Con Moong Cave
A NOTEWORTHY ARCHAEOLOGICAL DISCOVERY IN VIETNAM

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IN APRIL and May 1976, we conducted excavations in Con Moong Cave (con moong means ‘beast’) located in Cuc Phuong National Park, close to the boundaries of the three provinces of Thanh Hoa, Ha Nam Ninh, and Ha Son Binh.

The present report deals with this archaeological undertaking, one of the more recent activities of Vietnamese archaeologists, which sheds additional light on an eventful and highly interesting period in Vietnamese and Southeast Asian prehistory: the Mesolithic.

This report may give some idea of Vietnamese achievements in the study of our prehistory and protohistory and our contribution to science in general in the past years when our country was going through the hard trials of war and when our people were nonetheless pursuing their efforts to build a new life.

THE CON MOONG ARCHAEOLOGICAL VESTIGES

1. Preliminary examination leads to the simple statement that this is an archaeological vestige belonging to the well-known Hoabinh Culture. Like all other Hoabinh caves, this is a “snailery.” Two features are attached to it: many flakes have been found, and there are two stages, an earlier one and a later one.

Moreover, below vestiges of the Hoabinh Culture, early and late, there has appeared evidence of an earlier stage of development, an earlier culture: the Son Vi Culture. This latter culture has been discovered and studied by us for some years now and dates back to the Upper Paleolithic.

Thus, Con Moong Cave may shed light on that turning point when man passed from
the Paleolithic to the Neolithic, thereby escaping savagery and heading for civilization.

2. Con Moong Cave is located in the limestone mountain range running northwest-southeast along the Da River and the right bank of the Red River, less than 100 km west-southwest of Hanoi as the crow flies.

The cave is beautiful and well ventilated and stands 40 m above the floor of the valley. The stream which flowed in that valley has now dried up; about 1 km away is a large stream. There are two entrances to the cave; excavations may be made at the southwest one, where enough room is left for archaeological diggings.

3. Excavations have been made over about 40 sq m, up to 3.5 m deep. The cultural layer shows 10 different strata, including the cave floor and the upper crust, which bears vestiges of prefeudal times and modern ceramics.

Strata bearing prehistorical artifacts may be divided into three different cultural layers (Fig. 1). From the top down, strata 2, 3, and 4 make up cultural layer III, the latest. Strata 6 and 7 compose cultural layer II. Stratum 9 constitutes cultural layer I, the earliest. In all these strata, kitchen traces are found; as we approach modern times, they become thicker and lie closer to the cave entrance, together with heaps of mollusc shells, either whole or broken, thickly stacked or mixed with earth. Strata 5 and 8 are thin (10 to 25 cm), with traces of burning but otherwise sterile. They divide the three above-mentioned cultural layers from each other.

Fig. 1 Con Moong Cave stratigraphy.
Cultural layer III extends 1.2 m from floor level; cultural layer II sinks to 2.8 m; and cultural layer I goes down to 3.4–3.5 m, where it adjoins the substratum.

**FORMS OF PREHISTORICAL CULTURE FOUND AT CON MOONG**

1. **The Hoabinh Culture**

Of the prehistorical cultures of Vietnam (and Southeast Asia), the Hoabinh is the best known so far and is often talked about these days. Had he been able to attend this meeting, our American colleague Jonathan H. Kress would have spoken about its manifestations in the Philippines. So let me report to you about cultural layer II, where tools typical of the classical Hoabinh Culture have been found.

By classical Hoabinh Culture, I mean the form discovered by the French archaeologist Madeleine Colani half a century ago. It is called Hoabinh II and is regarded as belonging to the Lower Neolithic in this region. Unlike Hoabinh I, tools made of pebbles worked on one face show a lighter and more refined appearance; unlike Hoabinh III, no edge-ground adzes and no ceramics were made.

