

# Would We Have Noticed the Loss of the Iraqi Museum?: The Case for the Virtual Duplication of Cultural Heritage Collections

Robert K. Englund

*The following lecture was presented by Robert K. Englund, Professor of Assyriology & Sumerology and Director of the Cuneiform Digital Library Initiative (CDLI) at the University of California, Los Angeles, at the National Humanities Center on October 22, 2004. As principal investigator of the CDLI, Englund has led an international group of Assyriologists, museum curators, and historians of science to make available through the Internet the form and content of cuneiform tablets dating from the beginning of writing, circa 3350 BC. Supplementing nearly half a million discrete inscriptions, translated into English and Arabic, will be online tools necessary for textual analysis allowing far greater insight into the origins of culture in the cradle of the Tigris and Euphrates rivers that can be readily accessed by scholars all over the world.*



Let's start with a snapshot of what life was like in Mesopotamia in the first millennium BC, one that might point to some parallels between what ancient Babylonians and Assyrians were facing then, and what modern Iraqis are facing today. A king of ancient Iraq, certainly someone who would have felt quite at home in one of Saddam Hussein's many palaces, wrote in the report of his first campaign against the tribes surrounding Assyria,

I massacred many of them and carried off captives, possessions, and oxen from them. I felled 200 of their fighting men with the sword and carried off a multitude of captives like a flock of sheep. With their blood I dyed the mountain red, and the ravines and torrents of the mountains swallowed the rest of them. I razed, destroyed, and burnt their cities. And into the midst of those which none of the kings my fathers had ever approached, my warriors flew like birds. I felled 260 of their combat troops with the sword. I cut off and piled up their heads. I flayed as many nobles as had rebelled against me and draped their skins over the piles of heads. I flayed many right through my land and draped their skins over the wall of Nineveh.

I cite one of the more horrific rulers of the long history of bloodletting in the Near East because, among other duties, humanists must confront the consequences of the dogs of war, in Iraq and elsewhere, once they are freed to wreak havoc on human memory. Many will remember the scene of the consummate humanist George in Albee's

*Who's Afraid of Virginia Woolf?*, an inveterate associate professor at a New England liberal arts college who declared to his biologist guest, Nick, that it was the great dilemma of conscious historians to be relegated to understanding the motivations of agents of power—in subtext, as their court poets. So I would like here to consider what I see as some of the motivations that led to the present war in Iraq, whether the roots of the present conflict may act as a warning to us to expect more of the same in the future, and what we should undertake to, in our small way, head off some of the natural consequences of this strife.

Many today find themselves playing with dark conspiracies in their attempts to understand why a grand coalition in Washington led this country to war against an enfeebled dictatorial regime in Baghdad. The American president has declared the twenty-first century a century of war on terrorism, of which Afghanistan and Iraq are the first skirmishes. Whatever you might make of his politics, and, despite some rumblings among grassroots organizations, that of a growing majority of leaders within both U.S. parties, I do believe we must take seriously the intention of this nation to project and employ its military power to preemptively thwart any threat against its vital national interest, be that threat real or perceived.

We hear much these days about a new and better future, but I think, to be realistic, we must hope for the best and plan for the worst. We in the field of Assyriology would not have wished for the need to address these issues as they apply to Iraq, but we must deal with them in a serious way, aware that we have a special responsibility to make and keep available to our peers and to our descendants the records of a civilization that, though long vanished, left so many visible traces in our intellectual and technical history. I have entitled this paper, somewhat provocatively, “Would we have noticed the loss of the Iraq Museum?” thinking above all about the level of documentation of major cultural heritage collections throughout the world, but focusing on where they are most specifically threatened, that is, in regions of great conflict.

In March and April of 2003, U.S. forces moving north from Kuwait defeated a ragtag Iraqi army, consisting of a bloated corps of well-paid officers, of diehard Saddam loyalists,

and of forced conscripts from poor villages throughout Iraq—these latter young Iraqis who took the brunt of the lethal attack were, by the way, the only participants in this war who had no choice in what was happening to them. In the midst of this invasion, there was an act of national liberation that played out on the 9th of April, 2003, at Firdos Square in the center of Baghdad—and next to, by the way, the famous Palestine and Sheraton Hotels so much in the news in the years following the invasion—with the technical assistance and under the watchful eye of a new occupation force. The footage of Saddam’s statue being toppled in that square by a U.S. tank, fed through the broadcasts of a very eager U.S. media, fairly saturated cable and nightly news reports in our homes. But beginning just one day later, a 48-hour confrontation among local Iraqis and combatants from U.S. and Iraq forces took place before and within the Iraq National Museum, itself but several miles from Firdos and its toppled statue. The confusion of war sets in with the reporting on this extended incident of cultural heritage destruction.

