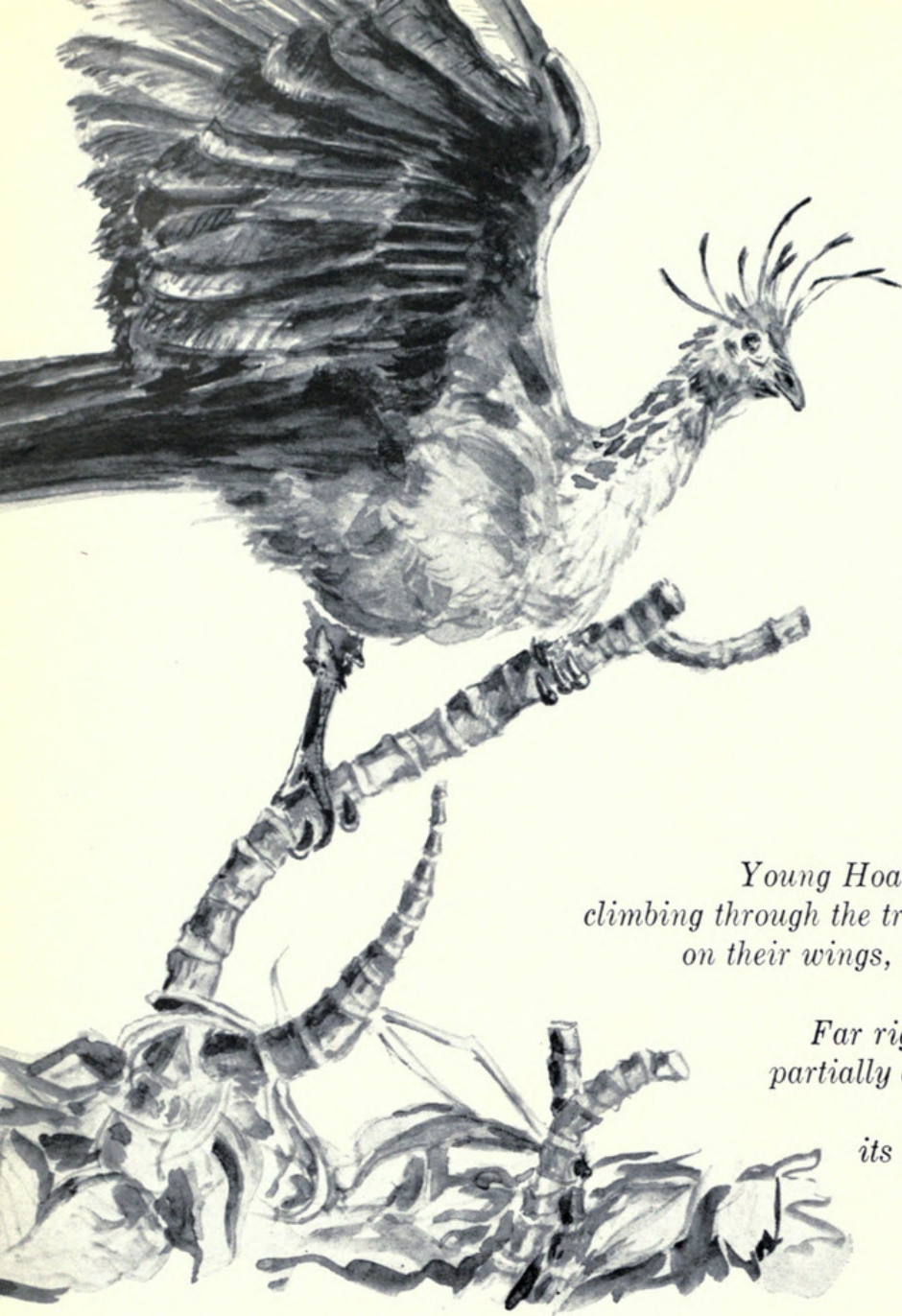




Bird of the Mangrove Swamp

by Michelle B. Grayson, Research Assistant, Bird

Young Hoatzins are helped in climbing through the trees by finger claws on their wings, right; they lose the claws as adults.

Far right; a nestling eats partially digested food. The baby bird puts its bill into the mouth of the parent to get its meal.



Illustrated by Tibor Perenyi

OCCASIONALLY, WHILE POKING through collections or browsing in the literature, one uncovers some fact so fresh and exciting that he breaks his routine to share it with others. For me, such a discovery was the Hoatzin. Few people would classify this bird as beautiful. It is certainly not graceful or colorful; nor unusually large or powerful, but unquestionably unique. From appearance to habits it ranks alone. The Hoatzin (family Opisthocomidae) is a sedentary bird of the heavily-wooded river banks and permanently flooded forests along overgrown river banks of South America. The Amazon is considered the center of distribution although Hoatzins occur from Guiana and Brazil to Colombia and Bolivia. These birds can exist only where certain marshy plant foods are available. They eat the tough leaves, flowers and fruits of these plants as well as small animals (fish or crabs) picked from the mud under the brush.

In general appearance, they are slender birds. A little over two feet long, head to tail, they weight only about one and three-quarter pounds. The plumage of the back is dark brown, spotted in places with white. The underparts are a light rusty color. The tiny head sports a long, erect, and bristly reddish-brown crest.

