

POLAND'S CONTRIBUTION TO ARCHAEOLOGICAL RESEARCH INTO ANTIQUITY

BY

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During the 19th and at the beginning of the 20th centuries, the period of the most intensive archaeological discoveries in the lands of antiquity, Poland, at that time not an independent country, was in no position to organize officially, or take part in, archaeological research. It was only after independence had been regained as a result of the First World War that Polish scholars were able to proceed to start research of this particular kind. During the years 1936—1939, Warsaw University and the French Institute of Oriental Archaeology of Cairo organized jointly, under the leadership of the author of the present article, common Polish-French excavations in the region of Edfu in Upper Egypt.¹ The results of three digs were published in a three-volume work, *Fouilles franco-polonaises* (Cairo, 1937—1950).² The following is a very attenuated account of the results of the three years' field work at Edfu.

Excavations on the territory of an Old Kingdom necropolis led to the discovery of a considerable number of family tombs, called mastabas, for the most part from the period of the Sixth Dynasty (2350 to 2190 B. C.). The tombs were built of sunbaked brick, having walls up to over five feet thick, and both surface and underground tomb chambers. Every chamber was provided with a tomb endowment, which at the time of disclosure was covered over with weathered rock rubble.

The tomb endowment usually included diversely-shaped earthenware pottery, red or pale-pink in colour. Together with

¹ Kazimierz Michałowski, *Organizacja Badań Archeologicznych Bliskiego Wschodu* (Organization of Archaeological Study of the Middle East), Warsaw, 1936, *Biuletyn Historii Sztuki i Kultury* (Bulletin of History of Art and Culture), Vol. IV.

² A more detailed bibliography (reports and papers concerning Edfu) is contained in K. Michałowski's *Sztuka starożytna* (Ancient Art), Warsaw, 1955, p. 240.

egg-shaped urns, there were elongated, cylindrically-shaped vases having spigots of unbaked clay, as well as phial-shaped vessels of smaller sizes with conical bottoms, platters, bowls and plates on high socles, and, finally, pitchers in deep basins and tiny jugs with handles.

The tombs of wealthy dignitaries contained, in addition to earthenware pottery, vessels of alabaster, diorite and occasionally copper, at that time a very precious material, and such toilet utensils as palettes for rouge and copper razors and mirrors.

The most interesting finds were the underground chambers. A thorough examination was also made of the surface part of the vast mastaba of a dignitary, Izi by name, who had lived at the turn of the Fifth and Sixth Dynasties; this was first unearthed in 1933. Of the three underground chambers, two were intact, while the third had been almost completely looted. In the two intact chambers were found many precious objects, such as alabaster vessels adorned with royal names, vessels and other articles of copper, and even small golden ornaments. The looted chamber belonged to the dignitary Izi, the proprietor of the tomb; a copper pitcher and platter were found in it, as well as a limestone sarcophagus with a hieroglyphic inscription, the only sarcophagus found in the necropolis. The walls of that chamber were inlaid with limestone and coated with stucco. Along the upper part of the walls was an ornamental fresco, while the floor was covered with stone slabs. A passage linked the chamber with the pit. The exceptional site of the tomb, its size, decoration and sumptuous fittings testified to the importance and high social position of the owner.

The second remarkable find on the territory of the necropolis comprised the underground tomb chambers of the mastaba of Kar, called Pepi Nefer, the prefect of the district of Edfu under the reign of Pepi I of the Sixth Dynasty, a royal favourite brought up at the Memphis court. The tomb endowment disclosed bore witness to his wealth. In addition to several hundred earthenware vessels, the endowment included alabaster, diorite and copper vases, copper toilet utensils, as well as an alabaster head for a bed, beautifully ornamented.

In the necropolis of the First Intermediate Period and the Middle Kingdom, we proved the existence of three different systems of burying the dead, corresponding to the class differentiation of the population; the bodies of members of the then wealthiest social stratum — priests, merchants and the like — were buried in wooden sarcophagi, which were then placed in surface family tombs, with arched roofs of sunbaked brick; brick structures of multi-storeyed *façades*, dug into the earth somewhat after the style of the Roman *columbaria*, constituted the burial-places of the middle stratum — the craftsmen; the poorest

people had to be content with burial in subterranean, serpentine galleries, resembling catacombs. In addition to alabaster and earthenware vessels, and necklaces and amulets, the endowment of such tombs included terracotta figurines of women, so-called concubines, which are extremely valuable archaeological relics.