It appears that some of the Saddam loyalists who had scattered with the winds in the first days of the invasion had taken positions within the confines of that museum and had exchanged fire with U.S. forces. It appears further that as Donald Rumsfeld stated, “A free people are free to do bad things,” namely, that local Iraqis entered and plundered the holdings of the museum both for reasons of personal gain and out of hatred directed against the staff of that institution widely believed to have been a tool of the Baathist party. On the 12th of April, this looting was abruptly ended by the U.S. occupation force. For a short moment, the importance of preserving and disseminating cultural heritage achieved a currency among U.S. and European media and politicians that led to nervous discussions even within DoD and State Department planning staffs over how best to counter the bad publicity surrounding this apparent failure by the occupation to secure major sites of cultural heritage within Iraq.

Fully consonant with the theory of fluid group action, plunderers on the 14th of April regrouped and entered the National Library and Archives in Baghdad. They torched that unique collection, irrevocably destroying thousands of

historical documents with no facsimiles whatsoever. As in the Iraq Museum, it may be that local Iraqis saw in these archives records of the actions of a hated tyrant; we cannot know for we cannot look into their hearts. But groupthink also took hold in the circles of academicians who more closely than others followed the events in the Iraq Museum. Blogging sites hosted by the Oriental Institute of the University of Chicago, and science and culture pages of major U.S. and European newspapers came alive with reports of the mass destruction and looting of this heart of Iraqi cultural heritage. Many spoke of the complete loss of the collection, in total 180,000 unique artifacts documenting 12 millennia of human settlement, including 3,000 years of written history from the pre-Christian era. Cuneiform documents from the period of around 3300 BC until about the time of Christ were, we were told, lost for all time.

As one example, I would like to cite an article written for the *Süddeutsche Zeitung* by a professor of Assyriology at the University of Marburg in Germany: “A surprising detail in the description was the circumstance that the American soldiers themselves made the plundering possible by breaking open or unlocking well-secured gates. They then summoned bystanders to loot, saying ‘Go in, Ali Baba, it’s all yours.’ Eyewitnesses heard this standard phrase again and again. ‘Ali Baba’ had become the epitomizing term among Americans for plundering Iraqis. A witness recounted how the soldiers sat laughing on their tanks as they watched.” So now that’s the German, the European press, on what was happening in these few days of the uprising against the Iraq Museum.

These initial reports went out across the Internet, fanning fires of disgust at what was characterized as a wanton disregard for world cultural heritage by a raging band of barbarians in Iraq. The critics in these reports were not referring to the looting mobs in Baghdad and other Iraqi cities, but were pointing at those on the *American* side. As a response to this outcry, military intelligence and FBI agents were assigned the task of assessing the damage and retrieving lost artifacts, in the course of which a certain cultural propaganda war set in. While the community of specialists in museum and library science, in archaeology, and cultural history circulated and recirculated tales of damage

inflicted or tolerated by U.S. military forces in Baghdad, U.S. officials began circulating suspicions that the plunder was at least in part an inside job, since only the real pieces, the valuable pieces, were taken, and since many doors had been opened without force. Evidently feeding from some local sentiments, investigators around Matthew Bogdanos, the man put in charge of recovering Iraq Museum losses—and, by the way, the Manhattan prosecutor who grew famous with his prosecution of Puff Daddy—concluded that the Baathist museum staff must have had their own motives for stealing from their own collections.

For the record, I might state that the last time I had the opportunity to work in the Iraq Museum was in April of 1990, shortly before the Saddam invasion of Kuwait. But in the months I spent working on a specific group of cuneiform documents in that collection, I did learn that we must remain very skeptical of the description of the museum’s holdings from either or any side, since much and perhaps most of the collection was effectively undocumented. Although certainly not foreign to Western museums, the level of collection documentation within the relatively poor Near East, let alone within destitute third world countries, is truly alarming and must form a central topic for discussions among cultural heritage officials generally, and among proponents of digital libraries specifically. Clearly, we have the tools to catalogue collections quickly and at low cost, but the international community must add to this capability the will to do so. I will return to this dilemma shortly.

