

# Urkesh 2007

## A site for all seasons

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## A site for all seasons...

Our excavation season is always in the summer.

But the site does not shut down when we leave.

With its imposing architecture and the great new insights it offers into the earliest history of the Fertile Crescent, Tell Mozan is attracting more and more attention. So we feel committed to developing a model for the presentation of the site that engages the scholar as well as the tourist. The cornerstone of our effort is the architectural conservation program. At Mozan, hardly a mudbrick has been lost of any portion of the monumental architecture we have ever excavated. This is no minor claim in a region where the weather is harsh and where archaeological sites quickly develop into gaping holes and unsightly dumps. In contrast, it is our pride to offer the pristine document as originally excavated, and at the same time the monument as the architect meant it when it was first built.

This is the uncompromising starting point of any effort to engage the visitors who seek to enter the perceptual world of the ancients. We must be responsive to the impact our finds make on the perception people have towards their past. And we cannot simply leave this for others to do, *after* we have completed *our* job. We must seek to convey the meaning we extract from the ground, because we are the ones who best understand its nuances, its implications, its full import. And we must do it in “real time,” i.e., while our work is going on, so that we do not fail to communicate, as well, the sense of discovery in action.

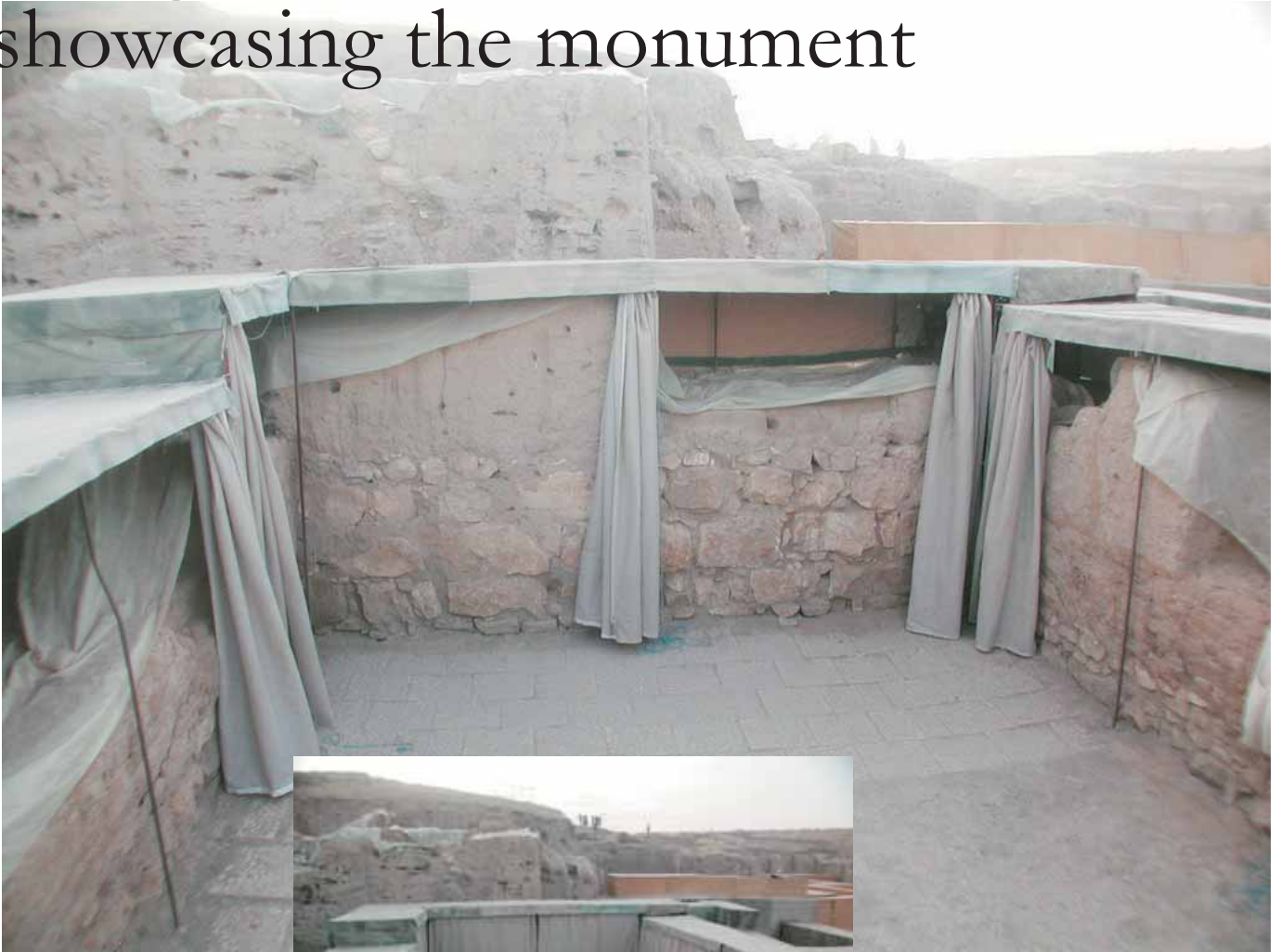
In the process, we become better archaeologists. By seeking to explain complex situations, we come to understand better the very complexity that, if truth be told, baffles *us* as well as the intelligent visitor. In addition, we also come to better see the coherence of the pieces. We excavate in discrete and separate units, which we connect in what often remains but an abstraction. Presenting the site to others forces us to reflect on the concrete links of an ancient urban landscape that did not consist of holes in the ground, and was not the result of haphazard accretions. It often developed, instead, in response to aesthetic and functional concerns of which we can easily lose sight if our quest remains myopically tied to this or that hole in the ground.

