

Robert J. Wenke • Richard W. Redding • Anthony J. Cagle (eds.)

Kom El-Hisn (ca. 2500–1900 вс)

An Ancient Settlement in the Nile Delta



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Edited by Robert J. Wenke, Richard W. Redding, and Anthony J. Cagle



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Dedicated to the memory of Dr. Lech Krzyzaniak, a great pioneer in the archaeology of the Nile Delta



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It must be noted that any report of archaeological fieldwork published more than twenty-five years after fieldwork ceased must include an apology. Our primary findings were published piecemeal in various academic journals, but it is only with this volume that we summarize the full range of the data we collected and our analyses of them. We blame this long delay on the usual suspects. Combining the research results of many scholars into a unified report proved to be a difficult and lengthy process.

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- Fig. 13.4. Multidimensional scaling ("MDS") of the data in table 6.1 indicates that almost 13.4 all of the information in the original correlation matrix can be expressed in a Euclidean space of just two dimensions. These data were the same as those used in the PCA example discussed above. In this case the frequencies for the selected plant taxa were considered ratio-level measurements, although an ordinal-level coefficient might be more appropriate. MDS measures the extent to which the spatial plotting of variables reflects the information in the original correlation matrix, and the differences are called "stress." In this case the stress value was 0.13 for the matrix, and r-squared = 0.99. As in the PCA study, the meaning of these dimensions must be inferred: they could express almost anything, ranging from sample size to spatial distribution. (Note that for statistical reasons beyond the scope of this chapter, "correspondence analysis" [Shennan 1997: 308] is perhaps the best multivariate technique with which to search for structure in these data). The distance of the "AllCereals" variable from the main cluster implies that the concentration of cereal remains in dung cakes is quite different, in terms of Dimension 1, than samples that do not contain cereals. The extreme outlier represented by "small_legume" also requires some explanation. One might speculate, for example, that manure cakes that contained many cereal elements came from cows that were penned close to residential areas. But such speculations are not easily testable for validity.
- 13.5 Bronze mirror found on the chest of an individual whose grave was clearly intrusive and cut into existing Old Kingdom mud-brick walls. Such mirrors were common "grave goods" in certain periods, but their chronology is not well established. There is some evidence that this might be a Middle Kingdom inhumation.

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Abbreviations

ACE Bulletin	Australian Centre for Egyptology Bulletin (Sidney/Warminster/Oxford)
AeUL	Ägypten und Levante: Zeitschrift für ägyptische Archäologie und deren Nach-
III OL	bargebiete (Vienna)
АF	Ägyptologische Forschungen
AfO	Archiv für Orientforschung
AHSS	Annales Histoire, Sciences Sociales
AJA	American Journal of Archaeology
AJPA	American Journal of Physical Anthropology
AnSt	Anatolian Studies
ARA	Annual Review of Anthropology
ARES	Annual Review of Ecology and Systematics
ArOr	Archiv Orientální: Quarterly Journal of African and Asian Studies (Prague)
ASAE	Annales du Service des Antiquités de l'Égypte
AVDAIK	Archäologische Veröffentlichungen, Deutschen Archäologisches Institut Abteilung
	Kairo
BARIS	British Archaeological Reports, International Series
BASORSup	Supplements to the Bulletin of the American Schools of Oriental Research
BIE	Bulletin de l'Institute d'Égypt
BIFAO	Bulletin de l'Institut Français d'Archéologie Orientale
BL	Bulletin de la Liaison du Groupe Internationale d'Étude de la Ceramique Égypti-
	enne
BMSAES	British Museum Studies in Ancient Egypt and Sudan
BSA	Bulletin of Sumerian Agriculture
CA	Current Anthropology
CAJ	Cambridge Archaeology Journal
CCE	Cahier de la Céramique Égyptienne
EA	Egyptian Archaeology
ESAP	Egyptian Studies Association Publication
GJ	The Geographical Journal
GM	Göttinger Miszellen
IBAES	Internet-Beiträge zur Ägyptologie und Sudanarchäologie
IJESD	International Journal of Environmental Science and Development
IJO	International Journal of Osteoarchaeology
JAA	Journal of Anthropological Archaeology
JAE	Journal of Applied Ecology
JAES	Journal of African Earth Science
JAfA	Journal of African Archaeology
JAMT	Journal of Archaeological Method and Theory
JANEH	Journal of Ancient Near Eastern History
JAOS	Journal of the American Oriental Society

Abbreviations

IADOD	Learner de Cale Anna de Cardon de Cardon de France
JARCE	Journal of the American Research Center in Egypt
JARE	Journal of Archaeological Research
JAS	Journal of Archaeological Science
JCR	Journal of Coastal Research
JEA	Journal of Egyptian Archaeology
JEgH	Journal of Egyptian History
JHS	Journal of Hellenic Studies
JFA	Journal of Field Archaeology
JMA	Journal of Mediterranean Archaeology
JNES	Journal of Near Eastern Studies
JNH	Journal of Natural History
JSP	Journal of Sedimentary Petrology
JTB	Journal of Theoretical Biology
JVS	Journal of Vegetation Science
JWP	Journal of World Prehistory
LÄ	Lexikon der Ägyptologie
MAeS	Münchener Ägyptologische Studien
MDAIK	Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo
MIE	Mémoires de l'Institut Égyptien
NAR	Norwegian Archaeological Review
NGRE	National Geographic Research and Exploration
OIP	Oriental Institute Publications
OLA	Orientalia Lovaniensia Analecta
OMRO	Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden
PNAS	Proceedings of the National Academy of Science
PPP	Paleogeography, Paleoclimatology, Paleoecology
QR	Quaternary Research
RdE	Revue d'Égyptologie
SAAB	South African Archaeology Bulletin
SAK	Studien zur Altägyptischen Kultur
SAOC	Studies in Ancient Oriental Civilization
WorldArch	World Archaeology
WZKM	Wiener Zeitschrift für die Kunde des Morgenlandes
ZAeS	Zeitschrift für ägyptische Sprache und Altertumskunde

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