

# The Neolithic Site of Xinguang, Yongping County, Yunnan Province

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The Neolithic settlement site of Xinguang 新光 is located at the western section of Bonan 博南 Street in the eastern outskirts of the county seat Yongping 永平 County, Yunnan 云南 Province. Rising 1600 m above sea level in a highland basin landscape, it is surrounded by high mountain ridges. The Yinjiang 银江 River, originating from the piedmont zone, crosses the basin to converge with the Lancang (Mekong) 澜沧江 River.

During construction works in connection with the eastward expansion of the town Yongping in May 1993, a multitude of Neolithic stone implements and potsherds had been discovered. As a consequence, excavations had been conducted under supervision of the Yunnan Provincial Institute of Antiquity and Archaeology between December 14, 1993 and March 31, 1994, covering fourty 5 by 5 m quadrants. Altogether 1000 square meters were explored during this initial excavation season.

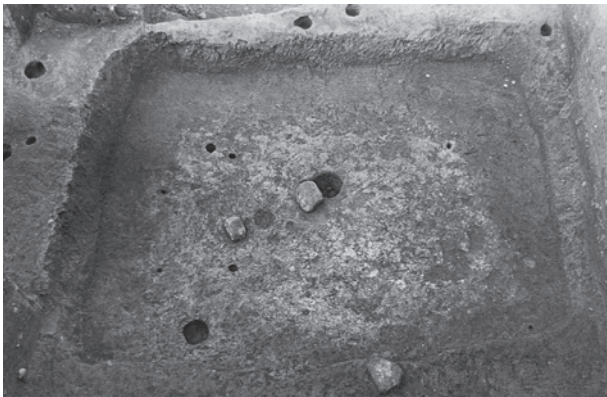


Fig. 1 House F5

With the terrain sloping gently, the deposits varied in thickness between 1 and 2 m respectively. From surface to bottom, twelve layers were identified. Of these, layers 3, 5 and 7 could be further divided into sublayers. Those horizons belonging to the Neolithic were strata 5 and below.

## I. Features

Houses, pits, hearths, and ditches were the features to be observed.

1. Two semi-subterranean dwellings: House F5, rectangular in outline with rounded corners, level floor, showing traces of burning, and one big central posthole. Length: 4 m, width: 3.1 m, remaining depth of the walls: 0.6 m (Fig. 1).

2. Surface-level structures suggesting a second, different type of houses, with foundations of unmixed loess or loam spread out, interspersed with numerous postholes whose dispersal did, however, not reveal any regular pattern. For a typical example see house F6.

3. 21 waste pits, mostly round or oval in outline, some of them being originally big postholes. The pits contained very few artifacts.

4. Seven hearth pits, mostly round in outline with ca. 50 cm in diameter, and semi-circular or trough-bottomed in profile. Their unusually thick, red-burnt walls appeared as ring-shaped structures in the planar.

5. Three ditches; of them, G3 belonged to the Neolithic, being a drain for waste water.

## II. Artifacts

Artifacts comprised mainly stone implements and pottery as well as a small number of decayed horse and

deer teeth.

### 1. Lithic industry

In total 642 stone implements were recovered, of them 276 in fairly complete condition.

Axes: 15 items, all of them rectangular to trapezoid in outline, with a curved and sharp cutting edge. Sample T1203⑧:15, of large, thin body; length 26 cm. Sample T1508⑩:9, a common type of this site, trapezoid in outline with a curved neck and completely polished surface; length 10.4 cm (Fig. 2:1 and 2).

Trapezoid adzes: 140 items, all of them trapezoid in outline, falling into four size categories: large, middle, small, and minute, obviously intended for different purposes. Sample T1203⑥:6, with slightly curved neck; length 10 cm. Sample T1204⑥:2, with slightly curved neck; length 5.9 cm. Sample T1104⑩:18, curved neck, completely and carefully polished; length 5.2 cm. Sample T1203⑧:9, small and delicate, with pointed neck and small impact scars; length 4 cm (Fig. 2:3 and 4).

Rectangular adzes: 27 items, falling equally into four size categories: large, middle, small, minute. Sample T1505⑪:11, with a slightly pointed neck; length 8.6 cm (Fig. 2:5).

