

MUSEUM SERVICE

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Cover Picture—

A faience ushabti in the form of Osiris, (5¼" high), one of the many objects of Egyptian material on display in the Hall of Man on the second floor.

Osiris was king of the underworld, and as such he became more and more prominent in Egyptian religion. In the Old Kingdom a good life was considered helpful in the next world, and the aid of Osiris was valuable. But in the Middle Kingdom, he became judge of the dead.

Egyptian art is expressive of the period and distinctive in design. It represents the formality of life, and is not characteristic of any other group of people in all its aspects.

Cover picture and illustrations of article entitled, 'Egyptian Material' photographed by William G. Frank.

What Our Readers Want

Museum Service, as its name implies, aims to *serve* the ever-widening public of the Rochester Museum of Arts and Sciences by informing, educating and, we hope, stimulating those it reaches. Its audience may be divided, roughly, into three main categories: the citizenry of greater Rochester, the members of the Rochester Museum Association and the staffs and friends of the several hundred museums scattered throughout this nation as well as those in foreign countries.

Recently, we mailed a questionnaire in an effort to evaluate the multiple function of our publication as a newsletter, educational vehicle of science and history and as a journal useful to the museum profession. Forty per cent of our readers, approximately 600 persons, took the time to fill out and return the cards which contained a total of 21 questions. This return, we are told by experts in the field of opinion polls, is a high percentage. This response shows, too, that our special public is ready and willing to help us improve the quality of our bulletin. Thirty-six per cent of those who replied said that they regularly read *part* of the contents of each issue, while 30.4% read *all* of it, and 3.3% read *most* of it. The remainder did not reply to this query.

Two-thirds of the total of those participating in our survey indicated that the articles covered their subjects adequately. Six per cent thought that they were too short, and only 1.2% stated that the subjects were not sufficiently treated. We were es-

pecially interested to know what might be the preferred subjects. Nature led with the high score of 64%, while the other topics in decreasing order of interest were: History, 58.5%; Museum Activities, 42.1%; Geology, 37.7%; Museum Exhibits, 35.4%; Anthropology, 34.5%; Hobbies, 33.2%. Apart from the interests of the readers, we were concerned, for the achievement of greater efficiency, whether we should change our present policy of publishing a monthly bulletin. Over one-third (36.4%) of those replying to this question, desired the publication to continue with its ten issues annually. On the other hand, 23.1% wished a quarterly and 11.2% preferred a magazine once every two months.

The most important result of this survey is that almost 100 worthwhile suggestions were submitted. A number of these which are feasible to follow should improve the contents of the magazine and more nearly cater to those whom we serve. There seemed to be a strong emphasis of approval of *Museum Service*. Several persons urged us to print more articles on local history, others wanted more items for children, several asked for "travelogues." We were not discouraged either to read a few critical remarks but found all of them constructive. It pleased us to read the comments, "I enjoy your journal. It is doing a good job" and "We think the Bulletin is fine as it is." We are, indeed, thankful to everyone of those generous readers who has directed us along the road of progress.

—W. STEPHEN THOMAS, *Director*



Painted palm wood falcon representing the god Horus.

IN THE MUSEUM'S COLLECTION* by
Daniel M. Barber, Junior Anthropologist.

Although small and incomplete in many respects the ancient Egyptian collection at the Rochester Museum of Arts and Sciences represents a time span of 150,000 years of human activity along the Nile.

Acquired through scattered purchases and gifts since 1916 this collection gives the student a cross section, as it were, of the various cultural characteristics which these people exhibited as they developed from a relatively simple way of life toward a very elaborate one.

Currently on exhibit in the Hall of Man are many Egyptian items on loan through the courtesy of the Met-

ropolitan Museum of Art and the University of Pennsylvania. These have been employed to supplement our own collection and will not be discussed in this summary.

The story which our collection tells is divided into a pre-Dynastic period and a Dynastic period. The former is represented largely by stone tools of jasper and flint and have, for the most part, been collected at the Fayum Depression south of Cairo. This Depression is the remains of an extinct lake around which many of the earliest peoples made their camps. The earliest implements belong to the Middle Paleolithic period and are called Levallois "flake blades."

*Special thanks to Roger K. Powell, registrar at Colgate Rochester Divinity School, for his labors in translating the hieroglyphics found on many of our objects.

Levallois Tradition in Egypt

The Levallois tool tradition initially began in Europe. Characteristically it constituted the careful preparation of a flint core before the removal of an ovoid or pear-shaped flake. This flake was then given only minor secondary working along the edge. The Egyptian version of this technique was to make the flake longer and narrower giving the appearance of a blade. McBurney in *The Stone Age of Northern Africa* reports this tool to be a common type in the Middle Paleolithic of Upper Egypt and associates it with a river terrace level at three to four meters above the water.