At Tell Mozan we are seeking to meet the challenge by aggressively promoting a diversified and integrated approach to site presentation. In the first place, the concept is inscribed in the very strategy of excavation. Everything else being equal, we include, in decisions about the progress of the excavation, considerations about how to present the results. Then, we provide a number of supporting aids that will especially be useful for visitors coming when the Expedition is not present. This was one of the goals of the 2007 study season, which we illustrate in this year’s folio.

The other goal was to work on the Urkesh Global Record, a radical new departure in archaeological publishing. The gestation has been long, and we are finally coming close to ... giving birth. We worked intensely, in 2007, on several digital volumes, and two of these are now being readied for final publication online – one volume dealing with a sector of the Palace, the other with a sector of the Temple Terrace. While full fruition of the system can really only take place online, we welcome you here to a brief review of its highlights.

wall  
conservation

# Conservation – caring for the ruin, showcasing the monument



Excavations “unveil” the walls in the state to which they have been reduced – a state of ruin.

This we must preserve as the only real “document” of a built environment that was once erect and proudly alive. Our choice at Mozan has been to wrap, as it were, the wounds of time.

It is thus that we protect and reconstruct, at the same time.

Almost twenty years since, the walls are as pristine as when we first “unveiled” them.

# Back to basics...



A persistent problem in our conservation effort has been the top panel. Canvas, plastic and even metal ultimately failed.

We resorted to the simplest, and most ancient, technique: mud!

And it worked...



A row of mudbricks frames the edges.

It holds in place a layer of straw, which we get from the surrounding fields.

We then cover it with coarse mud, leaving an outlet for water runoff through a spout.



A coat of thin mud plaster mixed with salt gives the “roof” a smooth appearance.

The salt prevents airborne seeds from taking hold.



While wet, the top of “our” walls still shows.

Once dry, the cover blends perfectly with the vertical panels, and gives the perfect look – that of the original, mudbrick walls.

At practically no cost...

# A “real” virtual reality

Urkesh 2007 – Plate 3



Computer walk-throughs are common nowadays.

The surprise in store for us was to ... emulate virtuality, as if a double mirror game!

Working on, walking through, looking at the reshaped structures gives us the unending pleasure of touching “virtuality” on solid ground...

site  
presentation

# Sharing the perception of the ancients

Urkesh 2007 – Plate 4



The ancients did not look at ruins.

Nor did they look at their built environment from above, as if in a zoo.

To reflect their perspective of their own surroundings, we have built several points of access that take the visitor at the level where the ancients stood.

Face to face with the structures, our perception echoes the one that shaped the ancients' life.



# “Panoramas”



The term “panorama” is used in local parlance to refer to the structure from which one looks at the excavations. Here we have placed permanent shades that allow the visitor to take in a broad view of selected areas.

An excavation project is a live undertaking. We want the visitor to share in the intellectual dynamism that is proper of an ongoing excavation. Thus, our display cases are built in such a way as to allow easy replacement of any explanatory page, of which we have by now already one hundred available.

When we are in residence, we have a lighting system that allows for visits in the dark, which highlight the dramatic interplay of light and shadow. Here is the Minister of Culture in 2006.



# “Footnotes”

Reading stands with individual plates, are placed at specific junctures within the excavations.

They are like footnotes in a text; they develop more fully points of detail, they answer questions on the part of visiting scholars, they stimulate the curiosity of the intelligent visitor.

This example shows one such reading stand that invites the visitor to descend to the ancient level of the Plaza, where more reading stands give further details.



The wall in front of you is a revetment wall dating to about 2400 B.C. It encased a massive glacis that sloped up to the temple you see in the distance. When first built, you would have looked up at it from the wide plaza in front, and the effect would have been similar to what you see in the 3-D reconstruction below.

In the last centuries of Urkesh (1500 to 1300 B.C.) the plaza was filled in, and the effect was lost – much as it is lost today. As a small aid to recapture the ancient perception of space, you are invited to walk down the steps on your left to the level of the ancient plaza.



# Stratigraphy



Sections represent an important aspect of archaeological work, and the one in front of you is a good example. It shows a cut through a number of accumulations that took shape over a period of a few centuries. The section allows us to read time through space!

When the revetment wall (to your left) was first built around 2400 B.C., it was abutted by an escarpment, a portion of which is visible on your left. This escarpment sloped down to the Plaza, about 2 meters below the base of the wall. The Plaza was open to the south (on your right) and it remained unencumbered for some four centuries.

Some time after 2000 B.C., the original Plaza was blocked by building activities to the south (on your right), and a basin developed in which the water flow from the Temple Terrace was trapped. As the Plaza began to fill up, the slope changed gradually and over the next 4 centuries became less sharp.

With the ever increasing constructions to the south of the Plaza, the sedimentation process became more intense, as material began to come from the new buildings as well as from the Temple Terrace itself. This gave rise to the thick 3 meter deposit that, as you see, became more and more level. This took place between 1500 and 1200 B.C.