Spearheads: 16 items, usually willow leaf-shaped, with a middle ridge on either face and rhombic cross-section. Sample T1405⑧:9; length 8.5 cm (Fig. 2:6).

Arrowheads: 22 items, resembling the spearheads in shape, but smaller in size. Sample T1405⑩:17, leaf-shaped (with slender rhombic cross-section), the middle ridge of its distal part on either face giving way to a long triangular facette towards the concave base; length 3.4 cm. Sample T1107⑨:9, flat arrowhead without middle ridges; length 3.2 cm (Fig. 2:7 and 8).

Chisels: two items. Sample T1203⑩:14, small and exquisite, its longitudinal section showing an asymmetrical cutting edge; length 3.9 cm (Fig. 2:9).

Knives: five items. Sample T1709H21③:2, crescent-shaped, its section showing an asymmetrical cutting edge, with two bifacially drilled perforations and five incomplete perforations; length 8.6 cm (Fig. 2:10).

Sickle: one fragment (sample T1104⑨:14), crescent-shaped (with dented cutting-edge), showing the

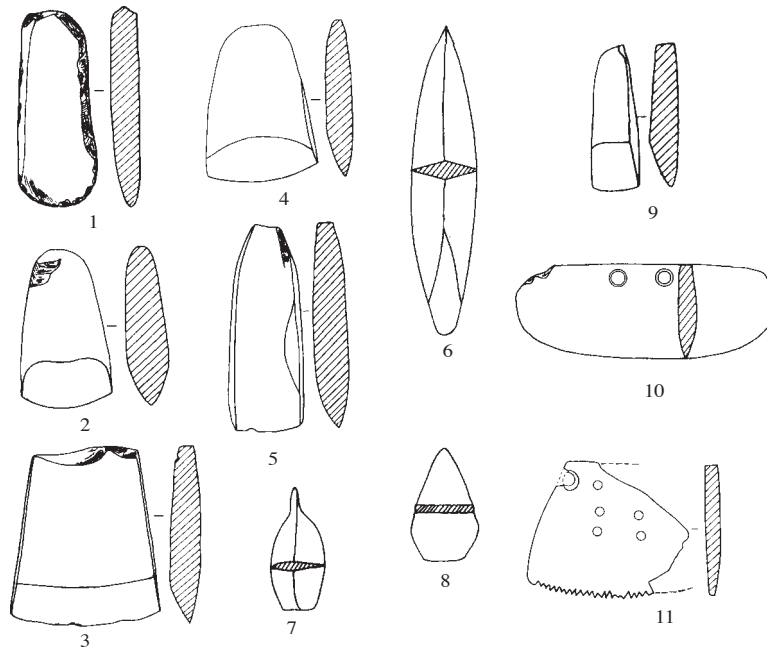


Fig. 2 Unearthed lithic artifacts

1. type A axe (T1203⑧:15)
2. type B axe (T1508⑩:9)
3. type BaII adze (T1204⑥:2)
4. type CaI adze (T1104⑩:18)
5. type B adze (T1505⑪:11)
6. type AIII spearhead (T1405⑧:9)
7. type Ca arrowhead (T1107⑩:17)
8. type Cb arrowhead (T1107⑨:9)
9. chisel (T1203⑩:14)
10. knife (T1709H21③:2)
11. sickle (T1104⑨:14) (Scale: 1. 1/8; 2. 1/4; 3, 4, 10, 11. 1/2; 5. 1/10; others 3/5)

rest of a drill hole and five incomplete perforations; width 4.4 cm (Fig. 2:11).

Spindle-whorls: four items. Sample T1206⑩:23, flat and thin, with V-shaped perforation, 6.6 cm in diameter.

Besides, we unearthed four double-edged adze-shaped implements, five semi-finished adzes, 17 grinding stones, 15 rubbing stones and one set of mortar and quernstone. Several round, flat pebble slabs had obviously been used for grinding purposes, with a diameter of 31.5 cm for the quern and a length of 24 cm for the mortar.