The powerful fortifications in the part of the necropolis which we excavated indicate that Edfu must have often resisted foreign invaders. In the period between the end of the Middle Kingdom and the beginning of the New Kingdom, i.e., in the first half of the second millennium B. C., the political situation in Edfu must have required the hurried building of fortifications. The western part of the cemetery was then sacrificed and, by means of doubling the walls and joining the south-western walls of the tombs, mastabas were transformed into powerful bastions. Afterwards, a new wall was erected; later, however, both these defence lines were destroyed by fire.

In the period of the New Kingdom, there arose over the whole territory of the ruined necropolis a new city, in the ruins of which were found numerous valuable relics, e. g., a sphinx, scarabs and pottery. The then prevalent custom of burying corpses in rock tomb did not permit proximity of the living to the dead. The city of the dead was thus removed to the eastern slope of the rocky desert.

In Edfu itself, beginning with the period of the New Kingdom and almost uninterruptedly up to Arab times, we were able to follow the gradual overlaying of successive human settlements. Each period had left there traces of building and artistic activities in the form of fragments of walls, pottery, objects of religious cults and of everyday use. A detailed analysis of the top of the "Tell" enabled us to make an accurate chronological classification of the various strata.

1. The Early Ptolemaic period — 3rd-2nd centuries B. C.
2. The Late Ptolemaic period — 2nd-1st centuries B. C.
3. The Roman Ptolemaic period — 1st century A. D.
4. The Roman Ptolemaic period — 2nd century A. D.
5. The Coptic-Byzantine period — 6th-7th centuries A. D.
6. The Arab period — 8th century A. D.

In the Ptolemaic stratum, special attention was, apart from problems of town planning, attracted to individual houses with vaulted rooms and upper terraces. In one of these, we found a sculptor's studio, in another — a doctor-apothecary's flat, complete with a laboratory of flasks and phials, a small anatomic model, a set of small bronze medical instruments, and even "magic" prescriptions.

The Roman stratum was the most impressive. In it we unearthed a fragment of an entire urban district, comprising a trad-

ing and administrative quarter with a small forum, a residential district, and fortifications. Along the southern side of the district there was a row of warehouses and domed granaries — silos. In the vicinity were found a considerable number of stone basins used as handmills; there were also granite pestles for crushing grain. Of particular interest, among the finds from that period, were well-preserved earthenware lamps and fragments of terracotta figurines of Isis and Horus. The Roman pottery at Edfu embraced a wide variety of shapes, from tiny bowls to large amphoras; the make of the vessels, however, was much coarser and less conscientious than in the case of those from the New Kingdom period. On the other hand, the fragments of frescoes and stuccos disclosed in dwelling houses testified to the high level of artistic care accorded to such interiors.

Prosperous households had comfortable bathrooms, with hot water and a central-heating installation, called a *hypocaust*. The variety of bathing installations indicated the attention devoted to body hygiene by the inhabitants of what was then called Apollinopolis Magna. In addition to ordinary baths, we found baths in the shape of easy-chairs for bathing the feet, as well as deep basins for bathing in an upright position. All of these were constructed of baked brick, covered with waterproof cement. Some of the baths were presumed to be public, in view of the considerable number of Greek *ostraca* of the 1st and 2nd centuries A. D. found *in situ* and relating to *balanikón*, the fee paid by the inhabitants of this district of the city.

Among other written documents unearthed, of special interest were Latin *ostraca* from the latter half of the 1st century A. D., constituting very rare documents of a military character. As regards written documents, however, it was the sector on the southern side of the hill above the Old Kingdom necropolis that furnished us with the most remarkable finds. In the ruins of houses from the Roman period we unearthed more than a hundred Greek *ostraca* comprising receipts of a special tax called *indaion telesma*, paid by inhabitant Jews from the times of Vespasian up to those of Traian. From these, Professor J. Manteuffel succeeded in establishing the exact genealogy of several of the taxpayers.

On the western side, Appollinopolis Magna was defended by a powerful system of fortifications, with semicircular watch-towers guarding the gates in the city walls, adjoining which were the military barracks.

The observations we made during field work, and the relics found in the successive archaeological layers, indicated an interruption — of some centuries' duration — in the development of life in the area in which our research was conducted. Towards the end of the 2nd century A. D., the district of the city on the

accessible part of the "Tell" was completely deserted by its inhabitants. The next chronological traces of building activity, separated from the earlier ones by a thick and barren layer of *sebbach* — powdered rubbish — related to the 6th, or the beginnings of the 7th, century A. D., that is as late as the Byzantine period.