## Time seen through space



Stratigraphy is the all important message the archaeologist wants to convey to even the casual tourist who comes for the monument, but should leave with a new understanding of archaeology.

This example shows how we protect the sections, with curtains similar to those of the walls (but in clear plastic, to mark the difference).

Once the curtain is drawn aside, the visitor reads an explanation of why sections are the determinant factor in understanding the sequence of phases, the depositional process, hence the larger historical setting.

# An integrated visit

A visit to the site must have a different impact than just a “virtual” visit online or in books. Hence we want to make the physical presence of the built and the natural environment fully meaningful. Some of our plates help the visitor to feel part of the broad scope of the architecture, and of the wide open landscape that surrounds on all sides the site of Mozan. In the future, we plan to develop an Archaeological Park that expands the opportunities to see the site in its landscape, by introducing stations in the countryside around the Tell.



## A balance of perceptions

The architectural layout reflects two distinct attitudes in the confrontation with the divine world. The wall is the seemingly insurmountable barrier, and conversely the staircase is the access negotiated by religion.



## The northern horizon

The mountains in the distance were the true hinterland of ancient Urkish.

The palace in front of you was the hub of a trading network that exploited the natural resources of the mountains – primarily copper.

All the stones used in the construction of the palace also came from these mountains.



# A programmed site tour

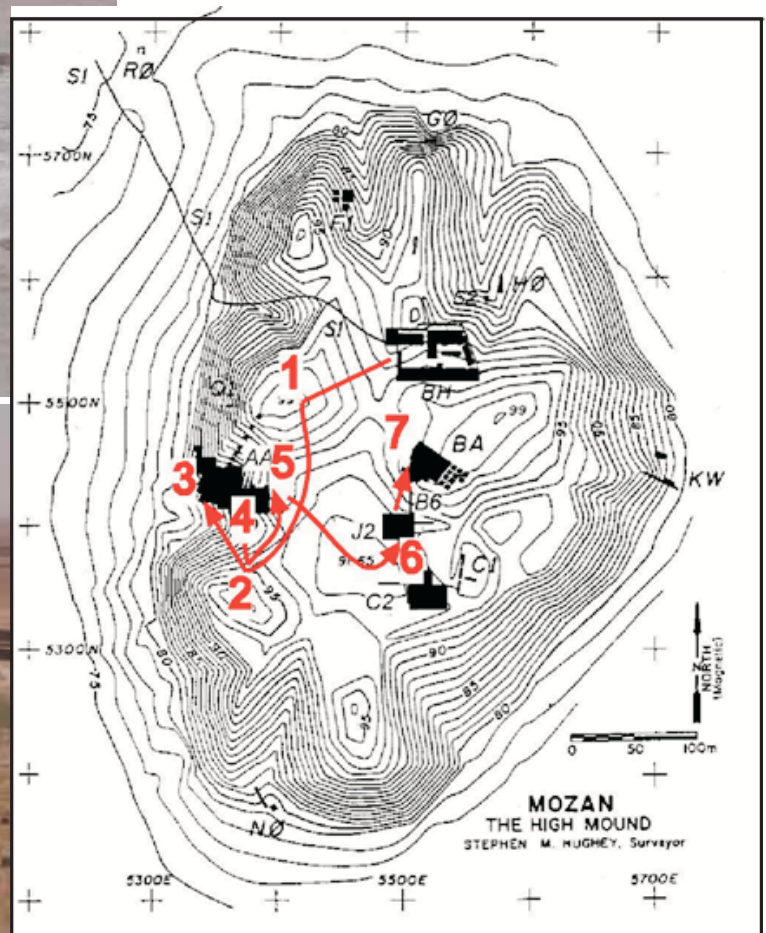


A forty page booklet is given to all visitors, who can follow a self-guided tour, along a suggested path.

Also, a companion volume of plates is available, which supplements panoramas and reading stands.

All this material (at this point in English and in Arabic) is updated yearly, and is available also online, so that visitors can prepare ahead of time if they wish.

In the future we plan to expand these features not only by translating the text in other languages, but also by suggesting ways in which visitors can design their own tour using the Urkesh website.



Martin  
Sheen  
at Mozan

# Hard work for a celebrity

Urkesk 2007 – Plate 10



We are fortunate to have on the Board of Directors of our Institute one of the most prestigious names in filmmaking – Martin Sheen.

It is well known that “involvement” is his trademark, whatever venue he chooses.

And involvement he chose in the world of archaeology as well.

He came to Mozan for a true “working” visit in July 2007, and wasted no time in becoming fully involved in a true “hands-on” excavation.