Two Levallois tortoise-cores which are rather difficult to date are also in our collection. Found near Cairo these by-products of the Levallois industry were not common in lower Egypt until the silt stage of the Fayum Depression which dates about 50,000 years ago. The difficulty in assigning these a date lies in the fact that the tradition continued to be popular into Neolithic times about 4,000 years ago.

The Upper Paleolithic is superficially represented by a collection of small blades, almost microlithic in size, ranging from two and one-half to seven-eighths inches long. The blade tradition arose somewhere in southwestern Asia and filtered into lower Egypt about 35,000 years ago. The tradition consisted of the preparation of a prismatic core from which was pressed, in a longitudinal direction, long, thin, narrow flakes called blades.

Egypt, unlike Europe, shows a very rapid transition from Paleolithic to Neolithic times. This transition period known as the Mesolithic began at the

close of the Ice Age in Europe about 12,000 years ago and is evidenced by the occurrence of tiny blade tools called *Microliths*. This period is not represented in the Museum's Egyptian collection.

Egypt Enters Neolithic

The concept of farming first developed in Mesopotamia and then spread west into the area of the Nile delta about 7,000 years ago. This age of agriculture known by archeologists as the Neolithic Period laid emphasis upon polishing and pressure flaking in the manufacture of stone tools. In our collections there are two types of the typical pressure flaked projectile points. The first is the tiny stemmed or "tanged" variety which averages about seven-eighths of an inch long. One, however, is over two and three-quarter inches. The other, which is even more typical of the Fayum Neolithic, is the winged projectile. Another type of tool that was common at this period was the pressure flaked knife. These were sometimes hafted as knives, or in the case of the serrated examples, as sickles for cutting grain. Still surviving in this period was the blade tradition of the Upper Paleolithic. Several examples are in the Museum's collection.

Some objects not clearly dated include two jasper drills and a stemmed spokeshave which appear to belong to the Levallois tradition.

An important development during the Neolithic was pottery. Although the concept was not initiated in Egypt either, it did spread into the area at an early date and characteristic types soon developed. During the Gerzean Neolithic, for example, there was made a buff-colored ware with red

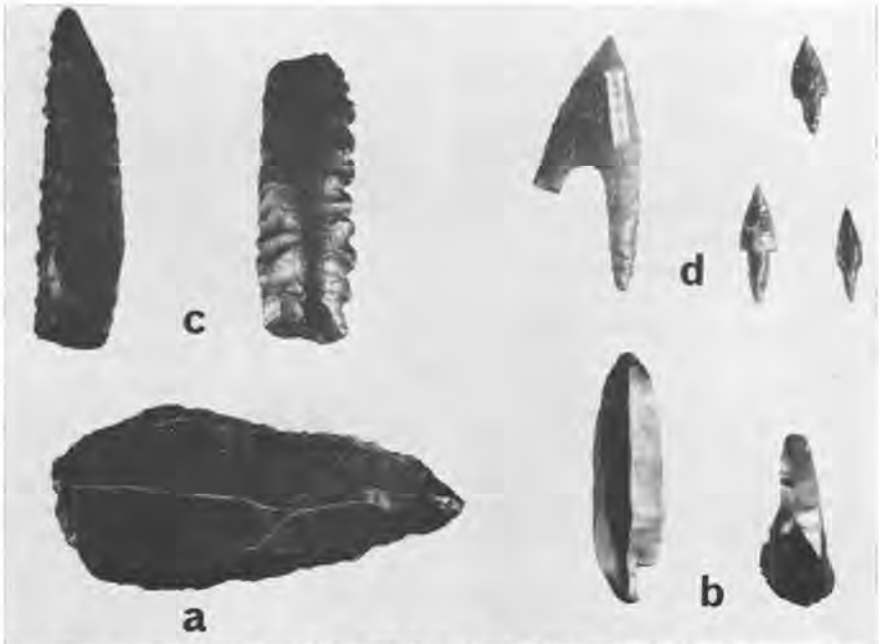
designs. In our collection there are two such jars which were discovered in graves near Fayum. These are decorated with multi-oared boats which fly standards remarkably similar to the insignia of the nomes in later day Egypt. It is speculated that these emblems may represent an incipient step toward the invention of writing.

Faience

An extremely interesting material dating to the earliest dynasties in Egypt is Faience. The Museum's collection contains beads, necklaces, statuettes, scarabs and ushabtiu made of this substance. Faience is simply a glazed pottery consisting of a body material composed of a powdered siliceous material such as sand, or quartz, bound together with some

organic material and glazed with a composition of sodium silicate and calcium silicate. The color, determined by the addition of various impurities, is predominately a shade of blue or blue-green. Copper was added to the glaze for blue. Green usually turned brown, an indication of iron, and several of our ushabtiu display this hue.