The list of lost artifacts has been slowly reduced by improved cataloguing and by policing work that included the use of financial incentives to pry many of the artifacts loose from their unrightful owners, a tactic that was generally supported by archiving and cultural heritage proponents in the weeks and months after the April 2003 destruction. Still, most reasonable current estimates put the loss at approximately 6,000 to 10,000 mostly small and therefore easily transportable objects—above all, cylinder seals that are a hallmark of the administrative history of Babylonia. There appears to be no image documentation of these small objects that frequent the safes of even the smallest of antiquities dealers and collectors throughout the world. A quick check on eBay in October of 2004

resulted in six probable hits of authentic cylinder seals. It is likely that the majority of these have recently been removed from Iraq.

Now, some other higher profile objects went missing, including an archaic human statue and the famous Warka Vase with its friezes of early human activity, both of which date to the end of the fourth millennium BC. A number of twenty-seventh-century statues from the Diyala region east of Baghdad, excavated by University of Chicago archaeologists in the years preceding the Second World War, were also lost. The safe return of one of these statues, which formed a centerpiece of a May 10th, 2003, exposé on the museum looting that appeared in the *LA Times*, spurred a roundtable discussion on the matter organized by the Getty Conservation Institute in Los Angeles. This discussion was attended by UCLA faculty, by Los Angeles County Museum of Art officials, and by the local community, but also by two federal investigators immediately before their departure for Baghdad. To demonstrate their solidarity with representatives of Iraqi cultural heritage, Coalition Provisional Authority officials and favored Iraqi politicians were regular guests of the reconstituted museum staff in Baghdad.

That the motives of many of the looters were unclear and often certainly unprofessional is demonstrated by the fact that most of the scenes of devastation photographed within the offices and storerooms of the Baghdad museum were the result of plunderers' intentions to steal the *furniture*, dumping stacks and piles of precious photographic and written documentation from desks and cabinets on the floors on their way out the door. I mentioned that we cannot well state with confidence how much might be missing from the Iraq Museum collections since the documentation is so unprofessional. During my own work in Baghdad, I had no immediate access to the museum storerooms, but with some regularity the curator Ahmed Kamel did bring to my table cuneiform tablets that had gotten mixed in with those that I had requested. In two instances of such unintentional largesse, I was able to make quick photographs of shoe box-sized containers of texts dating to or near the reign of Nebuchadnezzar, and thereby to underscore the desperate need for cataloguing in this and many other archives of cultural heritage across the Middle East. The unprofessional

images I made in passing are the only known record of a jumble of over 250 texts that may just document the provisioning of deported elites from Jerusalem, the prediction of solar eclipses over 500 years, or the plaintive sigh of a mother who had lost her child to a sepsis shock. Would we have noticed the loss of these texts to plunders in April of 2003? Most certainly not.

Before considering what current prospects are for the secure documentation of Near Eastern artifact collections, let me try with one example to highlight what is happening beyond the now relatively secure confines of Iraqi museums. The capture and eventual release by apparent Shiite insurgents of Micah Garen, an independent journalist from New York City, has already faded from the national media scene, but we should remember Garen as one of the real activists among proponents of cultural heritage preservation. I would invite you to bookmark his Web site at [fourcornersmedia.net](http://fourcornersmedia.net), where he and his partner, Marie-Hélène Carleton, have been documenting the widespread plunder of unprotected archaeological sites in Iraq. One image from their site exhibits some of the 1,000 cuneiform tablets recovered during a single police raid in southern Iraq in June of 2004; the quick shots made by Garen are the only photographic documentation of 1,000 relatively complete inscriptions that had shortly before their confiscation been illegally excavated at a site nearby. Such plunder often takes place with searchlights in the dead of the night, not for fear of intervention by law enforcement or occupation forces, but to avoid the deadening heat. Garen has written me that these and other artifacts were transferred to the Iraq Museum but he did not know who might be caring for or cataloguing them.

This and many other examples of countryside looting prompted University of Michigan archaeologist Henry Wright, in an edition of the *National Geographic* magazine, to rank Iraq *under U.S. occupation* as the most endangered case of cultural heritage on earth, and to worry that fifty years from now, we won't have enough of an archaeological record left to answer fundamental questions about our past and our possible future. Such matters as the guarding of significant sites of shared cultural heritage are evidently much more involved than is the relatively straightforward

issue of instituting policies geared towards the documentation and dissemination of existing collections. We might hope that law enforcement agencies will receive sufficient material support from the international community to be able to interdict the looting and cross-border transportation of cultural heritage objects wherever these crimes are taking place, particularly in an Iraq stripped of its ability to secure its own archaeological sites. But what are the prospects at least for a modest improvement of collection security in Iraq and elsewhere in the Middle East?