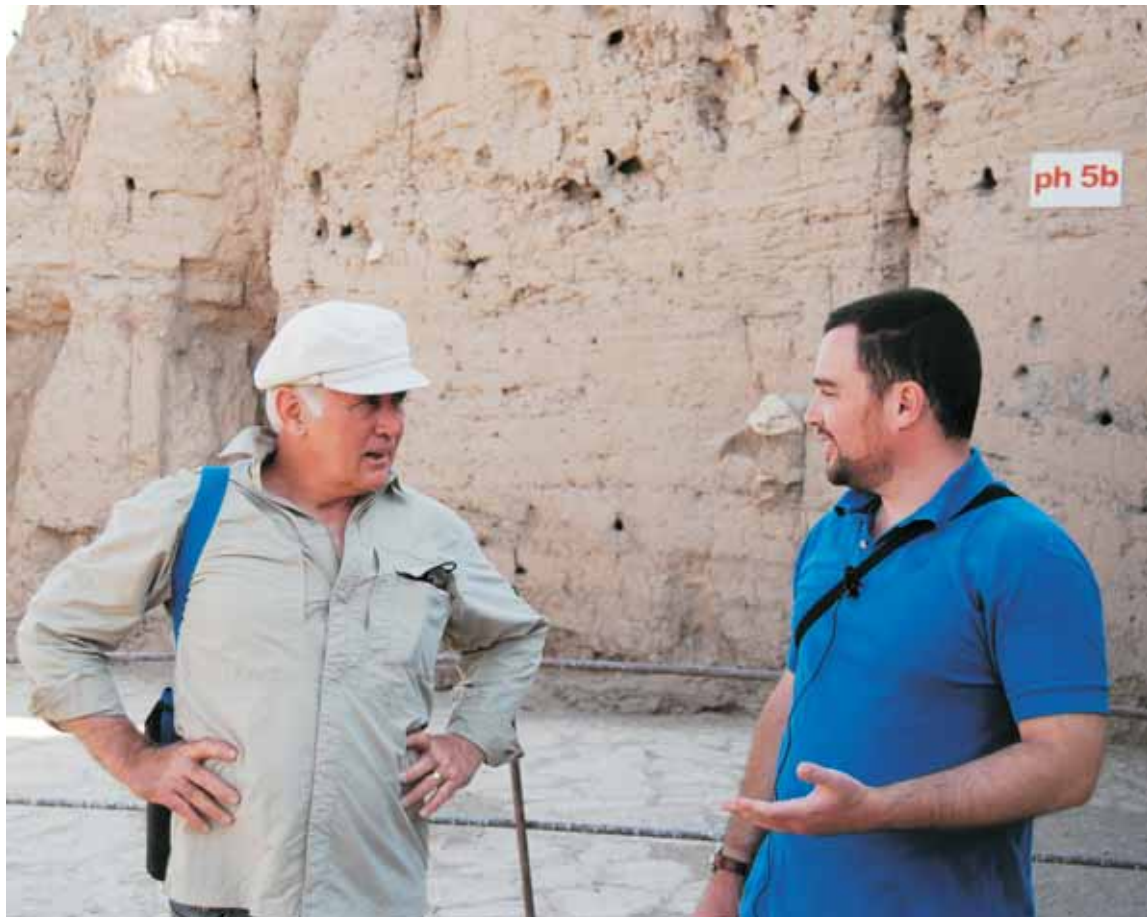


# A good test of our presentation program



With his extraordinary personality, Martin Sheen will be an ideal spokesman for our work – the best possible interpreter of the archaeologist's work and of the ancient culture we are bringing back to life.

Presenting the site to our “presenter” was a great thrill, and the best test of all the material we have assembled to guide the visitor.





All work,  
some play...

With Martin's presence,  
the 2007 group picture was indeed special.  
And so was his birthday,  
which he celebrated "on location"  
with his newly found "community"...



# Ever in the limelight...

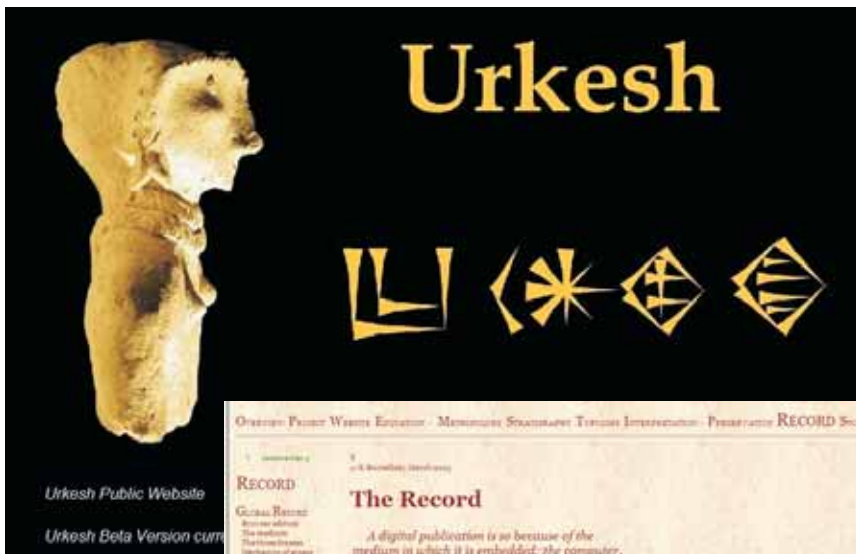


Whether in the ceramic lab of our expedition house, or on the excavation,  
TV crews and cameramen were never far away.

Well-known in Syria for his extraordinary artistic career,  
Martin Sheen is now making a name for himself as ... an archaeologist,  
and for Mozan/Urkesh as a new intellectual homeland.



the  
Urkish  
Global  
Record



We have strenuously pursued a publication system that is radical in that

- (1) it confronts long standing problems of archaeological publishing, and
- (2) it exploits the true potential of the digital medium.

