

# STORAGE

## in Ancient Complex Societies

Administration, Organization, and Control



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The ability to accumulate and store large amounts of goods is a key feature of complex societies in ancient times. Storage strategies reflect the broader economic and political organization of a society and changes in the development of control mechanisms in both administrative and non-administrative—often kinship based—sectors. This is the first volume to examine storage practices in ancient complex societies from a comparative perspective. This volume includes 14 original papers by leading archaeologists from four continents which compare storage systems in three key regions with lengthy traditions of complexity: the ancient Near East, Mesoamerica, and the Andes. *Storage in Ancient Complex Societies* demonstrates the importance of understanding storage for the study of cultural evolution.

**Linda R. Manzanilla** is professor and researcher at the Institute of Anthropological Research of the National Autonomous University of Mexico (UNAM). She has participated actively in the formation of generations of archaeologists in the National School of Anthropology and History, Mexico. With a Ph.D. from the University of Paris, she is author and editor of 22 books and 190 articles and chapters on subjects related to the emergence and change of early urban societies in Mesoamerica, Mesopotamia, Egypt, and the Andean Region. She has excavated in Mexico, Bolivia, Egypt, Anatolia, and Israel. Among her awards and honors are the research award of the Shanghai Archaeology Forum, the Mexican National Academy of Sciences Award, Alfonso Caso Award (INAH), Presidential Award of the Society for American Archaeology, foreign member of the National Academy of Sciences of the USA, National University of Mexico Award in Research in Social Sciences, Foreign Member of the American Philosophical Society, member of El Colegio Nacional in Mexico, and Doctor Honoris Causa by UNAM. She has been member of the Committee for Research and Exploration of the National Geographic Society, and co-editor, with Gary Feinman, of *Latin American Antiquity*.

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## ARCHAEOLOGY

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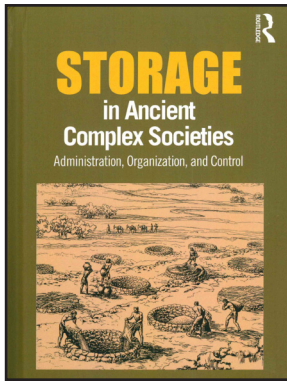
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## Storage in Ancient Complex Societies: Administration, Organization, and Control

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*Reviewed by Alleen Betzenhauser, Illinois State Archaeological Survey-Prairie Research Institute, University of Illinois at Urbana-Champaign*

The archaeological record is rife with evidence for storage but this aspect of past societies often remains under-theorized. Linda R. Manzanilla and Mitchell S Rothman attempt to remedy this with their edited volume that investigates storage and its role in complex societies in three disparate regions: the Near East, the Andes, and Mesoamerica. The contributors variously speak to topics and themes set out by the editors in the preface: what was stored, in what types of facilities and social contexts, and how and when were those stores distributed.

Beginning with Manzanilla's preface and continuing through Rothman's introductory chapter, it is clear that the editors are approaching this topic through a social evolutionary lens, namely Julian Steward's (1955) multilineal evolution. Rothman is most explicit, going so far as to suggest geology as an analogy for social change by referencing Charles Lyell's (1838) findings that included "a set of fairly uniform patterns of change" (p. 20). Thankfully the entire volume does not adhere to such antiquated theoretical perspectives. The contributions provide new insights into the variability of storage: what was stored, how, and for how long and what the archaeological signatures of these aspects of storage might be. The one aspect that is not fully developed in most of the contributions is the social context within which storage occurred. Instead, most of the authors prioritize storage's roles in the economy and political organization.

The contributing chapters are divided into three sections based on geographic region. Within each section the chapters are arranged chronologically. Section 1 is composed of three chapters that discuss different aspects of storage in the Near East during the Bronze Age. Common themes in this section include the use of seals for tracking stores, descriptions of various storage facilities (mostly food storage), and the role of storage in the development of states as it relates to the concentration of power (i.e., those who control storage).

Rothman and Enrica Fiandra provide an account of the changes in the use of seals, stamps, and tablets to track the collection and dispersal of foodstuffs at Tepe Gawra over the course of 2,000 years. They identify a shift to more specialized facilities and the tracking of goods other than foodstuffs in the later period that they interpret as the development of a bureaucracy that resulted from intensification of production and an increase in long distance trade. Ianir Milevski, Eliot Braun, Daniel Varga, and Yigal Israel focus their chapter on early Bronze Age underground grain silos in Israel. These large storage facilities were

set apart from domestic residences and were capable of storing more grain than would be necessary to support the local population. They conclude based on an economic explanation following Timothy Earle (2002) that the stores were intended to provision Egyptians living locally or those living in other colonies, serving in the military, or living in Egypt. Tate Paulette's chapter concerns how the control over the storage and redistribution of grain from the late Uruk to Ur III (3,200–2,000 BC) resulted in the creation of kingship. He identifies storage facilities at the earliest palaces and describes how a highly centralized system of storage and redistributive developed over time.