It must be troubling to anyone who has followed developments in Iraq in the past quarter century, and I think to those who view developments in the Middle East generally, to realize that in the United States, a nation that has, especially since the Second World War, played so prominent a role in that part of the world, no public discussion is taking place about the reason many Muslims hate us so much that they would dedicate their lives to our destruction. What really motivated those nineteen Saudis and Egyptians to commit such horrendous crimes against innocents in order to make a statement about American actions in their part of the world? It seems to me that an unprejudiced observer will look at the 2004 presidential and vice-presidential debates, let alone the national campaigns themselves, and conclude that insofar as security concerns are involved, these are highly irrational discussions. Both political parties and both candidates for the presidency seem effectively to have bought in to the argument that Islamic fundamentalists hate us because we are Americans who enjoy certain freedoms and economic and social privileges. That may in part be true, but who has conspired with the Democratic and Republican operatives to keep from public discourse the real irritants in our relations with the Middle East?

To my mind, the first is clearly our dependence on oil. This is an old point of argument that became most acute after the Arab embargo of the early 1970s. But judging from national policy on energy use since then, no federal-level legislative or executive body has proposed any serious steps to cap the profligate abuse of the world's energy reserves in this country. Energy analysts have stated that America, dependent on its own reserves, would run out of oil in a matter of several years. That is the story that we

hear regularly about once a decade, and as new reserves are found, it is as regularly pushed into the background. But I think that those who look closely at American reserves recognize that we will in fact become more and more dependent on foreign oil until such time as we institute a very different policy on energy use within this country.

We remember George Bush Sr.'s "This will not stand" proclamation before Congress prior to the Kuwait War, and his justification for that war, which was, "Most Americans know we must make sure that control of the world's oil resources does not fall into Saddam's hands." Bush Sr. was merely echoing the Carter Doctrine stating that securing Persian Gulf oil was in America's *vital national interest*, most clearly expressed in his 1980 State of the Union Address in response to the perceived threat against the Strait of Hormuz shipping lines represented by the Soviet invasion of Afghanistan. We should remember that this perceived threat to Gulf security led to the covert and overt funding of Afghani and foreign mujahideen forces, and that this same year Osama bin Laden entered Afghanistan. As the current vice president repeated in the months leading up to the effective congressional declaration of war in October of 2002, armed with weapons of terror and seated atop 10 percent of the world's oil reserves, Saddam Hussein could be expected to seek domination of the entire Middle East, take control of a great portion of the world's energy supplies, and directly threaten America's friends throughout the region. That was a speech before the Veterans of Foreign Wars in a meeting in August of 2002.

Now we compete for these same resources with new national economies that threaten to assign to a distant age the \$20 barrel of oil and the 99-cent gallon of gas. Thus oil attaches us to the Middle East in a special way. Indeed, the so-called "Bush Doctrine" presumes that the Gulf states are, in matters of national security, a part of U.S. territory, and it seems that these energy needs will conspire, with whatever party occupies the White House, to keep American soldiers stationed in the Middle East until the wells run dry.

The second point of irritation is the long-standing and often, or at least occasionally, uncritical relationship of this country to the governments of Israel. Just as images of atrocities committed against Iraqi civilians at Abu Ghraib served

to recruit new martyrs to the horrifying cause of terrorists worldwide, so too does the unresolved record of occupation of the West Bank and Gaza (and the deadly reactions and counterreactions to that occupation) commit this country to a long-term role of adversary to Arab nationalist and Islamic fundamentalist agitation in the Near East, and, as we have witnessed, throughout the world.

I mention this only by way of pointing to the situation we face as humanists who bear some responsibility for the preservation and dissemination of shared cultural heritage. We must assume that armed conflict in the form of civil war (as seems the likeliest outcome of our adventure in Iraq), cross-border hostilities sparked by nationalist fervor, a catastrophic event involving Israeli security, or an intervention by the United States or its surrogates to stabilize situations that could threaten the free flow of oil, are only some of the events that might challenge the goals of U.S. *Realpolitik* in the Middle East for the foreseeable future. What solutions might we imagine for this long-term dilemma?