The system provides online access to the totality of the observations made in the field during the process of excavation. This allows the reader to retrace the path of discovery and to independently evaluate it.



While establishing a database, the system develops a novel approach to digital narrative. It is created automatically from the input obtained in the field, and develops a proper argument that goes from the minutiae of the individual excavation units to the broader scope of the site as a whole.



In this way the final product reflects a truly digital mode of thinking that can be fully appreciated only in an interactive mode while at the computer. Here only a few key presuppositions and display options are illustrated.

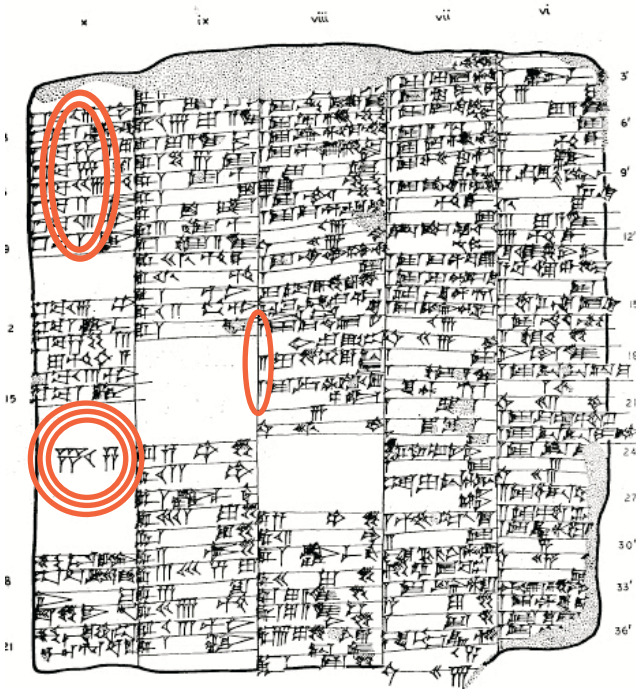


# Non-linear?

The term “non-linear” has achieved nearly cultic status in contemporary parlance.

It evokes a sense of mystery, which gains in awe and power the less we try to explain it.

It is, however, no different than the case of Molière’s bourgeois who felt he had reached a pinnacle at the discovery that he was able to speak in prose...



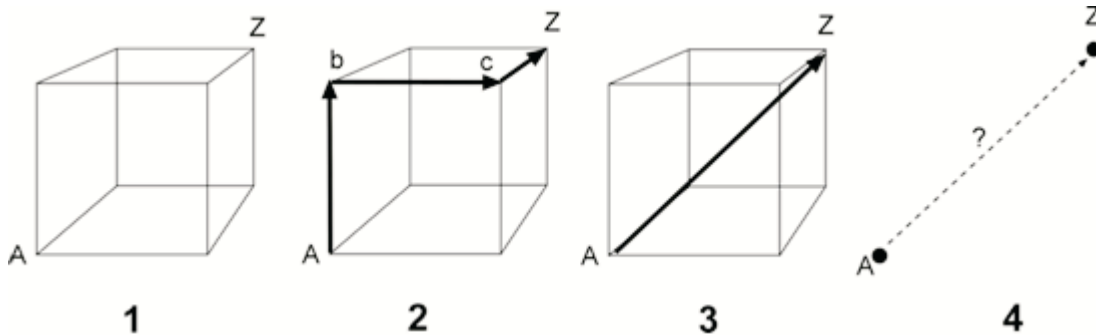
We have been conceptualizing our world in a non-linear fashion at least ever since writing was first invented, some 5000 years ago.

The earliest ledgers, the earliest maps are based as much as today’s ledgers and maps on linkages that are not linear. Consider this cuneiform tablet, from about 2000 B.C. It lists individual animals given to certain individuals (single circle), then it gives subtotals by types of animal (double circle), and finally gives the grand total (triple circle). It is so simple anyone can “read” the numbers. Thus the grand total is 5 times 60 (the large vertical wedge), plus 10 (the oblique wedge head), plus 4 (the smaller vertical wedges).

The connection is clear among all the various steps. It is non-linear, because it presupposes conceptual jumps, evinced by the sequence and general arrangement.

But is it *really* non-linear?

I would rather argue that it is, at best, *cryptically* non-linear. Or, I would prefer to say, polyhedral.

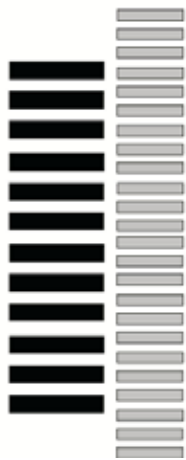


Given a polyhedron, you can argue for a link between points A and Z because you know (by virtue of the figure being a polyhedron) that there are the intermediate points b and c. Intuition may lead you to the same conclusion (schematically rendered in fig. 4), but you can “prove” your “non-linear” intuitive jump only by referring to a construct like the polyhedron (figs. 2 and 3) – thus giving QED status to an otherwise unproven statement.