Apart from the ruins of the monastery — where, in addition to Coptic pottery, deacons' letters and prayers were found — the remains of that period included a number of vaulted cellars, excellently preserved, which had once been used for storing wine and food. Some of these contained earthenware wine amphoras (in many cases inscribed with the name of the owner), large earthenware casks adorned with a characteristic Coptic ornamental design, and, last but by no means least, Greek papyri from the beginnings of the 7th century A. D.; these were loan agreements, under a kind of official stamp, corresponding to our contemporary bills of exchange. Wooden tablets covered with Coptic characters, which we dug out nearby, led us to conclude that their owner must have carried on correspondence in both Greek and Coptic.

Superimposed on the Byzantine layer was the Arab necropolis from the 8th century A. D., chronologically the most recent layer of the Edfu "Tell".

In the course of every serious scientific undertaking — and this is particularly true of collective research — specific methods are worked out, which, in turn, impart certain characteristic features to the achievements and results of the undertaking. The same applies to the individual features of what is usually called a "scientific school", which, in most cases, is the creation of a single outstanding scientist, who transmits his methodological experience to a group of students; a scientific school can, however, be the result of common efforts of a number of scientists. Although nothing is further from my thoughts than the ascription to our Edfu excavations of the features of a distinct archaeological school, it is of interest that in the course of three years of common work we nevertheless succeeded in working out specific methods of research, such as had never before been properly applied in field work. By introducing such, we succeeded in achieving considerable scientific results. What was the quintessence of our research methods at Edfu? What new elements did we introduce into archaeological field-work?

I am not referring here to any of the technical improvements connected with digging, e. g., with the methods of sounding, with sector planning during terrain stratification, or with operations of that kind which often can absorb archaeologists to such a degree as to obscure the real purpose of research, which is, of course, search after historical truth. The novelty of our methods consisted

in a close co-ordination of archaeological and epigraphic research, which, as regards the Edfu dig, might *in fine* be called co-operation of the archaeologist with the papyrologist.

One of the most difficult problems to be solved in archaeological field-work, and incidentally one of the key questions in the whole of archaeological study, is that of ascertaining in the most accurate way possible the dates of historical remains. Unless one is in a position to determine the exact date of the various objects excavated, one cannot even attempt to build any historical synthesis. Faulty or incorrect dating of individual remains or of groups of remains can result in drawing of absolutely false conclusions, a shortcoming, by the way, which even very serious archaeological research has sometimes failed to avoid.

It was due to the very close co-operation with the late Jerzy Manteuffel that I was able to attempt the accurate dating not only of individual archaeological groupings — e. g. the ascription of particular districts of the city to the Graeco-Roman period — but also of such individual historical objects as houses, cellars and the large movable remains; this, in turn, resulted in the determination of the peculiarities of various wall elements, i. e., of the methods of binding bricks in the Early Ptolemaic period (3rd and 2nd centuries B. C.) which were different from those used in the Late Ptolemaic period (2nd and 1st centuries B. C.). We were also able to distinguish between the peculiarities of the Roman technique of construction in the 1st century A. D. and the technical properties of wall elements from the 2nd century A. D. Using the same method, we were able to establish the strict chronology of such relic groups as ancient lamps, for which up till then no chronological criteria had been available. It was that fixing of criteria for that single element from among the many material remains of ancient human activity that enabled Miss Maria Bernhard to write her comprehensive monograph on ancient lamps.³ Our excavations also resulted in the laying of firm foundations for the chronological definition of Ptolemaic and Roman pottery of the 1st and 2nd centuries A. D.

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After the Second World War, during the period of the reconstruction of the barbarously destroyed scientific institutions of Poland, no continuation of archaeological field work abroad was possible.

The first archaeological expedition to the lands of antiquity after the war was organized in 1956 by the National Museum of Warsaw in conjunction with the Hermitage Museum of Leningrad

³ Maria Bernhard, *Lampki starożytne* (Ancient Lamps), Warsaw, 1955.

and with the cooperation of the Academy of Sciences of the USSR and of Leningrad University. This time, the territory of the ancient Greek colonies in the Black Sea basin was chosen, with archaeological field work concentrated at Mirmeki, a Greek colony from the end of the 6th century. This colony had been situated in the eastern part of the Crimea on the shores of Bosphorus Cimmerius, several miles from the former capital of the Bosphoran state of Panticapaeum (today's Kerch). The present author led the Polish group; the leader of the Soviet group was Professor Victor Gaydukevitch of Leningrad University.

During earlier Soviet field work, conducted in that region in the years 1946—51, there had been unearthed a part of a Hellenistic city, which in ancient times had been a prosperous centre of trade in fish, grain and wine. Treating the ruins already excavated as a common starting point, the work was now divided between the two groups. The Soviet team took over the southern, and the Polish, the eastern sector. In the course of five weeks, an area of some 3500 square feet was dug over in our sector, the average number of manual labourers employed being twenty. From under a 10-foot layer of earth and debris a considerable number of dwelling quarters and outbuildings from both the Hellenistic (3rd — 2nd centuries B. C.) period and the Roman (1st — 2nd centuries A. D.) period were dug out.