In our collection faience beads are predominately cylindrical and have a blue color. They range in diameter from three thirty-seconds to one-quarter of an inch. One faience necklace currently on display is constructed of eleven units arranged in the following manner. Three parallel strings each with four faience cylinders are preceded and followed by a set of four tiny circular beads alternating red and yellow. These, in turn, are followed by a pair of globular



Pre-Dynastic Stone Tools: (a) Middle Paleolithic Levallois flake blade, (b) Upper Paleolithic blades, (c) Neolithic pressure flaked blades, (d) Neolithic Fayum winged projectile point (Left) and tanged points (Right).

beads separated from one another again by three tiny beads in the pattern yellow-red-yellow. Polychrome faience beads such as just described did not appear until the Eighteenth Dynasty and this is perhaps the date to which the necklace belongs. The necklace has a pendant in the front in the form of a standing hippopotamus. This represented the goddess Thûeris who was protector of maternity and who watched over the birth of children.

Another necklace, composed basically of cylindrical faience beads, has five blue faience pendants, each in the form of a lotus blossom. The Egyptian lotus is usually blue and is associated with the high god Osiris and is worn by Nefertete. It is commonly linked with fertility, the sun and resurrection. For these reasons it is often found placed on mummies. The intensity of the blue on the blossoms would probably date it during or after the Eighteenth Dynasty.

One small necklace supposedly from prehistoric Egypt is composed of thirty-three triangular elements each consisting of a triangle on either side of which is a blue faience cylinder five-sixteenths of an inch long with carnelian beads at the two basal angles. The bases are strung together and the third carnelian bead hangs as a pendant separated from the tubes by a tiny circular faience bead. A fourth necklace of blue faience is composed of thick tubular beads three-eighths of an inch long separated by either one, two or three tiny polychrome beads.

There are other faience beads in the collection which, although not composing any particular necklace or ornament, are of importance to mention. One bead in particular which is

of interest to archeologists outside the Egyptian area is the segmented faience bead. There is in our collection one type which was in vigorous circulation between 1600-1300 B.C. Through the Mycenaens it became diffused throughout Central Europe and has become a good reference for cross dating Bronze Age sites in Europe.

It is the opinion of the author that the majority of the beads in the collection belong to the late Dynastic periods. There are many deep blue and purple varieties with the crinkled, sugary glaze characteristic of the Thirtieth Dynasty for example.

Ushabtiu

Ushabti figures are found in nearly every collection. The anthropology division has seven, each representing the god Osiris. The concepts inspiring the ushabti figures may have existed in pre-Dynastic times for certainly prototypes of the figures themselves did. It was believed in classic times that the Kingdom of Osiris or the *after-life* required work gangs to perform the menial tasks of planting and harvesting of the wheat in the fields of Aâlu. Ushabtiu were placed in tombs as substitutes for the deceased in these tasks. Thus, prepared for their labors, the earlier figures carried digging sticks and baskets but at the end of the Middle Kingdom the worker figures were replaced with small statues in the form of mummies. This new form was in connection with the worship of Osiris the King and Judge of the dead, the resurrected god. The figures in our collection are standardized, each made from a mold, inscribed with hieroglyphics, and then baked. Osiris is portrayed as a mummy with only

his face and hands uncovered. His arms are crossed and he holds a crook to his right shoulder and a lash to his left. All examples have a flat band down the back and this was the usual location of inscriptions during the Eighteenth Dynasty. Many of our own, on the other hand, have inscriptions across the front. Mr. Robert K. Powell, registrar at Colgate Rochester Divinity School, has translated one of these and it reads "(for) the deceased Psamek, to provide him with seeing."

Scarabs

Scarabs were also made of faience in an attempt to imitate the blue stone lapis lazuli. The scarab beetle was identified with the god Khepera. The Egyptians believed that the hatching of a new beetle indicated spontaneous generation. Thus the scarab became a symbol of self-generation, the sun rising and moving across the heavens. Heart-shaped scarabs were placed over the heart of the dead while a Chapter of the *Book of the Dead* was read.

Scarabs are found in tombs as early as pre-Dynastic times. By the Sixth Dynasty (2600-2500 B.C.) they became both amulets and seals. Egyptian officials wore the scarab with inscriptions of either the king or their own name and title. During the Eighteenth Dynasty they became very popular souvenirs for people visiting temples, fairs or shrines. They began to be fashioned into new shapes. Some had human faces such as a very large, brown clay example from the school service division. It measures three and five-eighths inches long by two and one-half inches wide and has inscriptions on the under side which have not yet been deciphered.

The school service division is the custodian of the Museum's scarabs. Two are nicely carved from lapis lazuli, a blue-green stone.