Most artifacts found in this cultural layer are typical of Hoabinh Culture. The lithic artifacts are pebbles worked in one direction, such as almond-shaped, oval-shaped, or rectangular-shaped chopping tools, all of which could be called “long axes” as opposed to the typical chopping tools known under the common appellation “short axes”; disc-shaped scrapers with a circular working edge, also called “disc-shaped tools” because it is not yet known to what precise use they were put.

There have also been found tools made of bone (sharp-pointed) and hard, large-sized freshwater mollusc shell (scrapers or containers). These materials were not much used, but they are found in many Hoabinh vestiges.

Tombs in which the dead are buried with their knees drawn up against their chests and sprinkled with ochre are a common feature of Hoabinh Culture.

2. **Hoabinh III—The Bacson Culture**

Just as cultural layer II bears features of M. Colani’s Hoabinh II, cultural layer III carries traits of Colani’s Hoabinh III. The outstanding one is the presence of edge-ground adzes. But there is no Bacson sign and no ceramics, found in some late Hoabinh vestiges.

One point is to be determined: the relationship between the Hoabinh Culture, Hoabinh III in particular, and the Bacson Culture, and the dates and characteristics of these cultures.

Are they two different cultures (that may be contemporary) or the same one? Recent research and debates have led us to this conclusion: They are two parallel developments of the same cultures.

These two forms of development, carrying specific local features, may spring from the same source and advance toward the same peculiar trait: the axe with polished blade, commonly called the Bacson axe. Long axes, short axes, and disc-shaped tools are more numerous in the Hoabinh Culture, but are not absent in the Bacson Culture. Conversely, Bacson axes and Bacson marks are numerous in the Bacson Culture but are also found in the Hoabinh Culture.

We agree with M. Colani when she said that Hoabinh III corresponds to Bacson. However, we do not place it after the early Lower Neolithic but right at the early Lower Neo-
As to Hoabinh II, it is not an early lower neolithic, but a mesolithic culture. It still carries elements which tend to cause it to be classed in the Palaeolithic: chipping and flaking technique and uncertain primitive agriculture (the so-called "Epipaleolithic").

3. The Son Vi Culture

Just as cultural layer III continues cultural layer II, it is clear that cultural layer II springs from cultural layer I, and this is not only continuation in time. However, while cultural layer III corresponds to Hoabinh III and cultural layer II to Hoabinh II, it is not easy to deduce from this that cultural layer I is Hoabinh I.

What Hoabinh I is cannot be clearly conceived from the miscellaneous documents left by the French in Hanoi. In areas along the Da River we have found vestiges of an early, coarse form of Hoabinh: Is it the Palaeolithic Hoabinh I of Colani? If so, this kind of Hoabinh I has not been found here. But we have said above that Son Vi palaeolithic pebbles have been found. Son Vi lithic tools have been unearthed in cultural layer I, and also in cultural layer II.

Between the two layers we found no clear discrepancy in technique and no clear indication of the evolution of the lifestyle in Son Vi. However, Son Vi mixes with Hoabinh in cultural layer II while it predominates in cultural layer I. In both layers, Son Vi tools and flakes are found:

- The typical tool has a working blade on the longitudinal edge of the pebble and is made from a whole stone ("orange section") or from half a stone ("quarter pebble").
- Flakes, some of them retouched.

The above shows that the Hoabinh Culture (early, then late) does not spring from an earlier, coarser Hoabinh, and that, whether it is in a coarse form, as in the Da River basin, or in a more refined one, as in Con Moong Cave, the Hoabinh Culture springs from the Son Vi Culture.

Reflections on the Vietnamese Mesolithic Following the Excavations in Con Moong Cave

1. Con Moong Cave, which contains vestiges of the Son Vi, Hoabinh, and Bacson Cultures, witnessed a shift lasting several thousand years, from the Upper Palaeolithic through the Mesolithic to the Lower Neolithic.