By reason of the discovery of a number of stamped amphora handles, we succeeded in establishing the dates for the particular stages of those constructions — in itself a considerable achievement. Deeper soundings under the walls of Hellenistic buildings resulted in the uncovering of elements of older walls from the so-called Classical period, i.e., the end of the 5th and the beginning of the 4th century B. C. Fragments of imported Attic pottery constituted an eloquent proof of the close trade relations of Mirmeki with Athens — and not with Athens alone. Amphoras for wine brought from Rhodes, Sinope, Knidos, and Heraclea Pontica, ornamented bowls of the Megarean type with relief ornamentations, and terracotta objects from Alexandria testified to the wide contacts of Mirmeki with many centres of contemporary Greek culture.

Mention should also be made of the local imitations, often found at Mirmeki, of both Megarean pottery and of terracottas, in which the motifs of the imported Hellenistic objects were repeated with considerable accuracy.

The many finds of coins of the Spartan dynasty and from the reign of Mithridates VI Eupator, king of Pontus, were also, together with the amphora stamps mentioned above, a valuable chronological criterion. The results of the field work fully confirmed the occurrence of an evolution in the development of Mirmeki from a town (*polis*), and its decay to the role of a minor

fishing settlement of the "Tell" type. As regards the 3rd century B. C. and the first half of the 2nd century, we encountered buildings of an urban type, with houses of solid stone wall construction, provided with a sewage system. Under the reign of Mithridates, Mirmeki, together with the whole of the contemporary Bosphoran state, must have passed through an acute economic crisis resulting from, among other things, the wars of Mithridates with Rome in the eighth decade of the 1st century B. C.

In accordance with a reference from Strabo, the Roman layers were comparatively poor; the dwelling quarters of the upper layers gave way to buildings of a farming character, such as grain silos and rural households, a fact which proved that Mirmeki in the 1st and 2nd centuries A. D. was a settlement decidedly rural in character.

An analysis of bone material made by Professor Zalkin of Moscow, at the request of the Polish expedition, yielded very interesting results as regards the determination of the species of animals and poultry that had been consumed by the inhabitants of Mirmeki; the main source of food, however, was the sea-fish and a species of small oysters, called *midi*.

Among the most interesting of all of our finds, however, was undoubtedly one made towards the end of our field work in the Crimea. This was the uncovering of some exceptionally well preserved ruins of a vineyard cellar, consisting of stone wine presses for the extraction of juice from the grapes, cisterns, and a complicated, though very ingenious, system of sinks and drains made of cement, a material characteristic of the Hellenistic period. This discovery was in the nature of a scientific sensation, since this was the first time in Mediterranean archaeology that this particular kind of building had been unearthed with all its component elements in their proper places. A scientific reconstruction of this immensely important element of the material culture of antiquity has now become possible. The Polish discovery aroused very lively interest in all the Soviet expeditions and in international archaeological circles.⁴

Intensive work is now proceeding in Warsaw and Leningrad on the conservation of the archaeological materials unearthed in the Crimea, in preparation for exhibitions of the relics in the Warsaw National Museum and the Hermitage Museum.

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In 1957, too, we have to our credit a contribution to the archaeological research into Antiquity.

This time it is Egypt again. In March and April a team of Polish archeologists, led by Professor K. Michałowski, conducted

⁴ Cf. *The Illustrated London News*, Jan. 5, 1957, pp. 28—29.

excavations in the Nile Delta on the site of the ancient city of Athribis (now Tell Atrib near Benna). Excavations started on the northern and western sides of the bigger of the two artificial mounds which had grown on the ruins of the necropolis and the settlement.

In the first campaign — the excavations are expected to spread over several years — some important discoveries were made which add considerably to our knowledge of both the history of Athribis and ancient Egyptian culture in the late period. Already now, before the results of the campaign are properly evaluated, a discovery that can be made known is that of water filters, the first to have been found in Egypt. They are special structures of baked bricks, which used the sand that is found on the spot as the filtering material. They were first built in the Ptolemaic period and considerably enlarged during the first years of the Roman rule in Egypt.

Apart from that discovery, important for the history of ancient technology, mention is due to the ruins of a stone building for religious purposes, dating from the Alexandrian period and to hieroglyphic inscriptions of historical importance, dating from the XXV dynasty, in which the name of King Taharki were struck out by hammer during the XXVI dynasty under the reign of pharaoh Psammetich II.

These results open fine prospects for the future excavations on the Tell Atrib site.