Hand carving disappeared in the Nineteenth Dynasty and was replaced by mold casting. The popularity of the scarabs continues to this day and is evident from a souvenir necklace with six molded clay beetles. These were rubbed with a blue-green pigment to make them appear authentic. The casts, however, may have been made from original artifacts for on the bottoms were well formulated inscriptions. Mr. Powell states: "Each bead was roughly stamped with the same die before hardening. By comparing respective parts of all six the thrust of the message became clear. The first of three lines depicts two gods and a cobra meaning 'goddesses.' These are followed by the determinative of 'seeing.' Line two shows two dog-faced apes sniffing lotus blossoms under the solar disc. Line three is broken and obscured except for the central sign for *Million*. The message reads: *May gods and goddesses watch (over you), (assuring) happiness in the hereafter for a million years.*"

Glass

Several glass objects are in our collection. It is not known exactly where glass was discovered but there is reason to believe that its origin was in Egypt and that it developed from faience. The technique for manufacturing an object out of glass was the cane method; the use of the blow pipe was not discovered until the first century B.C.

We have one glass vase five and five-eighths inches high in the shape of an amphora. This container was



Decorated glass vase, 5 $\frac{3}{4}$ inches tall.
Made by glass cane process.

built from molten glass rods in the following manner. To the end of a tapered copper mandril a body of soft siliceous paste was applied and then tied in a rag. This was formed to the desired shape and baked. The molten glass rods, about one-eighth of an inch in diameter, were wound about the shank of the mandril and over the paste mold until all were evenly coated. When this operation was completed the copper mandril cooled and shrank and was then easily removed from the neck of the vase. The soft paste was then washed out. The decoration was applied immediately after the molten glass was

smoothed. Thin colored rods were wound about the body and welded into the surface.

Our amphora consists of a pale blue-green body upon which milky threads were twined in a spiral fashion from the base to the spout. At the widest portion the threads were scraped in a longitudinal direction giving a scalloped appearance to the design. The green color was accomplished by adding copper while the milky white was produced by adding oxide of tin. This and a second Egyptian vase are on exhibit in the Hall of Man on the 2nd floor. The other vase is taller and has only a single handle. The spout is wider and more everted. The glass is pale green, undecorated and appears more fragile.

One small bowl is of the size and proportions of a Chinese tea cup and it may well have been used as such a vessel. It is alleged to belong to the Greek period and is composed of transparent amber colored glass, iron or manganese being responsible for the tint.

Also of the Greek period is a glass bracelet three inches in diameter. It is constructed of a transparent pale green rod three-eighths of an inch wide and three-sixteenths of an inch thick. It now has an iridescent patina.

Glass beads were made by winding a thread of glass around a hot copper wire. The point where the thread was pulled off can still be seen on most authentic examples.

Wood Was Scarce

Although wood is one of the oldest materials employed by man it was a

scarce commodity in Egypt. The most available type was palm but this was too coarse for detailed carving. Sycamore and acacia were preferred but they were difficult to procure. The Museum's collection contains two wooden objects, both of which are palm. The first is the undecorated hull of a model boat. Such toy vessels often accompanied a body in its tomb. In the Second Intermediate Period and in the Middle Kingdom boats were designed to be used in the after life. Under circumstances which prevented the approach to a tomb by boat, model boats were substituted as symbolic of the actual crossing of the Nile and were simply buried in a pit after the ceremony.

Most of the time wood was painted. We have on exhibit a hawk painted in bright hues of brown, yellow, green and red. Painting was rarely done directly on wood itself. The object was first given a thin coat of gesso, which is simply a mixture of plaster of Paris and glue. The pigments made from local minerals were mixed with albumen or honey. Yellows were made from ochre or sulphuret of arsenic, greens from pulverized lapis lazuli or silicate of copper, reds from ochre, cinnabar or vermilion. Other colors such as brown were made by combining the basic ones. During the Twentieth Dynasty it was fashionable to coat painted surfaces with varnish. The effects of discoloration, however, brought about an end to this practice at the close of the period. The hawk or falcon symbolizes the solar deity Horus, the brother of Osiris, Isis and Set. The symbol is identical with that of Ra. The Pharaohs always had the falcon symbol in their first title.

Horus in other Guise

Horus was more often depicted as a child with a finger in its mouth. A small seated bronze statue, three and three-quarters inches high, of a naked boy may well represent this deity. It was neither common to represent low ranking citizens in a material such as copper nor in a seated position. With few exceptions Horus was the only god who was represented in the nude, nakedness being a sign of low class or of childhood.

No trace of a bronze figure is found earlier than the Sixth Dynasty but other than this there have been no clues to date the object as yet. Metal statues such as these were made by beating the metal into shape. Sometimes the head, hands and feet were cast but the patina being so heavy upon our own example it was not possible to determine how the appendages were made or attached.

Some Miscellany

There are several ceramic items in our collection worth mentioning. One is a small earthenware lamp probably of the Roman period. The other is a terra cotta head of a reclining woman. The features are natural and in the Hellenistic style, far removed from the rigidity of the earlier Egyptian periods. The third item is a small pendant about an inch high representing the god Anubis, the guardian of tombs. He shared with Toth the duty of conducting the dead. He was the judge in the hall of Amenti, weighing hearts of the dead against feathers of truth. It is speculated that the jackal was initially deified to placate and prevent him from eating the bodies of the dead.