2. The existence of the Son Vi Culture has been confirmed and made definite this time. The Son Vi Culture has hitherto been known as anterior to the Hoabinh Culture. Now it is discovered that it mixes with Hoabinh at its upper stage. Further study of this shift is necessary.

3. This is also a Pleistocene-Holocene shift. Cultural layers I and II show completely different florals, a significant fact: In layer I, only spores of Polypodiaceae and Cyatheaceae have been found, not any pollen; on the other hand, in layer II, only pollens (Chenopodiaceae, Leguminosae, Rubiaceae, Myrtaceae, Meliaceae, Fagaceae) are found, but very few spores.

4. We have picked mollusc shells at a depth of 3.2 to 3 m and 2.4 to 2 m for ^14C dating and are still awaiting results. Although the Frenchman E. Leriche, doing research in
Lang Bon (a Hoabinh site which was not a very early one), dated it to the late Pleistocene, we have found Hoabinh artifacts to lie above, never under, the alluvia of the Upper Pleistocene. It is thus believed that the $^{14}$C datings, especially at a depth of 2.4 to 2 m, will point to the boundary between the two epochs of the Quaternary period, 10,000 years B.P.*

5. One tomb is found in cultural layer II and three in layer I. Thus for the first time we come across Son Vi man, although it may be only late Son Vi. Ochre and molusc shells are found near the remains, which suggests a link between Son Vi and Hoabinh. Regrettably, the bone fragments found are too small and too much decayed for morphological study.

6. Hoabinh tools found here are quite typical. There is a quandary for students of European prehistory: the absence of microliths in Hoabinh, a mesolithic culture. This does not mean that mesolithic man here did not use bow and arrow, as in other parts of the world. Probably the abundance of bamboo made the use of armature unnecessary. So far, however, no scientific proof of this hypothesis has been available.

7. Can Hoabinh tools found in Con Moong be considered typical inasmuch as many flakes have been found, some of them retouched, whereas Hoabinh stoneworking technique is usually regarded as producing no flakes? We have unearthed no small amount of Hoabinh artifacts showing typical Hoabinh technique accompanied by flakes (Hang Tung, Hang Muoi, Hang Bung) and even a high proportion of flakes, as is the case here. Flakes have also been found in sites known formerly to the French: Dun Din, Lang Doi, and others.

8. Thanks to the Con Moong excavations, many things have been unveiled, or made clearer, to us—not because this Hoabinh site is possessed of thicker and better-delineated earth strata and cultural layers than others, or yields more artifacts, but because the Con Moong excavations have been made eight years after the discovery of the Son Vi Culture, and much research and debate has taken place recently about the Hoabinh Culture in its internal development and its relationship with the Bacson Culture.

9. We appreciate the efforts of the American prehistorians W. G. Solheim II and Chester F. Gorman, who have set great store by the Hoabinh Culture and put forward many significant hypotheses. However, in order to determine the area of geographical expansion of the Hoabinh Culture, a closer examination is needed of the pebble-working techniques in the various so-called Hoabinhian sites in Southeast Asia. Likewise, further examination and more documents are necessary before we can affirm that rice (Oryza sp.) was planted as early as the Hoabinh period.

10. Lastly, let me tell you that we have gained an inkling of the scope of the Hoabinh Culture. With a marine transgression that corresponds to the Flandrian transgression which is known to have taken place 15,000 years ago, it is possible to understand the subsequent coming into being of stone-grinding technique and primitive agriculture. With the discovery and study of the bronze and iron ages, the knowledge of the resplendent Phung Nguyen/Dongson Culture, we may imagine the unfolding of the "neolithic revolution," although the road that led from Hoa Binh through Bac Son, Quynh Van, Bau Tro, Thach Lac, and Ha Long to Phung Nguyen remains to be explored.

*The $^{14}$C datings are as follows: cultural layer I, at a depth of 3.2–3 m, 11,090 ± 185 years B.P.; cultural layer II, at a depth of 2.4–2 m, 9905 ± 150 years B.P.