Breeding, which is apparently not restricted to a specific season of the year, occurs in colonies. The nests consist of simple stick platforms in the trees, usually four to fifteen feet above the water. The normal clutch includes two to four small yellowish eggs with pinkish spots. To feed, the almost featherless young put their heads into the gaping bill of the parent. The chicks are adventurous and make excursions early. They have, in contrast to the adults, a good grip with their feet and employ their bills in a manner similar to the parrots for climbing.

When alarmed, nestlings will dive into the water. They swim on or below the surface, utilizing both

their wings and feet in the process. An intruder is often unable to mark the progress of these remarkable babies except by the periodic reappearance of pairs of watchful eyes. Later, with danger passed, they climb out of the water onto overhanging branches. This escape, which is very suggestive of climbing reptiles, is aided by large temporary claws (moveable by special muscles and reminiscent of the wing structure of *Archaeopteryx*, extinct for 150 million years) on the first and second fingers of the wings. The corresponding flight feathers of the wing are retarded. Mature birds lose these claws and have normal flight feathers. However, they retain the habit of using their wings for climbing, often breaking their primaries in the process.

The single representative of its family, the Hoatzin is noteworthy in many respects. Systematically, it is believed to be closest to the quails, pheasants, and turkeys, but it retains many similarities to other birds ranging from the primitive *Archaeopteryx* to very advanced living birds. The digestive system, unlike most other birds, makes use of the crop rather than the gizzard for breaking up food. The resulting size and weight of a full crop tend to make the bird top heavy and



cause him to crouch and rest his breastbone, which has a specially-developed callous, against the perch. Adults maintain their equilibrium while hopping between branches by spreading their wings and flapping their tails.

Another distinctive feature prompts the local name

“stinking bird.” They have a musky odor which varies with the season and individual. The widely-accepted rumor that the flesh also contains this odor accounts for the natives’ neglect of the birds except for occasional medicinal purposes.

The presence of a group of Hoatzins is heard from afar. Their voice is remarkable for its harshness, varying from a hissing screech to a grunting croak. The name “Hoatzin” is of pre-Colombian origin and supposedly resembles the call.

Hoatzins are easily captured. A strong light seems to transfix them enough to allow a man to lift one off its perch. However, they do not live well in captivity.

Their inflexible routine is illustrated by the onset of breeding with every rainy season, independent of the frequency per year. There is also a case of note in which several breeding Hoatzins returned to their nests in a fallen tree. These birds starved to death while others lived nearby in growing trees.

So far, these birds have not been exploited. They have been allowed to remain obscure because no real use has been discovered for them. Useful or not, they too are beginning to feel the effects of civilization. Their already limited environment is dwindling and, therefore, man is their greatest though most unintentional predator.

DR. J. L. FRANCO ON AZTEC MUSIC

ON SUNDAY, MAY 21ST at 3 p.m., Dr. Jose Luis Franco C., a Mexican archaeologist, will give an illustrated lecture at the Museum on the pre-Hispanic music of Mexico.

Dr. Franco has spent many years studying the archaeology and the ancient writings of Mexico to understand the systems of pictographic writing developed by the Olmecs, Mayans, Zapotecs, and the Aztecs. As part of his general interest in the living culture of Middle America as it existed before the Spanish conquest, Franco specialized in the music of that period and has become one of the outstanding experts on the pre-Hispanic music of Mexico.

By consulting the works of Fray Bernardino de Sahagun and other Spanish observers who wrote shortly after the conquest he was able to learn much about the Indian schools of music, the part that music played in pre-Hispanic culture, and even to get an idea of how the music sounded.

Pre-conquest sources such as the Aztec and Mayan codices occasionally depict pre-Hispanic musical instruments and show them in use. Stone and clay representations of musical instruments are numerous and there are a surprising number of drums, flutes, whistles and rasps that have survived from pre-Hispanic times. It is possible to play the clay and bone flutes and the rattles and bells that have been excavated from archaeological sites. Dr. Franco has mastered several of these instruments during the course of his studies.

The music of ancient Mexico was an important part of the festivals held several times each lunar month to honor the gods. The rhythm of the music was carried by voices singing in monosyllables and polysyllables in cadence with the instruments. This use of a repetitive mixture of syllables to keep time was quite common, but there were also songs that told a story.

Pre-Hispanic musical instruments include both percussion and wind instruments. One of the largest and most important of the percussion instruments was the *huehueltl*, an upright drum made of a hollow log topped with a skin drum-head which stood waist high to the player. This instrument was accompanied by the *teponaztli*, a smaller hollowed log set on its side and played by striking the square tongues of wood that almost cover the “H”-shaped orifice of this instrument. The two tongues were of different length, which resulted in giving each a different pitch. Fortunately, several examples of both kinds of drum survive from the time of the Spanish conquest. These instruments are still being used today in the state of Tlaxcala and elsewhere in central Mexico. A third type of drum was made of pottery and had a skin head.

The wind instruments included flutes, ocarinas, whistles, and trumpets. These were made of bone, pottery, shell, cane or wood. The numerous rasps, rattles and flutes unearthed in Mexico make up in interest for their lack in size.

Dr. Franco’s discussion of the pre-Hispanic music will offer a unique opportunity to learn about an important but little known aspect of ancient Mexican life. Dr. Franco will speak in the Museum Lecture Hall. Members and the general public are cordially invited to attend.

—by John Hobgood, Chicago Teachers College



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