

Individual Research Projects

During a month's visit in Iraq last summer, Robert McC. Adams continued his long-standing reconnaissance of settlement and irrigation patterns in the central and southern parts of the country. He anticipates a major resumption of this project next year, subject to the approval of Iraqi authorities. Mr. Adams participated in several symposia and prepared articles on such subjects as "The Origins of Agriculture," "The Emerging Place of Trade in Civilizational Studies," "Soundings in Middle Islamic Levels in 'Aberta," and "Anthropological Perspectives on Ancient Trade." He has also continued to serve as Dean of the University's Division of Social Sciences and on various anthropological committees around the country.

Apart from his duties as Chairman of the Department of Near Eastern Languages and Civilizations, Klaus Baer's work has largely been concentrated on questions connected with the history of the Egyptian language—the evolution of the demonstratives, Coptic vowel phonology, and comparisons with Berber. (Mr. Baer suggests that the comparison of Egyptian and Berber may be more fruitful than the more usual comparisons between Semitic and Berber.) He is considering the relationship between the written and spoken languages of ancient Egypt, to the limited extent that anything about the latter can be determined. He suspects that the two systems developed largely independently during the time he is able to investigate.

Robert D. Biggs has continued to study cuneiform texts of the third millennium B.C. following publication of his *Inscriptions from Tell Abū Ṣalābīkh* ("Oriental Institute Publications," Vol. XCIX). He is preparing for publication a number of texts discovered at al-Hiba (ancient Lagash) by a joint expedition to Iraq of the Metropolitan Museum of Art and the Institute of Fine Arts, New York University. He continues as editor of *Journal of Near Eastern Studies*, a journal founded by William Rainey Harper, the University's first president, now sponsored by the Department of Near Eastern Languages and Civilizations.

John Brinkman, thanks to a senior fellowship from the National Endowment for the Humanities, was able to spend several months studying unpublished Kassite (1600–1150 B.C.) tablets from the University Museum (Philadelphia), the British Museum (London), and

the Istanbul Archeological Museums. He is now revising the first volume of his *Materials and Studies for Kassite History*, which should be ready to go to press during the coming year. Articles submitted for publication during this past year include an edition of the cuneiform texts from the St. Louis Public Library (to appear in the Samuel Noah Kramer Festschrift) and a joint edition (with Veysel Donbaz, Istanbul) of an eleventh-century (B.C.) Babylonian royal inscription (to appear in the *Journal of Cuneiform Studies*.)

Most of Carl DeVries' personal work has been associated with the major project of the Nubian publication, but he has published some short articles on Egyptology and more generally on Near Eastern geography and archeology. He has completed his responsibilities in connection with the *Pictorial Encyclopedia of the Bible*, but still must finish a few articles for the revision of the *International Standard Bible Encyclopedia*. In addition to the usual book reviews, one article appeared during the last year, on a Nubian clepsydra, in the Seele memorial number of *JNES* (and in popular form in the *Old Bottle Magazine*). Mr. DeVries wrote an article for the Merrill C. Tenney Festschrift, which will come out early next year, and participated in the Archeology Conference at Wheaton College.

Of necessity, McGuire Gibson's research has been tied to Nippur and the periods met with in the excavations. As a corollary to the Nippur excavations, a chemical and spectrographic analysis of glazed pottery is being performed. From these analyses it should be possible to determine whether glaze color variations are the result of leaching through reaction with chemicals in the soil, or of the introduction of new elements, such as lead, at specific times in antiquity. Glazed sherds are available from times as early as Kassite through as late as Islamic. Also as an offshoot of the Nippur investigations, a corpus of pottery for the second millennium B.C. is being built up, which should facilitate a much finer time-differentiation of the ceramics than has previously been possible. The sequence is based primarily on form, but also takes into account the substance of the pottery itself, variations in tempering material, and other analyses. Mr. Gibson's interest in the origin and development of civilizations continues. In his teaching he attempts to apply ideas of ecological relations, trade connections, and so on to whichever period is under consideration. This interest in broader theoretical problems is reflected in an article entitled "Violation of Fallow and Engineered Disaster in Mesopotamian

Civilization," to appear in *Irrigation's Impact on Society*, edited by Mr. Gibson with T. Edmond Downing.

Hans G. Güterbock published an article in German on rare and difficult logograms in Hittite texts in the *Festschrift Heinrich Otten* and one on "Ivory in Hittite Texts" in the periodical *Anadolu* of Ankara University, Volume XV, a volume dedicated to the fiftieth anniversary of the Turkish Republic. During the summer of 1973 he copied fragments of Hittite mythological texts in the Ankara Museum. The printout of his Hittite Computer Project is presently being used as the basis of a grammar of Old Hittite by Messrs. Philo H. J. Houwink ten Cate, University of Amsterdam, and Howard Berman, a Chicago alumnus. Mr. Güterbock is also preparing a chapter on Hittite literature for the *Handbuch der Literaturwissenschaft*.