Of course we could first follow imperial precedent and simply take everything to Berlin or to Chicago or London and never, ever return it, but aside from the fact that this is no longer a viable option in the modern world, the example of Berlin is a good one to warn against the idea that the West will better care for the security of shared cultural heritage than the Middle East can. Adam Falkenstein, the great Heidelberg Assyriologist, lost his extensive library to British bombing raids in Berlin, the same raids that claimed the Berlin Halaf Museum and major parts of the collection of the Pergamon that is today still being slowly reconstituted.

Failing a nationally organized removal of Near Eastern collections that so successfully filled the coffers and exhibition halls of the British Museum and the Louvre in the nineteenth century, we might hope that such international cultural and policing agencies as the FBI, Interpol, the UN, or its cultural arm at UNESCO, might play a more meaningful role in enforcing existing statutes set in place to protect national cultural heritage collections. UNESCO's 1954 "Convention for the Protection of Cultural Property in the Event of Armed Conflict," given sufficient enforcement power and given respect by members of the Security Council in New York, should form the basis for cultural heritage

protection in times of war. That respect could be signaled by the formal signing of this convention by the two main belligerents in the Iraq conflict, that is, by the United States and by Great Britain.

But on the other hand, academics and archivists who closely monitor the integrity of cultural heritage collections might cite this convention as a justification for collaboration with war planners in advance of preemptive or preventive wars. For instance, some American and British archaeologists, *before* the invasion of Iraq, met with and gave staff members of the office of Paul Wolfowitz so-called "avoidance lists" of culturally significant sites within the country that invading forces should protect from the vagaries of war—meetings which I personally find an affront to the dignity of those living Iraqis for whose homes and families such ordinance redirected from museums and archaeological sites would theoretically, through this tactic, be made available, but meetings which, in times of advancing moral relativism, were widely supported in my field. Failing the empowerment of the Hague cultural heritage convention in armed combat, we can still hope that artifacts looted during the conflict will be confiscated and returned to their countries of origin according to UNESCO's convention on the means of prohibiting and preventing the illicit import, export, and transfer of ownership of cultural property, ratified in 1972 and accepted by the United States just eleven years later.

We should not leave out of the list of current threats to Middle Eastern cultural heritage collections the possibility that state organizations might decide to destroy their own national collections. Can international organizations stop, or at least disrupt, the wanton destruction of world cultural heritage committed by a sovereign state against collections or sites within its own borders? It would appear from the recent example of the havoc played, by a ruling Taliban clique run amok, upon the great Buddha statues of Bamiyan in Central Afghanistan, but also against all pre-Islamic statues in that country, that the international community is powerless and certainly unwilling to enforce the security of what we must see as an internationally shared historical record.

It is in this sense, in the very real sense of protecting our own shared heritage as cultures in historical contact, that the Cuneiform Digital Library Initiative and other

research collaborations in the humanities can, I believe, make a difference, albeit a small one. Started in the 1980s as a cooperative effort between the Free University of Berlin and the Max Planck Society to digitize and electronically parse the proto-cuneiform collections from German excavations of ancient Warka—those are collections that date from about 3300 to 3000 BC, housed at the Iraq Museum, at the University of Heidelberg, and at the then East German Vorderasiatisches Museum—the CDLI in the early 1990s expanded its scope to include all third- and fourth-millennium cuneiform collections and in recent years to include cuneiform inscriptions generally.

In addition to digitally imaged collections in Germany, France, and the United States, we have finished work on the early cuneiform tablets in the Hermitage in St. Petersburg and have begun work on the collections of the Ashmolean Museum at Oxford and the Syrian collections in Aleppo and Idlib. We employed off-the-shelf hard- and software to capture the small objects that contained cuneiform inscriptions. Our basic text documentation is described in CDLI's Web pages, beginning with a catalogue in text transliteration, that is, in a one-to-one representation in simple text of the cuneiform inscription itself in machine-readable Roman script, and a 300 and then a 600 dpi full representation of the physical object.