Knowing the geometry of the polyhedron is therefore the key for arguing the validity of the conceptual jump. The great relevance of all this for the *Urlesh Global Record* is that we must construe a grammar of the archaeological record that is equivalent to knowing the geometry of the polyhedron. Then, and only then, will we be able to use at will the jumps that establish untold, and unsuspected, linkages among the near infinity of minute data we observe in the field.

# Digital or electronic?

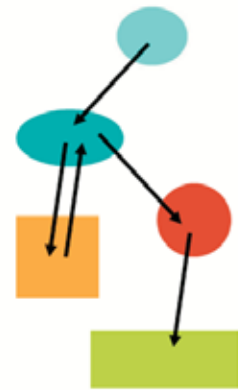
Database  
(ordered juxtaposition)



The use of computers in the documentary phase of archaeology has privileged the use of databases. However powerful, these present an essentially static juxtaposition of data, where no argument is properly developed.

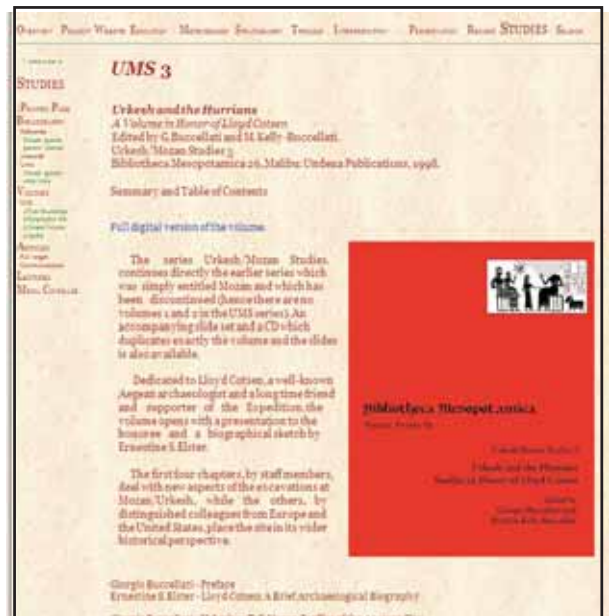
The use of the Internet, on the other hand, has privileged PDF files. These do develop an argument, but they are even more static, except for searching possibilities.

Discursive argument  
(sequential linearity)



We offer the same two type of data, databases and PDF files of all printed publications.

Grand Total	\$1882				
Accum. A	549	1%		272	14AAC
Accum. A	549	0%		81	14AAC
Accum. A	500	0%		50	14AAC
Accum. A	49	0%		281	14AAC
Accum. A	41	0%		278	14AAC
Accum. A	25	0%		59	14AAC
Accum. A	27	0%		84	14AAC
	781				
Accum. B	1100	2%		81	14AAC
Accum. B	283	0%		88	14AAC
	1383				
Accum. C	1161	2%		283	14AAC
Accum. C	794	1%		283	14AAC
Accum. C	344	1%		283	14AAC
Accum. C	338	1%		279	14AAC
Accum. C	298	1%		283	14AAC
Accum. C	194	0%		284	14AAC
Accum. C	129	0%		28	14AAC
Accum. C	101	0%		273	14AAC
Accum. C	76	0%		72	14AAC
Accum. C	76	0%		281	14AAC
Accum. C	49	0%		282	14AAC
Accum. C	20	0%		280	14AAC
Accum. C	11	0%		287	14AAC
	3967				
Accum. D	296	0%		83	14AAC
	229				
Accum. 1971		2%		282	14AAC
Accum. 1981		2%		280	14AAC
Accum. 1984		2%		281	14AAC
Accum. 1986		2%		282	14AAC
Accum. 1988		1%		281	14AAC
Accum. 1992		1%		281	14AAC