George R. Hughes has continued preparing a catalogue of the Demotic Egyptian texts in the Brooklyn Museum. The texts are principally on potsherds with a lesser number on papyrus, wood, and stone. The entries in the catalogue now number approximately two hundred. He has also continued to work on a publication of the early Demotic papyri belonging to the Oriental Institute and has begun the planning of a grammar of Demotic Egyptian as a future project.

During the 1973/74 academic year Janet Johnson completed an article dealing with the relationships between the rulers of the Thirtieth Egyptian Dynasty, this being the first step toward the retranslation and historical commentary on the Demotic Chronicle mentioned in last year's Annual Report. She prepared an appendix to the excavation report for the winter, 1973, season at Nippur, describing and dating a small Egyptian protective amulet found there and translating the spells on the amulet designed to ward off snakes, scorpions, and other denizens of the deep. Miss Johnson is now finishing the analysis of the verbal systems of two Ptolemaic-period literary texts, the story of Setne Khaemwast and Instructions of Onchsheshonqy. The information so obtained will be combined with that included in her dissertation, which was based on two late Roman period texts. From this she hopes to prepare for publication within the coming year a detailed study of the Demotic verbal system.

Helene Kantor spent the summer and fall of 1973 on the completion of the manuscript and plates of "Oriental Institute Communications," No. 23, *Chogha Mish: An Interim Report on the First Five Seasons of Excavations, 1961-71* (joint authors, P. P. Delougaz and H. J.

Kantor). In view of the repeated requests of Dr. F. Bagherzadeh, director of the National Research Centre for the History of Art and Archaeology, she went briefly to Tehran to report on the Chogha Mish excavations at the second annual symposium on Iranian archeology. That report is ready for eventual publication in the *Proceedings* of the symposium. Also ready is a Columbia University lecture on the 1973 season. Articles which appeared this year included two reports on previous Chogha Mish seasons, and the chapter on ancient Egypt in the *Propyläen Kunstgeschichte*.

Last fall James Knudstad was staff architect on the Smithsonian's Helmand Sistan (Afghanistan) project, which this season discovered an apparently Parthian "fire temple" similar to architecture of the same period that the Institute has found at Nippur. Since then he has been preparing the publication of early Islamic findings at Harvard's Qasr al-Hair excavations, Syria (conducted in part jointly with the Institute), and readying for publication the Institute's salvage excavations in Sudanese Nubia (1963-64) and Korucutepe, Turkey (1968-70).

The faith of Islam split soon after its founding into Sunnism, or orthodoxy, and Shiism, which recognizes a succession of political rulers, imams, who will return near the end of time bringing peace to the earth. The latter sect is further divided into Imamism (or Twelver Shiism), whose adherents accept a line of twelve imams; Zaydism, an Iranian and, later, Yemenite group; and the Ismaili (Sevener) branch, which claims that the succession ended after seven imams. Mr. Wilferd Madelung has been investigating the history of Twelver Shiism for several years. A stay in Iran last year enabled him to collect materials for a general political, social, and doctrinal account. Three related projects involve editions of manuscripts. The Zaydi texts described in last year's Report are about to be published. Secondly, Mr. Madelung is completing a study of the sources of Ismaili law, based on a newly discovered fragment by Qadi al-Nu'man (d. A.D. 974), the first elaborator of Sevener law, which reveals his sources: Al-Nu'man in fact combined the traditions of the other two branches of Shiism. Mr. Madelung's third project, in cooperation with M. J. MacDermott, S.J., is an edition of other recently found manuscripts, two works of Mahmud ibn al-Malahimi (eleventh century A.D.), the only known documents of later Mu'tazilite theology, a rationalistic movement within Shiism. The late phase

seems to have had a strong influence on later Twelver Shiite thought and even some on Sunni theology.

After working for four months in Chicago and reading many pages of the manuscript of Volume M of the *CAD*, A. Leo Oppenheim used what time was left to him during the first year of his "retirement" to take up again two long-postponed papers. One deals with the position of the intellectual in Mesopotamian society, presented on the basis of what we know of the status of scholars at court and their services to the community. It is scheduled to appear in *Daedalus*. The second paper deals with a much broader topic and Mr. Oppenheim could achieve only a first draft. In the paper he plans to show how Mesopotamian man relates to nature. There are two aspects to this topic. First, the observance of nature by scholars, scientists, and artists, and the conclusions drawn from such operations by those interested in their descriptions, be they lexicographers, physicians, diviners, or cosmographers; and second, the mastery of nature, that is, the aspirations and achievements of Mesopotamian technology. Since this evidence materializes on three distinct levels—texts, artifacts, and iconography—the topic has many ramifications. All of Mr. Oppenheim's published articles this year are found in volumes honoring his friends and colleagues—in *Festschriften* for Theodore H. Gaster of Columbia University, I. J. Gelb, and Hans G. Güterbock, and in the memorial volume for F. W. Geers, who gave invaluable service to the Institute during the first half of this century.

During the year Erica Reiner was engaged in three projects beyond the Assyrian Dictionary. She continued work on Babylonian celestial omens, prepared a chapter on Assyro-Babylonian literature for the *Handbuch der Literaturwissenschaft*, and partly in collaboration with Mr. Matthew Stolper, deciphered some of the Elamite tablets from ancient Anshan (see last year's Report). Miss Reiner contributed six articles to as many publications (among them the Geers, Gelb, and Güterbock volumes), including "A Sumero-Akkadian Hymn of Nanâ" and "How We Read Cuneiform Texts."