While we are hopeful that such projects as the NSF-funded Digital Hammurabi effort at Johns Hopkins will eventually lead to the development of an inexpensive and easily portable 3D scanner, and browser plug-in software that will facilitate the Web dissemination of high-resolution 3D images, we are satisfied that our solution to tablet imaging—which we compare to Peace Corps efforts to develop, for instance, simple ovens that will actually continue to work for villages in Africa once Western activists have left—is currently the best answer to the needs of a community of collections that range from the private mantelpiece group of three old Babylonian letters in Fort Lauderdale, to the fifty inscriptions in the anthropological museum of the University of São Paulo, to the 100,000 pieces in the archaeological museum in Istanbul or in the Iraq Museum in Baghdad.

A more important contribution of the CDLI to the preservation and dissemination of cuneiform collections,

and we think of collections of inscriptions of dead languages generally, is the development and implementation of Extensible Markup Language description of our text corpora. In this, above all, Stephen Tinney, professor of Sumerology at the University of Pennsylvania and director of the NEH-funded Sumerian Dictionary Project, and programming collaborators working with our Berlin partners at the Max Planck Institute for the History of Science, have played a leading role. We are currently in the process of editing substantial text files to produce a consistent data set that will serve as the basis for testing our data linguistically and semiotically. The point about this descriptive means of writing up in simple text format the most important characteristics of the text is that we are writing in a language that other computer projects understand and can communicate with and exploit directly, without further input from our own team. So the idea of communication is paramount in setting up a system that is run according to XML that will make our data available everywhere today but also should put it into a form that will be easily used by generations of researchers to come.

Our cleansed transliteration files consist of over one million lines of text. This text description can now be exploited in a number of ways. CDLI's Document Type Definition (DTD) contains the description of how we code cuneiform texts in a form that is generally understandable to any other text processing research team—and indeed should be understandable with little effort to a visitor from a later age, or a distant galaxy. We have in this kind of coding chosen a path of low resistance in deciding to tag our texts strictly at the graphemic level; text structural description has been put in automatically by our XML parser to delimit what we understand to be a discrete graph. Much as with earlier instantiations of various LISP programs, our XML parser strings information in open-close structures from highest to lowest levels of text description.

So we have kept text description at this stage exceedingly simple, and have not burdened it with a lot of tagging that would describe, for instance, the meaning of the words and so on, that we have in these texts. That sort of overlay processing we leave for a later stage of our work.

Another example of how CDLI text description can now be exploited can be seen in our transliterations of archaic Persian texts, dating to circa 3000 BC. The so-called proto-Elamite texts have not been identified linguistically, yet contain sufficiently long strings of signs and sign combinations that we feel confident a computer-assisted graphotactical analysis—that is, an analysis that looks for particular strings of signs, where signs appear in longer sequences and so on—will help us to theorize about their meaning within the text. We can isolate various kinds of graphotactical strings in the full corpus, resulting, we hope, in meaningful data for at least a language typology categorization, if not a language identification of the scribes of these early texts.

As my Berlin partner Peter Damerow and I have demonstrated, using an automatic parser of our transliterations of the earliest Babylonian texts from the period slightly before that of the proto-Elamite texts, valuable statistical numerical information can be derived from multiple sign combinations—information that while probably linguistically neutral, still offers the prospect of making important semantic connections between quantitative signs in our early administrative documents, and signs that represent objects, persons, and institutions, and possibly verbal forms.

These are then the data that we gather and archive in the digital capture of a collection of cuneiform texts. With grants from the National Endowment for the Humanities and, in cooperation with the Baltimore Walters Art Museum and the Learning Federation of the Federation of American Scientists, from the Institute for Museum and Library Services, we have been developing online linguistic tools to facilitate interpretation of these texts and text archives for all user levels, including for instance lexemic or word data-mining tools for linguistic and historical research.

It seems obvious that these archived and online resources represent an important milestone in the attempt to provide cultural heritage institution officials with a reliable facsimile of their own collections in a form that is easy to use, and to scale up and down as advancing technologies make possible an improved digital capture. Metadata description—that is, files that describe the files that you have—tags all text and image files for an archival access

system that, in compatible form, is immediately available to collection managers who can build digital facsimiles of complete artifact collections. These data are fed into the communication lines of a networked international community of users that for the first time enjoys access to collections at a great and therefore prohibitively expensive distance from their home or office workstations.