The second section is composed of four chapters that focus on the Andean region before, during, and after the Inkan Empire. Thomas and Shelia Pozorski's chapter explores the types of storage facilities evident during the Initial Period (1800–1400 BC) in the Casma Valley of Peru. They propose that modular storage structures were emblematic of bureaucracy and political authority. The placement of this standardized architectural form at administrative centers served as visible reminders of symbolic power and control. In the following chapter, John R. Topic describes Chimú and Inkan methods for keeping track of stores that included tokens, quipus, and u-shaped buildings. He asserts the spatial relationships among standardized storerooms relayed information documenting what was stored and where but also symbolized state control and bureaucracy. He advises, "What we gloss as 'Inka storage' is better understood . . . as a complex system serving community, ritual, and state needs". Alan Covey, Kylie E. Quave, and Catherine E. Covey tackle late Inkan storage in the capital of Cuzco using a range of data including linguistics and ethnohistory. In a comparison of storage strategies evident in survey data within a nearby valley, they indicate Inkan leaders communicated abundance and domination through their storage facilities since their surpluses were used to provision other households and artisans. The final chapter in this section is also the most interesting in the entire volume. Frank Solomon, Gino de las Casas, and Víctor Falcón-Huayta explore the storage system in Rapaz, Peru from the colonial period to the present day. Foodstuffs from communal fields were stored in a structure that was paired with another structure where quipus were stored, and both were contained within a walled compound. They describe a harvest ritual in which female deities were invoked through song. This chapter is the most nuanced, likely because it was significantly enriched by ethnographic data that shows how storage can be intimately connected with religion, economy, politics, and gender.

The final section shifts to the Mesoamerican region and contains five chapters ranging from Teotihuacan to Tenochtitlan. Manzanilla describes a multi-sector compound at Teotihuacan that she refers to as a neighborhood center. Storage of staples was not centrally controlled but dispersed among neighborhoods and households. She interprets the distribution of sherd disks as tokens used to ration tortillas that were provisioned to laborers and differed based on ethnicity, gender, and/or age. Unfortunately she provides very little data to support such an assertion and devotes much of the article to this rather than exploring how storage was maintained and managed within the

multi-sector, multi-ethnic neighborhood and how that relates to the overall polity. In the following chapter, the focus shifts to Xochicalco, a hilltop political-administrative center during the Epiclassic period (AD 600–1000). Silva Garza-Tarazona, Claudia Alvarado-León, Norberto González-Crespo, and Beatriz Palavicini-Beltrán indicate the ruling elite at the central site were provisioned by the surrounding regions but also controlled the production, storage, and distribution of sumptuary goods. The storage facility, composed of multiple rooms, occupied a prominent location within the acropolis but remained out of reach of the commoners.

In Chapter 11, Michael P. Smyth distinguishes differences in storage strategies in order to reconstruct the political structure of Tikal in the Maya lowlands. He indicates there is no evidence for large-scale storage of foodstuffs but the locations of storerooms at Tikal are suggestive of secured storage of durable and/or sumptuary goods. He suggests the lack of storage for foodstuffs is indicative that both labor and food were considered tribute thereby negating the need for large stores of food at the capital to support labor projects. Cristina Vidal-Lorenzo, María Luisa Vázquez-de-Ágredos-Pascual, and Gaspar Muñoz-Cosme cover similar topics as Smyth, namely storage in the Maya region, but focus on the site of Ceren where a volcanic eruption preserved much of the farming village including storage rooms in domestic structures. They indicate a variety of items were stored in these facilities including foodstuffs, medicine, tools, and pots. They contrast these to the restricted storerooms within the palace at Aguateca that presumably temporarily held luxury goods under the strict control of the ruler, similar to Smyth's observations at Tikal. The final contribution to the Mesoamerican section is José Luis de Rojas's chapter concerning Aztec storage facilities and strategies at Tenochtitlan and in subsidiary provinces. He relies on archaeological and ethnographic data in addition to translations of codices to reveal a lack of centralized storage of foodstuffs at the capital suggesting the rulers did not directly control the storage of these items. Documentary evidence indicates there were bureaucratic roles for collecting and administering tribute at the palace and in outlying towns suggesting storage facilities existed outside the center.

The final chapter is Rothman and Manzanilla's conclusion in which they restate the aims of the book and invoke neoevolutionary theory once again but using the contributions to support their views. They also provide brief summaries of the individual chapters. The book would have been enhanced if they had another scholar provide commentary on the volume rather than the editors simply restating what was already presented in the preface and introduction.

The topic of the volume should be of concern to most archaeologists and the examples are useful for identifying and comparing different types of storage in the past. In most cases, the figures and tables provide supplementary data support and enhance the texts. The volume provides interesting data concerning the variability of storage in a cross-cultural perspective. If the reader can look past the editors' focus on storage

as an administrative tool that figures prominently in social evolution he or she will find value in the range of examples of storage facilities, mechanisms for consolidating and redistributing stores, and relationships among storage, economy, political structures, and social contexts in the past.

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