consortium. (n.d.). About. Retrieved March 7, 2007, from <http://netpreserve.org/about/mission.php>.
- Jacobs, M. (2005a). Bien étonnés de se trouver ensemble. Over jongeren (-) en volkscultuur in Vlaanderen. In *Smakers. Jongeren en cultuur Afdeling Jeugd en Sport en CJP* (pp. 88–92). Retrieved September 4, 2006, from http://www.wvc.vlaanderen.be/jeugdbeleid/publicaties/documenten/smakers_web.pdf.
- Jacobs, M. (2005b). Rijmt etnologisch of volkskundig op eerlijk? Omgaan met de UNESCO-conventie (2003) voor het koesteren van I.C.E. *cULTUUR. Tijdschrift voor Etnologie*, 1–2, 100–120.
- Kirshenblatt-Gimblett, B. (2004). Intangible heritage as metacultural production. *Museum*

- International*, 56(1-2), 52-65. Retrieved September 11, 2006, from <http://www.nyu.edu/classes/bkg/web>.
- Letshela, P. Z., & Lor, P. J. (2002, August). *Implementing legal deposit of electronic publications in Africa: Progress report from South Africa and Namibia*. Paper presented at the 68th IFLA Council and General Conference, Glasgow, Scotland. Retrieved September 7, 2006, from <http://www.ifla.org/IV/ifla68/papers/072-124e.pdf>.
- Lupovici, C. (2005). Web archiving and cultural heritage mission: To select or not to select? In *Preserving digital heritage: Principles and policies*. Retrieved September 8, 2006, from http://www.unesco.nl/main_6-3.php.
- Mackenzie Owen, J. (2007). Preserving the digital heritage: Roles and responsibilities for heritage repositories. In Y. de Lusenet and V. Wintermans (Eds.), *Preserving Digital Heritage: Principles and Policies*, Selected papers of the international conference organized by the Netherlands National Commission for UNESCO and the Koninklijke Bibliotheek (National Library of the Netherlands), 4-5 November 2005, The Hague, Amsterdam: European Commission on Preservation and Access. Retrieved July 18, 2007, from <http://www.knaw.nl/ecpa/publications.html>.
- National Library of Australia. (2003). *Guidelines for the preservation of digital heritage* (UNESCO CI-2003/WS/3). Retrieved September 10, 2006, from <http://unesdoc.unesco.org/images/0013/001300/130071e.pdf>.
- UNESCO. (2003a). *Charter on the preservation of the digital heritage*. Retrieved September 10, 2006, from http://portal.unesco.org/ci/en/ev.php-URL_ID=13366&URL_DO=DO_TOPIC&URL_SECTION=201.html.
- UNESCO. (2003b). *Convention for the safeguarding of the intangible cultural heritage*. Retrieved September 12, 2006, from http://www.unesco.org/culture/ich_convention/index.php?pg=00022.
- UNESCO Community Multimedia Centres. (n.d. a). *Community Multimedia Centres*. Retrieved September 14, 2006, from http://portal.unesco.org/ci/en/ev.php-URL_ID=1263&URL_DO=DO_TOPIC&URL_SECTION=201.html.
- UNESCO Community Multimedia Centres. (n.d. b). *Why is there a need to address the digital divide at the community level in the developing world?* Retrieved September 12, 2006, from http://portal.unesco.org/ci/en/ev.php-URL_ID=5518&URL_DO=DO_TOPIC&URL_SECTION=201.html.
- Uricchio, W. (2007). Moving beyond the artifact: Lessons from participatory culture. In Y. de Lusenet and V. Wintermans (Eds.), *Preserving Digital Heritage: Principles and Policies*, Selected papers of the international conference organized by the Netherlands National Commission for UNESCO and the Koninklijke Bibliotheek (National Library of the Netherlands), 4-5 November 2005, The Hague, Amsterdam: European Commission on Preservation and Access. Retrieved July 18, 2007, from <http://www.knaw.nl/ecpa/publications.html>.

Since 1995, Yola de Lusenet has been working as executive secretary of the European Commission on Preservation and Access (ECPA), an independent foundation acting as a European platform for the promotion of preservation and access of the documentary heritage. Yola de Lusenet has co-organized numerous meetings on preservation-related issues and published papers on preservation management, reformatting, digital preservation, photographic collections, and audiovisual collections. She was the author of a discussion paper on digital heritage for UNESCO. From 1999-2003 she was the coordinator of the European Union-funded project Safeguarding European Photographic Images for Access (SEPIA), at present she is coordinator of TAPE (Training for Audiovisual Preservation in Europe), also funded by the EU. She is an ex-officio member of the Memory of the World Sub-Committee on Technology, a member of the audiovisual section of the Dutch archives organization DIVA, and chair of the Dutch Society for History and Computing (VGI).