

Cybernetica Mesopotamica

Urkesk and the Four Banks: A Digital Model

Giorgio Buccellati and Marilyn Kelly-Buccellati

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Websites: <https://d-discourse.net/>; <https://urkesk.org>; <https://4banks.net/>

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Giorgio Buccellati is Research Professor in the Cotsen Institute of Archaeology at the University of California, Los Angeles (UCLA), and Professor Emeritus in the Department of Near Eastern Languages and Cultures and in the Department of History at UCLA. He founded the Institute of Archaeology at UCLA, of which he served as first director from 1973 until 1983 and where he is now Director of the Mesopotamian Lab. He is currently Director of the International Institute for Mesopotamian Area Studies (IIMAS) and of the Associazione per la Valorizzazione dell'Archeologia e della Storia Antica (AVASA).

From 1973 until her appointment as Emerita (2003), **Marilyn Kelly-Buccellati** taught in the Department of Art at California State University, Los Angeles. Since 2003 she has continued her research at the Cotsen Institute of Archaeology at the University of California, Los Angeles (UCLA).

The project *Cybernetica Mesopotamica* is at the confluence of two major research trajectories: the archaeological record as documenting data no longer available for verification, and websites as avenues for scholarly publishing. Both have profound epistemological implications which come together in the relationship between the fragments and the whole. The combined research of Giorgio Buccellati and Marilyn Kelly-Buccellati has brought into focus the theoretical dimension of the problem and offered a concrete embodiment of the solution suggested. Their Balzan research project will make it possible to finalize various strands of this research.

To address the problem of theory, websites have quickly become an established channel for scholarly communication, but there is a profound epistemic dichotomy in their structure. As databases, they have a truly digital dimension, functioning as containers where data are stored with an immensely greater potential for retrieval than with pre-

digital tools, but argumentation is relegated to separate analog versions like PDF renderings of printed publications that are not integrated with the data, but juxtaposed to them.

The Buccellatis' goal harks back to the time-honored search for an integration between analysis and synthesis, between the fragments and the whole. They suggest that this problem might be solved through "digital discourse," an epistemic system parallel to a unilinear sequential narrative as generally available in printed or electronically similar analog format. In a website constructed with this in mind, there is a dynamic multi-planarity where multiple concurrent planes "discourse" with each other and together create a whole. The theory, first presented in *A Critique of Archaeological Reason*, is now being expanded in a dedicated website, d-discourse.net.

The major goal of *Cybernetica Mesopotamica*, their Balzan research project, is to create model websites that may serve as a new epistemic system operating in parallel with printed publications, but fully exploiting the multi-planarity potential afforded by digitality.¹ At the same time, the traditional publishing mode will be present in two books on the correlation between the digital and the printed, to be authored by Principal Investigators Giorgio Buccellati and Mary Kelly-Buccellati.

Archaeology: The Urkesh Website and The Urkesh Global Record

The Buccellatis have carried out extensive archaeological excavations at Tell Mozan, a locality in northeastern Syria and the site of ancient Urkesh, a major political and religious center of the elusive Hurrian civilization of over 5,000 years ago. The website urkesh.org embodies their research and has two major aims. The first is to serve as an extensive treatment of all aspects relating to the archaeological site as a whole, much as a comprehensive volume would, interlacing with the global record of the excavations. Secondly, the urkesh.org website also serves as a major hub to a wide series of independent websites, or "digital books."

Substantial work is required to complete this major undertaking, and this is the main goal of the Buccellatis' Balzan project: to achieve a full internal coherence among the various sections, to fully develop the various digital monographs that remain incomplete, and to publish a parallel printed book that will also serve as a detailed introduction to the various websites where the two distinct areas of theory are implemented: the archaeological record and the bibliographical support. The unique, multi-planar aspect of the digital books should be emphasized as it will be proposed as a model not only for archaeology, but also the humanities and the social sciences in general. During the three-year tenure of *Cybernetica Mesopotamica*, a number of these digital books will be completed.

Bibliography: The Four Banks

As highlighted in their Balzan Prize citation, the Buccellatis' research deals with

¹ A model for the correlation between digital and printed versions is Federico Buccellati's *Three-Dimensional Volumetric Analysis in an Archaeological Context. The Palace of Tupkish at Urkesh and its Representation* (Malibu, 2016; online at urkesh.org/UMS6).

substantive issues of Syro-Mesopotamian civilization. A cluster of websites that may be described as bibliographical is being developed at the hub website, 4banks.net. At present, one site is complete, critique-of-AR.net, which serves as a model for the other websites in the cluster dealing with language, religion, politics and literature. A second edition of the website is planned during the tenure of the Balzan project as is the opening of these other websites.

