

CyberResearch on the Ancient Near East and Neighboring Regions

Digital Biblical Studies

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CyberResearch on the Ancient Near East and Neighboring Regions

*Case Studies on Archaeological Data, Objects,
Texts, and Digital Archiving*

Edited by

Vanessa Bigot Juloux
Amy Rebecca Gansell
Alessandro di Ludovico



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Digitus Dei est hic!
(Translation: The finger of God is here!)
Roberto A. Busa, 2004



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More than anything else, this project would never have been successful without the strong support of our families (including Vanessa's numerous cats and dogs), friends, and peers, of whom we are deeply appreciative.

Special support for this volume was provided by St. John's University (New York).

Editors' Note

We look forward to hosting future conference sessions showcasing Cyber-Research on the ancient Near East and neighboring regions. Furthermore, we hope that these sessions will generate content for additional edited volumes relevant to a wide audience of both digital and non-digital specialists as well as digital neophytes and students.

Through this project, we are proud to contribute to the preservation of cultural heritage by sharing techniques and results for the digital knowledge-discovery and documentation of ancient archaeological contexts, objects, and texts, as well as modern archives and data repositories. Above all, this volume is dedicated to our friends and colleagues, and to the many students and scholars, whose work and lives suffer on account of the ongoing military conflicts and political crises in regions of the Middle East.

Phonology

(*vocalization*)

Consonants with diacritical marks in Akkadian, Sumerian and Ugaritic:

- ʾ (aleph), a voiced laryngeal with a glottal stop that is used with vowels /a/, /i/, /u/ for ʾa, ʾi, ʾu.
- ʿ (ayin), a voiced pharyngeal.
- ḏ (ḏal), a voiced interdental, as “th” in “that.”
- ġ (ġain), a voiced velar fricative, as “r” in French.
- ḡ a velar nasal, as “ng.”
- ḥ (ḥa), a voiceless velar fricative, as “ch” in German.
- ḥ (ḥota), a voiceless pharyngeal with a stricture of the pharynx.
- š (šin), a voiceless palate-alveolar fricative, as “sh” in shame.
- š (tsadé), an emphatic sibilant, as “ts.”
- ṭ (ṭet), an emphatic voiceless dental, as “t.”
- ṭ (taana), a voiceless interdental, as “th” in thin.
- z (zu), an emphatic voiced fricative dental, as “ts.”

Shortened Forms

Series, Periodicals, and Publishers

<i>ACalc</i>	<i>Archeologia e Calcolatori</i>
ACL	Association for Computational Linguistics
ACM	Association for Computing Machinery
<i>AJA</i>	<i>American Journal of Archaeology</i>
<i>AmA</i>	<i>American Anthropologist</i>
<i>AmAnt</i>	<i>American Antiquity</i>
<i>AnatS</i>	<i>Anatolian Studies</i>
AOAT	Alter Orient und Altes Testament
<i>AoF</i>	<i>Altorientalische Forschungen</i>
ARA	<i>Annual Review of Anthropology</i>
ASOR	American Schools of Oriental Research
<i>BaM</i>	<i>Baghdader Mitteilungen</i>
BAR-IS	British Archaeological Reports International Series
<i>BASOR</i>	<i>Bulletin of the American Schools of Oriental Research</i>
BSAJ	British School of Archaeology in Jerusalem
<i>CAD</i>	<i>Chicago Assyrian Dictionary</i>
<i>CDA</i>	<i>A Concise Dictionary of Akkadian</i>
<i>CH</i>	<i>Computers and the Humanities</i>
<i>CISE</i>	<i>Computing in Science & Engineering</i>
<i>CMAO</i>	<i>Contributi e Materiali di Archeologia Orientale</i>
CNRS	Centre National de la Recherche Scientifique
CUSAS	Cornell University Studies in Assyriology and Sumerology
DANS	Data Archiving and Networked Services
<i>DHQ</i>	<i>Digital Humanities Quarterly</i>
HdO	Handbuch der Orientalistik
HSS	Harvard Semitic Studies
ICE	Initiative for Cuneiform Encoding
<i>IEJ</i>	<i>Israel Exploration Journal</i>
<i>IM</i>	<i>Istanbuler Mitteilungen</i>
<i>JAMT</i>	<i>Journal of Archaeological Method and Theory</i>
<i>JAOS</i>	<i>Journal of the American Oriental Society</i>
<i>JAR</i>	<i>Journal of Anthropological Research</i>
<i>JASC</i>	<i>Journal of Archaeological Science</i>
<i>JCS</i>	<i>Journal of Cuneiform Studies</i>
<i>JCSSS</i>	<i>Journal of Cuneiform Studies Supplemental Series</i>