As a part of his continuing work on the economic history of the Old Babylonian period (*ca.* 2000–1594 B.C.), Johannes Renger is reconstructing archives of letters and of administrative and legal texts written by, to, or on behalf of particular merchants, administrators, and land owners. These texts are located in various museums throughout the world. Such a reconstruction will help in the under-

standing of the economic and administrative activities and inter-relations of particular groups and segments of society during the Old Babylonian time. Two articles by Mr. Renger on problems of marriage customs in ancient Mesopotamia were published during the past year; a third article is in press. A bibliography of the late Benno Landsberger, which he prepared in collaboration with Anne D. Kilmer, will appear in the *Journal of Cuneiform Studies* in 1974. At the invitation of the Department of Near Eastern Studies of the University of California, Berkeley, and of the Graduate Theological Union, Berkeley, Mr. Renger presented, in March, 1974, a lecture, "Sacred Marriage in Mesopotamia—Reinterpretation of a Ritual," as a part of their Inaugural Lecture Series for the Joint Doctoral Degree Program in Near Eastern Religions. In the fall of 1973 Mr. Renger lectured on the same topic and on "Annals and Reliefs in Sargon II's Palace at Khorsabad" at the universities of Berlin, Erlangen, Freiburg, Heidelberg, and Würzburg. Mr. Renger continues as associate editor of the *Journal of the American Oriental Society*.

Michael B. Rowton is studying what might be called the peripheral framework of civilization in Western Asia. Part of the population was more closely affected by the physical environment than the rest, for instance the nomads, the marginal farmers, and some among the refugees. There is reason to believe that in some parts of Western Asia this element in the population had at times greater bearing on the course of history than has been realized, notably in Mesopotamia, Syria, and Palestine. Involved are issues such as deforestation, erosion, natural refuge areas, and enclaves of pastoral grazing land deep within the sedentary zone; the interaction between nomad and sedentary, tribe and town; the nature of the tribe in Western Asia; overland commerce; and the role of the tribe in the military history of Western Asia. Also to be considered are the problems which confronted the state dealing with this peripheral element in the population of Western Asia. Mr. Rowton has published a total of nine articles on these subjects, and three more are in preparation. His intention is to bring all twelve articles together, considerably amplified, in the form of a monograph.

Lawrence Stager is currently working on two aspects of agriculture in Iron Age Palestine. The first involves the extensive transformation of the hill country through the construction of agricultural terraces on many of the rugged slopes of this area, construction that began with

the increase of small hilltop settlements in the twelfth century B.C., a date that agrees with the Biblical account of the settlement of the Israelites. The second aspect is the transformation of the Judean Desert in the seventh century B.C. through the use of controlled floodwaters and runoff. By the construction of sluice gates and check dams the water yield was increased to the point that farming in this arid zone was possible. Results of this research should be published shortly. Now in press is the preliminary report of the 1971/72 season at Idalion, Cyprus, where a large interdisciplinary staff directed by Mr. Stager investigated settlement patterns. Soundings turned up settlements from fifth millennium to Roman. Among the most interesting is the city of Idalion itself, which was continuously occupied from the late second through the first millennium B.C. It includes the first Archaic and Classical dwellings (seventh to early fifth centuries) ever found on Cyprus, and a large copper-smelting area that may explain why Idalion passed from independence to Phoenician domination about that time, when Phoenicia was taking over the Mediterranean copper industry.

Marten Stol studied unpublished Old Babylonian texts in the tablet collection of the Oriental Institute. He could assign a number of them to previously published archives, and he excerpted the texts for the Assyrian dictionary files. He will edit a tablet containing all the year-names of Warad-Sin, and some of those of Rim-Sin I, both kings of Larsa at the end of the nineteenth century B.C. This valuable text enables us to lay a firm basis for the hitherto largely unknown chronology of Warad-Sin's reign.

Kent R. Weeks has completed several articles for publication this year, including an analysis of Egyptian dentistry for the *Roentgenographic Atlas of the Pharaohs*; a survey of the ecology of the Nile Valley and its influence on early occupation; and reports on his epigraphic work in four mastabas at Giza. Mr. Weeks is currently completing a book on the prehistory of Egypt and the origins of the First Dynasty, which will appear early next year, and is continuing preparation of an annotated bibliography of ancient Egyptian medicine that now includes over five thousand references. He is overseeing the publication of the second volume of the Khonsu series, and a two-volume study of an Old Kingdom family at Giza for the Boston Museum Giza series.

In addition to his studies of Egyptian chronology, Edward F. Wente

has been interested in ancient Egyptian epistolography and is preparing an anthology of letters. One unpublished letter to the dead deserves a special article, which is being written for a volume in honor of J. Vergote of Belgium. The text of this First Intermediate Period letter to a deceased woman provides the earliest evidence for the incubation of dreams in Egypt. Hitherto clear references to this practice in Egypt has been confined to the Hellenistic period.