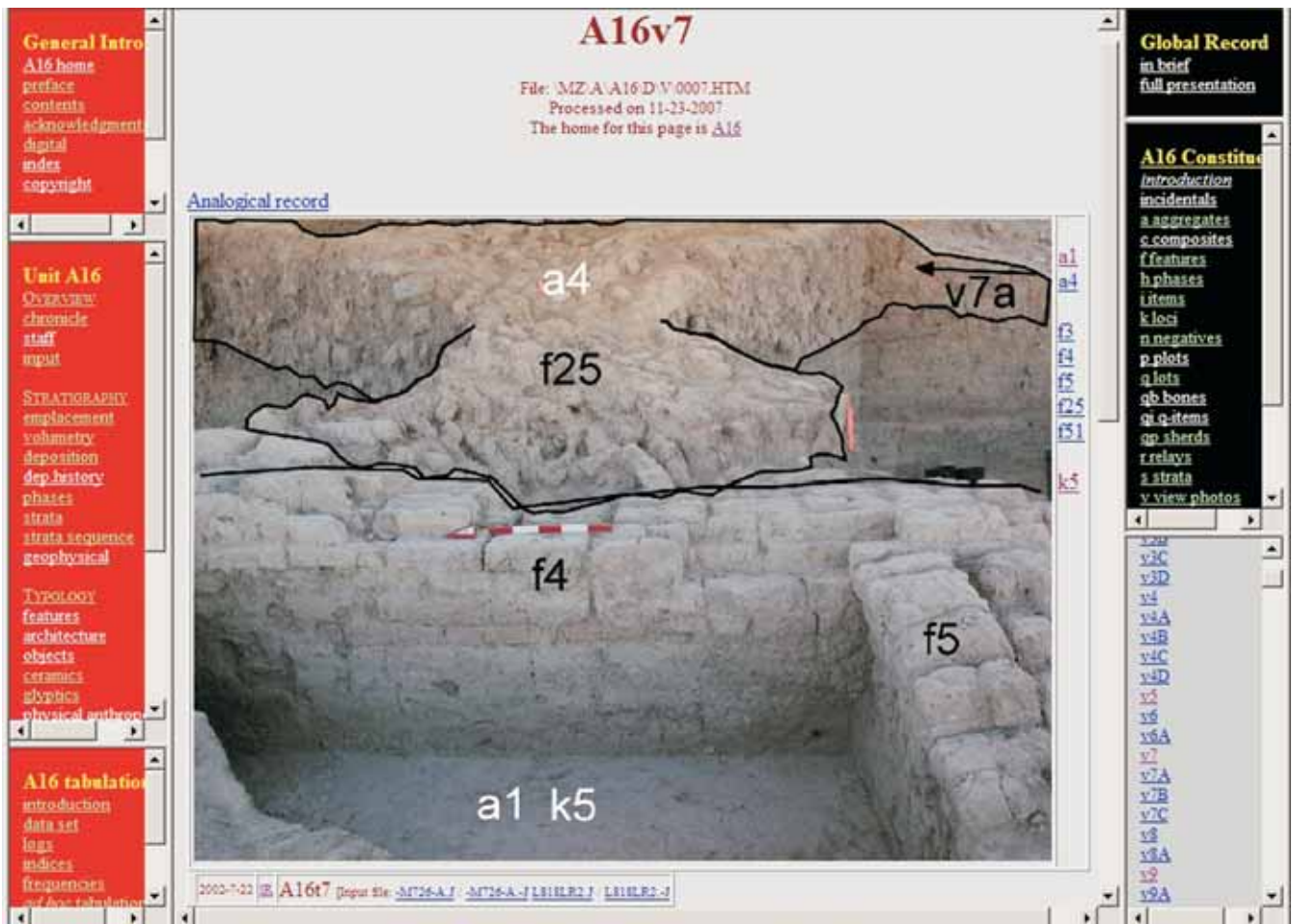
But our main goal is to go beyond, and to develop a properly “digital” publication. Hence the distinction between digital and electronic.

Electronic refers to a *technique*. A PDF file is not conceptually different from a publication printed on paper, even though it has immense side benefits (from searchability to cost factors). Thus the PDF file remains, as the acronym says, inherently a portable document. Similarly, a database is an infinitely more versatile card catalog, but conceptually it serves the same purposes; it remains the basis for something else, a statement which it cannot contain.

Digital, on the other hand, refers to a *method*. It represents a conceptually different way of doing things. We can speak of digital, but not of electronic, thinking.

The *Urkesh Global Record* takes a first step in the direction of such properly “digital” thinking by developing automatically a narrative that is based on a myriad of atoms. These atoms reflect all the scattered observations done by dozens of different individuals, at different times, with different skills. And they are woven into a coherent argument that is linear in its unfolding, but non-linear in the way in which it is constituted.

# Fingerprinting a photo



The documentary value of photos is greatly enhanced by the possibility we have today to draw an outline that highlights the main constituents in any particular view.

On the same web page, we offer the annotated template and the original photo with no overlay.

In addition, there are thumbnail images of all the other angles from which the same scene has been photographed.

# The dynamics of the argument

**A16.34**  
File: MZ-A-A16-D-0034.HTM  
Processed on 11-23-2007  
The home for this page is A16

Accession	Labeling Designation
2007-04-28	ceramic vessels
2007-04-29	bowl
2007-04-29	
2007-04-29	

**Description Count**

Accession	Description
2007-04-28	Portion of a chaff tempered ceramic bowl or flared vase with only 3-6 centimeters of the body with red painted stripes preserved. The vessel contains a typical Khaur decoration with the stripes extending down to the base of the vessel. This vessel was found in <a href="#">W14</a> , with the head of <a href="#">U1</a> resting on this vessel. Please refer to drawing <a href="#">W48</a> and <a href="#">W14-64059</a> .

**Photometric localization**

Accession	Photometric Localization
2007-04-29	W14-64059

**Contact association**

Accession	Contact Association
2007-04-29	U1 sits in <a href="#">F128 (R)</a>

**Spatial aggregation**

Accession	Spatial Aggregation
2007-04-29	associated q-lot 292

**Time sequencing**

Accession	Time Sequencing
2007-04-29	W48

The narrative that is generated automatically presents the data in a logical sequence, regardless of the person who wrote the observation or the time when it was made (although this information is preserved and is attached to every noted observation).

In this example, for instance, a given object is presented in its stratigraphic and typological details, ordered in the expected sequence.

The photos show the object in its original setting, and then after it has been taken out and cleaned.

It is important to note that this narrative is constructed on a daily basis. In other words, every day the record assumes the form it will have in its final version when published online.

This is conceptually significant, because it contributes to the objectivity of the data, and it assists in the definition of the excavation strategy for the following day.