The digital facsimile of physical artifacts represents our best safeguard against the many forms of expected—that is, for instance, decay of ancient objects once they are removed from their ancient strata—and unexpected artifact disturbance which we have witnessed threatening current collections. But it is obvious that these digital facsimiles can and must be expected to do more. This was, for instance, used successfully in recovering for the Iraq Museum a tablet transferred from Baghdad to a provincial Iraqi museum before the Kuwait War, and sold to a collector in London shortly after the Shia revolt in the south of Iraq. We are now developing tutorials in automatic text markers to assist law enforcement officials at distant borders, airports, or police stations, in identifying and confiscating cuneiform artifacts being stolen now. We entertain a vision that with the added urgency of stopping the flow of recent removals from Iraqi sites, international policing agencies and national and international cultural heritage statutes will institute a strict system of proof of ownership that licenses the possession of Near Eastern antiquities through a central database capture, and therefore foresees a positive ID of the pedigree of such artifacts by owners rather than by countries of origin.

CDLI text identifiers can quickly identify and track the ownership of cuneiform tablets moving through the sites of eBay, Christie's, Sotheby's, and so on, and make this information freely available through our Web pages. We of course offer our full cooperation to the International Council of Museums and to UNESCO in formatting our files for inclusion in a general database on Iraqi stolen property.

The limited cultural heritage preservation goals of the CDLI form a part of such European initiatives—spearheaded by the Max Planck Society—as European Cultural Heritage Online (ECHO). We fully subscribe to their October 2003 Berlin Declaration, stating that “in order to realize the vision



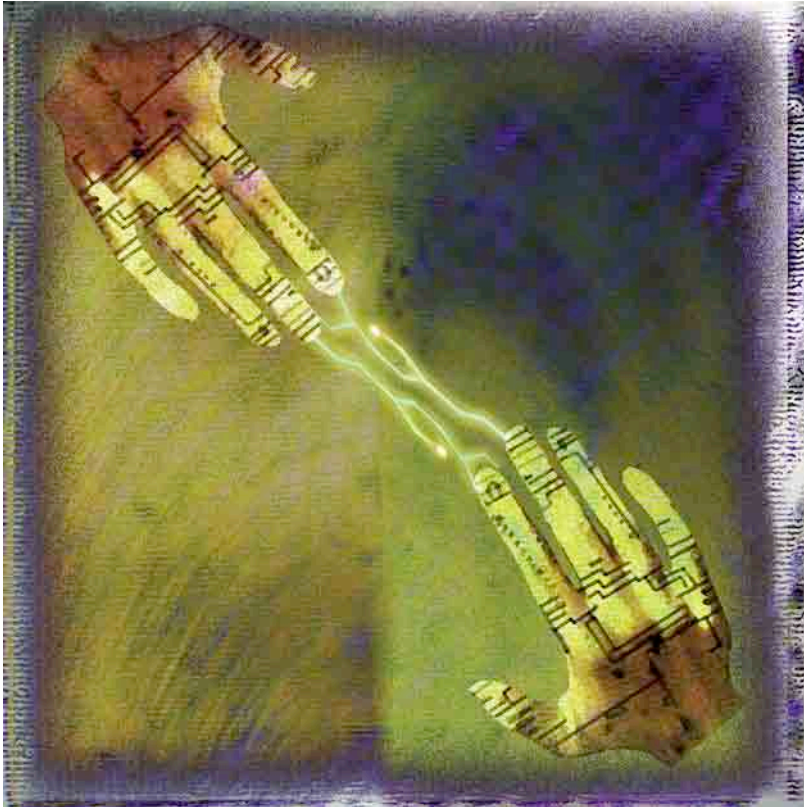
of a global and accessible representation of knowledge, the future Web has to be sustainable, interactive and transparent. Content and software tools must be openly accessible and compatible.”

The case of Iraq presents humanistic scholarship and information technology with a test. In a network that, among other tasks, serves the public mission of disseminating shared world culture—and, by the way, a network realized for the most part with public funding and using public bandwidth—can we overcome the many burdens of curatorial jealousy, of academic pettiness, of institutional and intellectual copyright, to create and disseminate intellectual and cultural content to the heirs of world culture in the United States as well as in Iraq and elsewhere? The CDLI is a modest player in this game, still one that through collaborative efforts across borders can act as a good example of cooperation in the public interest. I am therefore particularly grateful for the support that the Lyman Board and the National Humanities Center have shown our work.

# LYMAN AWARD

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# LYMAN AWARD

Since man is a child of God and technology is a child of man, I think that God regards technology as a grandfather regards his grandchildren.

— **Father Roberto Busa,**  
*the first scholar to apply computers  
to the study of literature*



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