Animal Mummies:
(a) Crocodile, (b) Fish,
(c) Bird (wrapped).



Theriomorphism and Animal Mummies

An interesting sidelight to Egyptian religion was theriomorphism. Gods were thought of as living in theophanies or certain animals such as hawks, fish, jackals, etc. Thus we find mummified animals or to the Egyptian believer—mummified gods. In our collection there are eleven animal mummies: 2 fish, 1 crocodile, 4 falcons or hawks, 3 kites and 1 possible crane. There are also two possible “dummy mummies” which contain no bones. The authenticity of these has been doubted by Mr. Charles F. Bridgman of the Radiography department at Eastman Kodak Company. There was, in fact, a “mummy factory” near Thebes in existence about 1920 at the time when these were collected and they do appear to lack the type of preservative bitumen common to the others in our collection. It was through Herbert C. Pollack, M.D. and Charles F. Bridgman that our collection was x-rayed to determine the species of animals

represented. This was mentioned in their study, “Radiography in the Museum,” in the April, 1957 issue of *Museum Service*.

The word *mummy* is derived from *bitumen* from the Arabic *muma* which is a preservative. Bitumen, however, may never have been used in mummification until the earliest Ptolemaic times (300 B.C.). Wood pitch and resins would have preceded these.

Animals were mummified in the same manner as were men, depending on the period involved. They were wrapped in linen and soaked in a preserving agent. In the case of our own examples it was bitumen. This alone would assign them to the Ptolemaic period. Some examples have elaborate bandage designs such as the one on exhibit. This was an innovation during Roman times. In general it can be said that the theriomorphism cult was not typical of Egypt during the peak of its religious development but only toward the end.

From a Human Mummy

There are no examples of human mummification in our collection except for a portion of a painted linen wrapping. The painting which is in red, yellow, blue and black is composed of three basic figures. The first, on the extreme left, is nearly entirely gone. That it is Osiris can be deduced from the presence of the crook. His robes have what appear to be lotus blossoms arranged in a manner so that one petal is shared by two flowers in an interlocking arrangement. The exact position to which Osiris is conforming here cannot be distinguished. To the right and arranged in a vertical order are two smaller figures. At the top is a figure of a kneeling woman ten inches high. She has about her neck a collar or *uasekh* which is supposed to enable the dead man to free himself from the wrappings. Above her head is a red disc probably symbolizing the sun or Ra. Between her and Osiris is an unidentified symbol consisting of a

yellow disc from which three barbed, red rays emanate downward.

Below the woman is the jackal headed god Anubis, sitting on his haunches. In his hand is the symbol of life. Below him is a portion of another life symbol and possibly a head.

Many items are now in our collection which are modern Egyptian duplications of ancient elements. For example, there are four necklaces each with a pendant of a jackal, pharaoh or scarab motif. They are composed of clay and had been stained green. The beads are made of modern glass.

Egypt Perpetuated Ideas

Except for a few basic discoveries such as glass, and even this is doubtful, Egypt has contributed little to man's cultural development. Its greatest contribution was that it preserved and elaborated upon those inventions conceived originally by the Sumerians. Egypt was to Sumer as Rome was to Greece.

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The materials discussed in this article are being displayed on our second floor. They are located both in the permanent exhibition cases on *Early Civilization* and in a specially prepared exhibit devoted entirely to our Egyptian collection and located near the elevator.

An Imaginative Mind and a Plan

This marks the 110th anniversary of the birth of this remarkable man who had an imaginative mind and a plan for the benefit of all mankind. Much of his interest centered around the development of the microscope and improved production methods to make it available for widespread use. As one of America's great scientists he contributed an important chapter in the history of science, industry and education. His contributions in optical science have changed the course of life for millions of people around the world. Today the microscope is the principal tool of science.



The zoom microscope offering continuously variable "in-focus" magnification, one of three new low-cost models designed for elementary and high school students, represents a fulfillment of the dream of Edward Bausch.



Edward Bausch (1854-1944) with the microscope he built at the age of 14. The instrument is still serviceable today.

Edward Bausch also had a plan and that was realized in the Rochester Museum of Arts and Sciences, the first unit of which is a living monument to his memory and that of Mrs. Bausch. It fulfills his hope "that this museum will continue to be a source of enlightenment and pleasure for generations to come."

LYNX RUFUS, the Bobcat



By **James D. Greiner**, Associate Curator of Biology.

Called Mah-wee, the silent one, by the Indians of the northeastern woodlands, *Lynx rufus*, the bobcat, is the magic ingredient for many campfire story sessions and it plays the lead in many contemporary legends. To catch a glimpse of him, one must be out in the cold, tree-splitting nights of mid-winter, for it is at this time that he, too, is likely to be abroad.