**Measurements**

Accession	Measurement
2007-04-28	6.3
2007-04-29	10.3
2007-04-29	W48

**Descriptive**

Date	Description
2007-04-28	ceramic vessel- The lower portion of a khaur jar in which the head of <a href="#">U1</a> (human skeleton) rested on.
2007-04-29	base of cv that <a href="#">U1</a> head rests on

**Analogical record**

Photos after: [W14](#), [W14](#), [W14](#)

Photo of excavation: [W14-64059](#), L: 721 ml

Photo of excavation: [W14-64059](#), L: 726 ml



# The higher nodes



A number of different programs process our data, and they produce, automatically, a great variety of outputs.

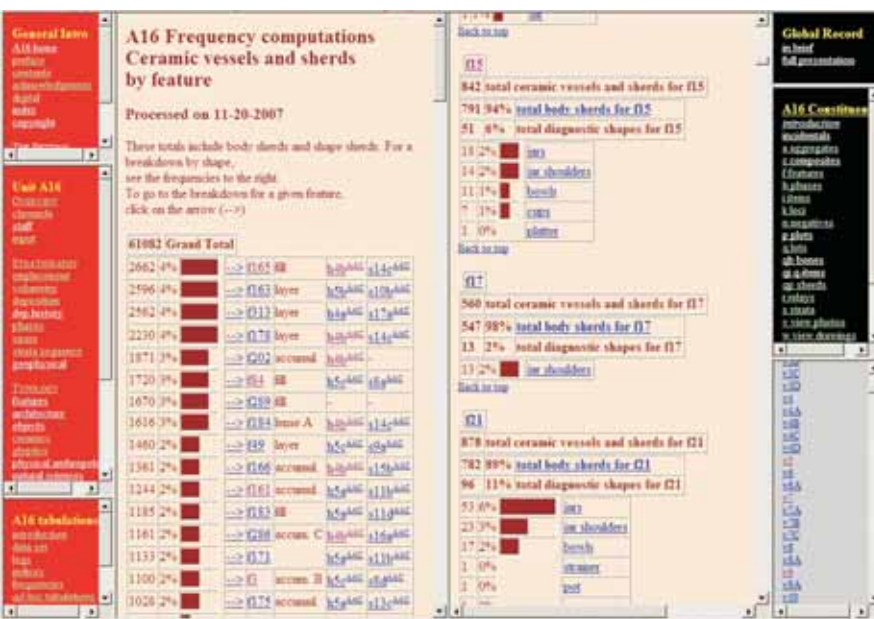
While the narrative strand unfolds a properly digital argument, other outputs display the data according to clustering criteria that are of general interest to the scholar.

These clusters are like “higher nodes” from which to view the data.

The first such cluster illustrated here is an organization of all features according to their reciprocal stratigraphic relationship. It is a depositional synopsis that in effect displays the full temporal history of every single feature on the basis of its spatial context as observed in the excavations.

A second type of cluster shows two types of frequency computations, the first of all the ceramics from an excavation unit by type of ware, the second by shape within features.

Note the high volume of data (the ceramics has a total of 61,082 pieces for a single excavation unit), and remember that all of these outputs are generated automatically and updated daily in the field.



# Hyperlink saturation

Another way in which a digital narrative is obtained is by saturating the output with hyperlinks. They allow the reader to follow a multitude of inquiry paths that recommend themselves on the basis mental associations suggested by the context.

For a typical excavation unit (consisting generally of some 8 5x5 m squares) there is an average of one million hyperlinks generated. These cover a variety of different ranges that are illustrated below.

Reference to the categories explained in the *Grammar*

Initials of the person who made the observation, with reference to their Curriculum

Reference to any other element cited

Reference to the input files from which the data are derived

The screenshot displays a complex digital interface for an excavation unit. On the left, a red sidebar contains navigation menus for 'General Intro', 'Unit A16', 'STRATIGRAPHY', and 'A16 tabulation'. The main content area is divided into sections: 'Contact association' (a table with columns for date, initials, and description), 'Time sequencing', 'Measurements', 'Descriptive' (a table with columns for property, value, and file), and 'Analogical record' (a grid of photos). On the right, a 'Global Record' panel shows a hierarchical list of categories. Annotations include:
 

- A red circle around the 'General Intro' sidebar menu, with an arrow pointing to the text 'Reference to the categories explained in the Grammar'.
- Red circles around the initials 'AV' and 'IE' in the 'Contact association' table, with arrows pointing to the text 'Initials of the person who made the observation, with reference to their Curriculum'.
- Red circles around the text 'f38 (layer) covers f39' and 'q319 sits in f39' in the 'Contact association' table, with arrows pointing to the text 'Reference to any other element cited'.
- Red circles around the file paths 'L728\_SV.J / L728\_SV.J' in the 'Contact association' table, with arrows pointing to the text 'Reference to the input files from which the data are derived'.
- A red circle around the 'A16 tabulation' sidebar menu, with an arrow pointing to the text 'Reference to the "higher nodes," the cluster within which the data are gathered'.
- A red circle around the grid of photos in the 'Analogical record' section, with an arrow pointing to the text 'Reference to each photo, for which templates and separate information is given'.
- A red circle around the list of categories in the 'Global Record' panel, with an arrow pointing to the text 'Reference to individual elements by category'.

Reference to the “higher nodes,” the cluster within which the data are gathered

Reference to each photo, for which templates and separate information is given

Reference to individual elements by category