### 2. Ceramics

Both coarse and fine wares had been recovered, mostly of grey, occasionally of cinnamon-brown, and rarely of red colour. In layers 5A and 5B, belonging to the late phase, the percentage of red ware was increased. Pottery decoration is mostly complex and richly varied, with more than 20 ornamentation types, being incised, stabbed or applied by delicate comb impression.

Commonly represented motifs, often executed as

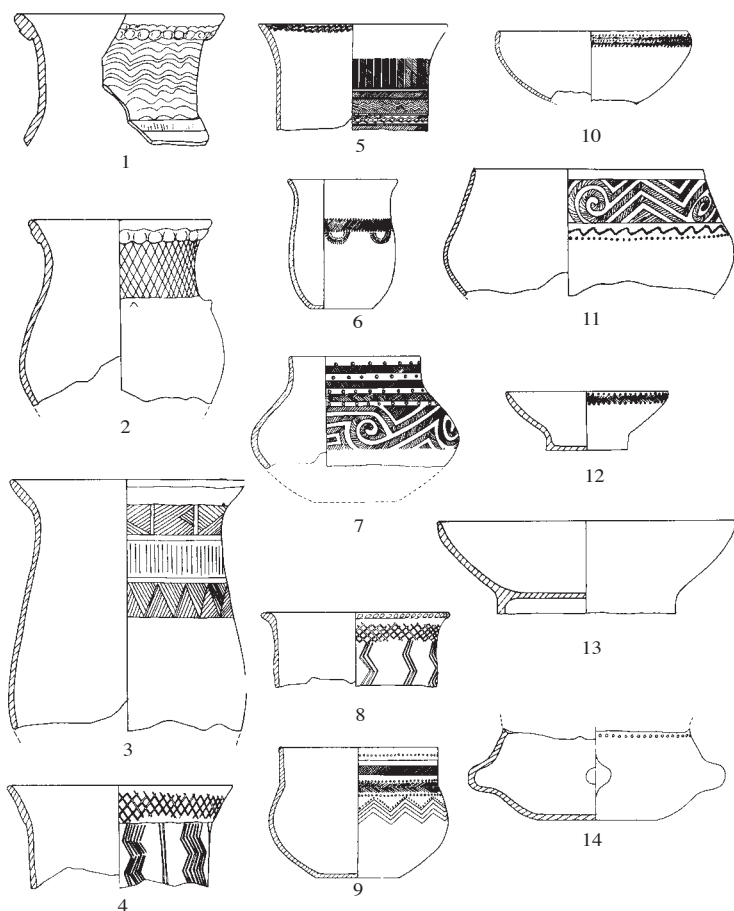


Fig. 3 Unearthed ceramics

1. type AaI *guan*-jar (T1104⑩:22) 2. type AbI *guan*-jar (T1709⑩:1) 3. type AdII *guan*-jar (T1105 ⑦ A:33) 4. type Ba *guan*-jar (T1104 ⑥:43) 5. type GaII *guan*-jar (T1104 ⑥:55) 6. type GbII *guan*-jar (T1709H21 ②:7) 7. style I *guan*-jar (T1104⑩:65) 8. type B *guan*-jar (T1104⑥:61) 9. style II *guan*-jar (T1106 ⑨:21) 10. type AII *bo*-bowl (T1104 ⑧:70) 11. *guan*-jar (T1107 ⑩:21) 12. type B *pan*-plate (T1205 ⑥:1) 13. type B *pan*-plate (T1303⑥:14) 14. studded vessel (T1406⑥:1) (Scale: 1–3. 1/4; 6. 1/12; 11. 1/5; 12–14. 1/2; others 1/7)

bands, comprise cross hatching (*wangge wen*), spiral decoration (*yuanhui wen*), triangles (*sanjiao wen*), dotted or pit lines (*dianxian wen*), leaf vein motifs (*yemai wen*), wavy line (*shuibo wen*), loops and S-bends (*yun wen*), and rims or lips with fingertip or pit lines (*fujiaodui* and *huabiankou wen*). For painted ware, red or white colour pigments were applied over delicately comb-stamped patterns after the firing.