The bobcat is shy to the point of obsession and may live near you in complete secrecy for many years. Being primarily nocturnal, he is often seen in the headlights of automobiles as he runs in his stiff-legged gait across old logging roads. Typically, he is a dweller of impenetrable cedar and spruce swamps, yet for all of his shyness and devious ways, he is quite plentiful and occupies a broad range.

He is found in the entirety of New York State, is at home from Maine to the rain forests of Washington and Oregon, and even lives in good number on the deserts of the southwest. Apparently he cannot tolerate the extreme cold of arctic and subarctic winters and in these isolated areas he is replaced by his counterpart, the true lynx.

The lynx is a somewhat larger animal and is equipped with prominent ear tufts of black fur. He also has a black band which completely encircles the tip of his stubby tail, while the bobcat has a black patch of fur on the top of his tail. The bobcat is more rufus or rusty-red in color than the lynx, hence his scientific name, *Lynx rufus*. The gray colored lynx is about ten pounds heavier than the bobcat in average body weight.

Perhaps one of the most fascinating, and at the same time eerie, aspects of this animal's appearance are his eyes. Varying in hue between light jade-green and pale yellow, with the vertical slit irises typical of all felines, he will fix you with a baleful stare that is almost hypnotic. The cat seems to possess fear for no other animal and is a very capable fighter when cornered by dogs. He has virtually no natural enemies, with the exception of man, and perhaps this fact explains the wide latitude that he enjoys with regard to his range.

Comparatively little in the form of concrete knowledge is available with regard to this animal's life story. Data dealing with his breeding habits, etc., are sadly lacking, but he is known to be an opportunist and, when hungry, will make a meal when and where the occasion presents it-

self. Fond of fish, as would be expected, he will lie motionless for long periods of time at the edge of creek ice in hopes that a fish will chance his way. At times like this, he is a world of patience. The spell is broken only by the occasional twitching of his stubby tail. Bobcats can and often do eat porcupines, and have developed the art of killing these slow witted animals to a fine degree. The porcupine will roll up into the shape of a ball when danger, in this case the cat, approaches. The bobcat crouches near the porky and when the near-sighted quill pig relaxes to continue on his way, the cat reaches deftly beneath the quill-free abdomen of the porcupine and with lightning speed, unzips him. He then very carefully makes his meal, often receiving a few quills for all his cunning and care. Sometimes these few quills are sufficient to eventually kill the cat, as they often work deeply into the lips and jaws to make the simple act of chewing an agonizing experience. As a result of the latter, many bobcats have found death by starvation. The only other animal that habitually eats the porcupine is the fisher. The bobcat is actually a carnivore but will frequently eat foods other than meat. In the winter he usually subsists upon the varying hare or snowshoe rabbit, along with other small rodents and birds.

The bobcat is gifted with one of nature's foulest dispositions, and even while courting his lady love, emits throaty growls and snarls, which I am sure could be interpreted as tones of endearment only by a female bobcat. He dens in hollow logs, brush piles and beneath upturned roots, and the females give birth to one to four young during late April and

early May. These kittens are blind and completely helpless at birth, but soon after they can see, display the baleful manner and sour disposition of all bobcats and spend the bulk of their waking hours fighting among themselves.

To the hunter, there are few sports of late winter which offer the excitement and challenge found in chasing bobcats with hounds. I am sure, however, that this unique sport would soon die out completely if results were based upon hours spent to bag one bobcat. To hunt this elusive critter, the hunter needs surprisingly little equipment. Besides hounds, a good set of lungs and a pair of legs that will stand up under the strain of ten to fifteen miles a day on snowshoes, head the list. Bobcats are considered game animals in most of the states in which they are found, and, unfortunately, are still listed as bounty bearing animals by many agencies. Recently, certain enlightened state authorities have removed this bounty status, where it applies to not only the bobcat but other species as well, and as a result are enjoying a much healthier operating budget.

As would be expected, the bobcat has some rather noxious though natural habits. He will, when opportunity raps, condescend to kill a chicken or two and will eat game birds and their eggs. However, even in the face of this admission, I have found that the bobcat is an amateur when compared with other animals, such as the fox and weasel, in matters of a farm pest nature. This fact may be due to the animal's retiring nature and to his shyness. The bobcat has, on rare occasion, been observed killing sheep and young deer but, again in defense of the latter, he is much

like the coyote in that he will eat diseased and wounded animals and, in doing so, performs a very valuable service to man and earns his reprieve from the bounty list. This facet of the animal's life story is not unusual when one considers that the cat has been recorded at weights upward to sixty pounds, with thirty-five pounders reported in common numbers. His average body weight is usually deemed to be about twenty-five pounds.