Infrastructure and Portability

IIMAS – The International Institute for Mesopotamian Area Studies (iimas.org), established in 1973, retains the permit for the excavations at Tell Mozan, ancient Urkesh. Over these five decades, it spearheaded the development of digital research in archaeology by bringing the first portable computers to be used on any excavation in Syria to its excavations at Tell Ashara, ancient Terqa, in 1978. The Mozan/Urkesh Archaeological Project is one of the longest-lasting archaeological projects in Syria, with a robust archival set-up, and full access to the collections that remain in the Expedition House. Principal Investigators Giorgio Buccellati and Mary Kelly-Buccellati are co-directors of the Mesopotamian Lab at the Cotsen Institute of Archaeology at the University of California, Los Angeles (UCLA), which was founded by Giorgio Buccellati in 1973 (ioa.ucla.edu).

Permanence is one of the key issues that condition the use of websites for long term duration. It is generally assumed that impermanence is actually built into the systems used and the platforms on which they rely – hence the systemic distrust for websites as reliable epistemic systems. Ensuring portability is a way to counter this, and finalizing plans to do so is among the aims of the Balzan project, including the establishment of a Steering Committee within IIMAS that will ensure regular upgrades in the software to allow the websites to remain active; a mirror site of the US server in Europe; plans to locate the systems on GitHub and on the CDL systems; and finally the use of online repositories such as Zenodo to ensure data permanence.

Evaluation, Publication, Dissemination

Editorial boards are planned for each major website, and their main task will be to provide general oversight on three major aspects: the substance of the argument and the data; the effectiveness in reaching stated goals; and the technical aspects of the website. As the various websites approach completeness, colleagues who may be interested in serving on individual editorial boards will be sought out. The Buccellatis also aim for a broader exposure of their approach as regards both theory and implementation.

The results of *Cybernetica Mesopotamia* will primarily consist of a number of dovetailing websites and books that will emphasize the theoretical impact of the research. Every publication or event will give ample recognition to support from the Balzan Prize for the Art and Archaeology of the Ancient Near East to Giorgio Buccellati and Marilyn Kelly-Buccellati.

The d-discourse.net website articulates the theory in full detail. It will serve as the basic theoretical statement to be implemented in the remaining websites undertaken by the project. Once complete, the urkesh.org website will serve as the flagship of the entire

system and a hub for the websites, or digital books, devoted to the topical sections and to the excavations units. The 4banks.net cluster of websites will include all the projected websites except for the one on art. All websites will be open access.

The publication of two books is planned, one by each of the two PIs in the project. Both will closely correlate two pertinent websites, with the aim of showing the similarities and differences between the two approaches. Giorgio Buccellati will publish a book on the website theory as presented on the d-discourse website. Mary Kelly-Buccellati will publish a book on Urkesh ceramics as presented in the ceramics digital book of the Urkesh website.

Outreach and Results

As the websites reach the appropriate level of completeness, outreach efforts will be undertaken through four main channels:

- Online systems (channels and blogs) promoting an ongoing dialog on the merits of the system.
- Round tables and workshops organized by the PIs and the Deputy PI at different universities, like previous ones in Madrid (San Damaso University) and in Milan (Politecnico and the Catholic University). Planned venues include the Pázmány University in Budapest, the University of Pavia, and the University of Graz.
- Congresses attended by the younger staff members, who will present various aspects of the project, as in the past two years in both Europe and the US.
- Select media outlets receptive to the deeper instances of the project's aims in order to reach a wider public.

The websites, digital books, and hard copy books will be completed by the end of the three-year period of the project. Two round tables each year are planned. In 2022 the venues were the Catholic University of Milan and the Pázmány University in Budapest. In 2023 the University of Pavia and the University of Graz have been proposed, and the University of Florence and Masaryk University in Brno have been suggested for 2024.

Younger collaborators will continue to present papers at various congresses, as in recent years. This will happen on a yearly basis, and the preferred venues are ASOR (American Schools of Overseas Research), AIA (the Archaeological Institute of America), EAA (the European Association of Archaeologists), ICANE (the International Congress on the Archaeology of the Ancient Near East), CAA (Computer Applications and Quantitative Methods in Archaeology), and EADH (European Association for Digital Humanities).