<i>JEurArch</i>	<i>Journal of European Archaeology</i>
<i>JGRSC</i>	<i>Journal of Global Research in Computer Science</i>
<i>JNES</i>	<i>Journal of Near Eastern Studies</i>
<i>JTEI</i>	<i>Journal of the Text Encoding Initiative</i>
MDOG	Mitteilungen der Deutschen Orient-Gesellschaft
OBO	Orbis Biblicus Orientalis
OIP	Oriental Institute Publications
<i>OxfJA</i>	<i>Oxford Journal of Archaeology</i>
<i>PEQ</i>	<i>Palestine Exploration Quarterly</i>
<i>QDAP</i>	<i>Quarterly of the Department of Antiquities in Palestine</i>
RA	<i>Revue d'assyriologie et d'archéologie orientale</i>
<i>RANT</i>	<i>Res Antiquae</i>
SAA	State Archives of Assyria
SAOC	Studies in Ancient Oriental Civilization
<i>ScAnt</i>	<i>Scienze dell'Antichità</i>
<i>SEL</i>	<i>Studi Epigrafici e Linguistici sul Vicino Oriente Antico</i>
<i>SJIS</i>	<i>Scandinavian Journal of Information Systems</i>
StCh	Studia Chaburensia
<i>StTr</i>	<i>Studia Troica</i>
<i>UF</i>	<i>Ugarit-Forschungen</i>
<i>ZfSem</i>	<i>Zeitschrift für Semiotik</i>

Additional Shortened Forms

AOS	American Oriental Society
AIUCD	Associazione per l'Informatica Umanistica e la Cultura Digitale
CAA	Computer Applications and Quantitative Methods in Archaeology
CIIT	Coimbatore Institute of Information Technology
CDLI	Cuneiform Digital Library Initiative
DARIAH	Digital Research Infrastructure for the Arts and Humanities
DH	Digital Humanities
ePSD	Pennsylvania Sumerian Dictionary
ETCSL	Electronic Text Corpus of Sumerian Literature
GLAM	Galleries, Libraries, Archives, and Museums
ICOMOS	International Council on Monuments and Sites
IFLA	International Federation of Library Associations and Institutions
Oracc	Open Richly Annotated Cuneiform Corpus
RAI	Rencontre Assyriologique Internationale
TEI-C	Text Encoding Initiative Consortium

CyberResearch

AAS	Artificial Adaptative System
AI	Artificial Intelligence
ANN	Artificial Neural Network
API	Application Programming Interface
AS	Artificial Sciences
ASCII	American Standard Code for Information Interchange
ATDM	A-Temporal Diffusion Model
ATF	ASCII Transliteration Format
Auto-CM	Auto-Contractive Map
C-ATF	c(anonical) ASCII Transliteration Format
CAL	Comprehensive Aramaic Lexicon
CBOW	Continuous Bag-of-Words
CDLI	Cuneiform Digital Library Initiative
CIDOC CRM	CIDOC Conceptual Reference Model
CLTK	Classical Language Toolkit
CNNs	Convolutional Neural Networks
CRM	Conceptual Reference Model
CSV	Comma Separated Value
DANA	Digital Archaeology and National Archive
DBMS	Database Management System
DTM	Document Term Matrix
FRBR	Functional Requirements for Bibliographic Records
GUI	Graphical User Interface
HTML	HyperText Language Markup
HTTP	HyperText Transfer Protocol
HTTP URIS	HyperText Transfer Protocol Universal Resource Identifiers
ID	Identifier
ISO	International Organization for Standardization
JSON	JavaScript Object Notation
LD	Linked Data
LOD	Linked Open Data
log	logarithm
mDC	Manuel de Codage
MRG	Maximally Regular Graph
MST	Minimum Spanning Tree
NC	Natural Computing
NLP	Natural Language Processing
NPMI	Normalized Pointwise Mutual Information

OCHRE	Online Cultural and Historical Research Environment
OCR	Optical Character Recognition
OD	Open Data
OM	OntoMedia
OWL	Web Ontology Language
PMI	Pointwise Mutual Information
RDF	Resource Description Framework
RDFS	Resource Description Framework Schema
RSTI	Ras Shamra Tablet Inventory
SKOS	Simple Knowledge Organization System
SOM	Self-Organizing Map
SQL	Structured Query Language
SPAD	Système Portable pour l'Analyse des Données
SVG	Scalable Vector Graphics
SW	Semantic Web
TEI	Text Encoding Initiative
TF-IDF	Term Frequency–Inverse Document Frequency
TWC	Topological Weighted Centroid
UPGMA	Unweighted Pair Group Method with Arithmetic Mean
URIS	Universal Resource Identifiers
UTF	Unicode Transformation Format
W3C	World Wide Web Consortium
XDR	External Data Representation
XML	Extensible Markup Language

Corpora of Texts and Seals

Adab	Sargonic Inscriptions from Adab
BM	British Museum
CUSAS	Cornell University Studies in Assyriology and Sumerology
KTU	Keilalphabetischen Text(e) aus Ugarit
LBAT	Late Babylonian Astronomical and Related Texts
MAMA	Monumenta Asiae Minoris Antiqua
PF	Persepolis Fortification
RS	Ras Šamra

Other

BVU	Basic Volume Unit
EDM	Electronic Distance Measurement
MURL	Mesopotamian Urban Revolution Landscape

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