The bobcat has four very valuable worldly possessions—his feet. They are large and, to some casual observers, seem ungainly. But to the bobcat, they are a means to an existence in a harsh world. Being well padded with fur, these feet afford the cat secure footing on deep winter snows and are a means to the lethal silence afoot, that he must have while hunting. Here I wish to interject a bit of fact that will probably extinguish a few popular misconceptions with regard to the vocal abilities that the bobcat is credited with. He is vocal, to the extent of sounding much like a common alley cat with a bit more volume but this writer, having heard the cats many times, has never found any similarity between the squall of a bobcat and the crying of a baby, the scream of a fair damsel in dire distress, etc. The cat uses his vocal cords

in a most practical manner and not to scare campers out of their skins, as many people believe, though this may be a decided fringe benefit. While hunting, the cat will emit squalls at regular intervals, and for the apparent purpose of paralyzing small prey animals into a state of immobility, thus making them easier to catch. Since he hunts during the still of night, people endowed with good hearing and even better imaginations return home from camping trips etc. with the "unreal screams of giant catamounts" still ringing in their ears.

Certain few authors, such as Van Wormer in his *World of the Bobcat*, have added a vast segment to the little known life history of this fascinating animal, while others have magnified the deeds that this cat is capable of and, I am afraid, have created confusion in the minds of many. This, then, summarizes the meaning of the word "bobcat," for to many he is an animal that defines a fabulous study source, while to others he remains the wildcat and the subject of many good story sessions around the potbelly wood stove. To most, he is a wonderful combination of both and perhaps this is good, for I seriously doubt that my tireless interest in this beautiful creature could be nourished by fact alone.



Bobcat and kitten watch a porcupine. Drawing by Douglas Howland.



Primitive Art of New Guinea

by
Gloria C.
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Wooden objects of ancestor worship from New Guinea: (Left) 2 ancestor figures with typical beak style of Awar, (Center) Polychrome cult figure, (Right) ancestor figure with soul symbol (bird) on head.

One of the outstanding memories of my trip to St. Louis during the last week of May, to attend the annual meeting of the American Association of Museums, is the acquisition for the Museum of a fascinating collection of primitive art from New Guinea. The details of the acquisition make an intriguing story of a

once-in-a-lifetime experience which has all the elements of Christmas morning and a bargain-basement scramble.

On the opening day of the A.A.M. meetings, mimeographed sheets were distributed to all delegates announcing the fact that the May Department Stores Company, Inc., through

its St. Louis branch, *Famous-Barr*, offered to donate a certain number of pieces of New Guinea primitive art to any museum which wanted them. All that was asked of us was that we go to the City Art Museum the next morning to make selections.

With a sense of excitement and anticipation akin to my childhood sensations on Christmas Eve, I made an appearance shortly after ten o'clock at the City Art Museum where I was directed to several basement rooms. Upon entering the first room, a vista of weird and colorful art pieces greeted me. A number of museum people were already there and milling around among the tables laden with primitive objects d'art.

The artifacts had been separated into several groups according to their value; each group was designated by a different colored tag. Each museum was permitted to choose one artifact with a blue tag (the most valuable in the collection), two bearing red tags and three tagged with yellow. In addition, we were given three arrows or spears and three carved nuts, all without tags.

The atmosphere was charged with the excitement of the chase. Everyone seemed to be thinking "What can I find?" or "How much is it worth?" It seemed to me that each time I spotted a particularly interesting piece, the tag indicated that someone had gotten to it before me and designated it for his museum. However, in spite of several disappointments, I did discover several fine pieces which had not previously been chosen and hastened to tag them for the Rochester Museum of Arts and Sciences.

Without doubt the finest piece in the collection is an intricately carved

wooden ceremonial drum. Its surface is completely embellished with carved symbols. Its hour-glass shape appears to have been carved from a hollow tree trunk. At approximately midway, a handle has been carved in one with the body of the drum.

There is in the collection a polychrome, carved wooden ancestral figure about four feet tall and shaped like a human male, wearing a headdress bearing a bird or "soul" figure. Another ancestral figure is a brilliantly polychrome irregularly shaped, abstract representation of a human bust. Still another piece is an ancestral tablet decorated with a carved anthropomorphic design.

Also in the group are male and female ancestral figures, each about twelve inches high with a grotesque face, beak-like nose in the style of Awar and exaggerated headdress reminiscent of Indonesia. A ceremonial breastpiece is fashioned of cream colored feathers cut in a fish motif accented with three bright red feathers. Three nuts carved into faces and adorned with feathers and colored beads, three polychrome arrows or spears with bamboo shafts and a carved bamboo lime container complete the accession. The latter was used to hold the lime which was chewed with betel nuts according to New Guinean custom.

What makes this collection an exciting acquisition is the fact that it fills a gap in the Museum's anthropological collections which hitherto have contained practically no artifacts from New Guinea. Museum anthropologists now can offer scholars more complete study material from the Melanesian group of the Pacific islands.



Ceremonial drum, carved from a hollow tree trunk.

Another factor which increases the interest in this new collection is that it is typical of the primitive art of New Guinea which Michael Rockefeller, son of the Governor of New York State, was seeking when he lost his life two years ago on an expedition to collect artifacts for the Museum of Primitive Art in New York City. Most of us have heard about this tragedy and perhaps have wondered what caliber of art could possibly be worth a man's life. The an-

swer is not so much that the art pieces are rare or aesthetically valuable but that they tell us a great deal about the culture of the remote and primitive people of New Guinea.

The collection has been placed on display on the second floor of the Museum where it will remain through September. It is included with objects from the general Pacific area known as Oceania, consisting of Polynesia, Micronesia and Melanesia.

1964-1965 Color Film Lectures

Sponsored by the Rochester Museum Association

Adult Series

October 14
South America: Mystery of the Yucos
Hector Acebes

December 9
Escape from Tibet
Thubten Jigme Norbu

January 13
The Arab World
Margaret Baker

Wednesday, 8:15 P.M.

February 10
The Wreck Hunters
Ralph Gerstlé

March 10
Land of the Mayas
Edward M. Brigham

April 14
Land of the Caribou Eskimos
Art Wilson

1964 — SEPTEMBER — CALENDAR

1 Tuesday	Rochester Rose Society—8 p.m.	
2 Wednes.	Genesee Cat Fanciers Club—8 p.m. Rochester Aquarium Society—8 p.m.	
3 Thursday	Rochester Cage Bird Club—8 p.m.	
4 Friday	Rochester Amateur Radio Ass'n—8 p.m.	Public Star Watch—8 p.m.
6 Sunday	MUSEUM CLOSED	
7 Monday	LABOR DAY—MUSEUM CLOSED	
8 Tuesday	Rochester Hobby Council—8 p.m. Rochester Numismatic Ass'n—8 p.m.	
9 Wednes.	Rochester Academy of Science—Ornithology—8 p.m.	
10 Thursday	Rochester Philatelic Ass'n—8 p.m. Rochester Dahlia Society—8 p.m.	
11 Friday	Morgan Chapter—N.Y.S.A.A.—8 p.m. Rochester Amateur Radio Code Class—8 p.m.	Public Star Watch—8 p.m.
13 Sunday	FAMILY PROGRAM—Movies 2:30 and 3:30 p.m.—Polynesian Culture, Birds of the Countryside	
15 Tuesday	Rochester Button Club—1 p.m.	
16 Wednes.	Monroe County Hooked Rug Guild—10 a.m.	
17 Thursday	Genesee Valley Gladiolus Society—8 p.m. Rochester Bonsai Society—8 p.m. Genesee Valley Hiking Club—8 p.m.	
18 Friday	Jr. Numismatic Club—7:30 p.m. Rochester Amateur Radio Code Class—8 p.m.	Public Star Watch—8 p.m.
20 Sunday	FAMILY PROGRAM—Movies 2:30 and 3:30 p.m.—A Is For Architecture, Stars and Stripes (fireworks display)	
22 Tuesday	Rochester Numismatic Ass'n—8 p.m.	
23 Wednes.	Men's Garden Club—8 p.m. Seneca Zoological Society—8 p.m.	
24 Thursday	Genesee Valley Quilt Club—10:30 a.m. Rochester Philatelic Ass'n—8 p.m.	
25 Friday	Rochester Amateur Radio Code Class—8 p.m.	Public Star Watch—8 p.m.
26 Saturday	Tribute to Edward Bausch, Museum Benefactor, on 110th anniversary of his birth—10:30 a.m.	
27 Sunday	FAMILY PROGRAM—Movies 2:30 and 3:30 p.m.—Singapore and Malaya, All American Roses	

SPECIAL EXHIBITIONS

1st Floor	Why Modern Architecture —models and drawings of modern architecture in Rochester. Sponsored by the Rochester Society of Architects. To September 20
Mezzanine	China: 18th Century to 1942 —ancient arts and culture; symbolic objects used in daily life; costumes, jewelry, religious objects, porcelain and toys. Through September
Library	Political Echoes —mementoes of past campaigns. Mid-September—Mid-November
2nd Floor	Oceania —artifacts and objects from Polynesia, Micronesia and Melanesia from the Museum's collection including recent acquisitions from New Guinea. Through October Highlights in the Development of Firearms —guns (muskets and rifles), small arms (pistols and revolvers), powder horns and parts from the Museum's collection. September 13—November 1 Egyptian Material —archeological and ethnological objects from the Museum's collection. September—October
3rd Floor	Samplers: Needlecraft of Pioneer America —a collection of hundreds of old samplers, some dating as early as the 18th century, loaned by the Whitman Company. To September 28