All pottery was built up by hand without wheel. While the supply of forms was rather limited to a few types in the lower strata, it greatly increased towards layer 6; layers 5A and 5B are characterised by large vessels. Dominating types are *guan*-jars with everted,

steep or inverted rim, *hu*-flasks, *bo*-bowls and *pan*-plates, *gang*-vats and *bei*-beakers. Aside from vessels, other pottery products like spindle-whorls and vessel supports were unearthed.

*Guan*-jars with everted rim: 515 items. They are characterised by a wide mouth, everted rim with rim collar, curved belly and a flat base. Frequently, the rim exterior is thickened, carrying fingertip lines, incised cross-hatching or slanting hatchings for decoration, though undecorated varieties are not uncommon. Occasionally, rims are adorned with fingertip bands. Below the rim zone, wavy lines, incised cross-hatches or slanting hatchings, triangular patterns, zigzag-patterns and dotted lines are applied. Sample T1104⑩:22, with two fingertip bands applied one over the other, supporting a thickened rim, with horizontal wavy lines covering the cylindrical neck all over; mouth diameter 14 cm (Fig. 3:1). Sample T1709⑩:1, below a fingertip band supporting the thickened rim, incised cross-hatching covers the cylindrical neck. Four pointed opposite-standing lugs were applied on the shoulder; mouth diameter 14 cm (Fig. 3:2). Sample T1105 ⑦ A:33, below the rim zone, two bands of woven mat-pattern were incised, separated by a band of vertically incised parallel lines; mouth diameter 18 cm (Fig. 3:3). Sample T1104 ⑥:43, with a cross-hatched thickened rim and below vertical zigzag-bands consisting of parallel incised lines separated by vertical grooves; mouth diameter 24 cm (Fig. 3:4). Sample T1104 ⑥:55, with incised, minute spiralling meander applied on the inside. Below the rim zone, the exterior vessel surface is densely covered with complex comb patterns; mouth diameter 20 cm (Fig. 3:5). Sample T1104 ⑩:56, with a band of slender, standing triangles below the rim zone and a wide band of cross-hatched frames, its spaces filled with hatched rectangular spiral elements; mouth diameter 16 cm, total height 17.2 cm (Fig. 4). Sample T1709H21 ②:7, with slightly curved belly, the shoulder being decorated with a wide band of slanting hatchings and hanging garlands below, both executed with slanting fine comb-impressions edged by



Fig. 4 Type GbI pottery *guan*-jar (T1104 ⑩:56)



Fig. 5 Type GbII pottery *guan*-jar (T1709H21 ②:7)



Fig. 6 Style II *guan*-jar (T1106 ③:21)

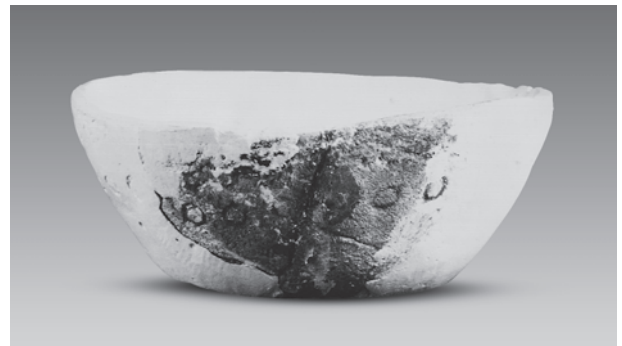


Fig. 7 Type BI *bo*-bowl (T1104 ⑩:72)

pit lines; mouth diameter 23.5 cm, height 27.5 cm (Figs. 3:6; 5). Sample T1104 ⑥:61, with sharply bent rim, decorated with a fingertip line. Below the rim zone, a cross-hatched band is incised, followed by vertical zigzag-bands consisting of parallel incised lines; mouth diameter 22 cm (Fig. 3:8).

*Guan*-jars with steep rim: 250 items. This type is characterized by a protruding round belly, small base, often belonging to fine grey ware. It is predominantly decorated by fine, dense comb patterns, partly in combination with pit decoration, and occasionally with red or white colour pigments applied. Sample T1104 ⑩:65, neck, shoulder and upper belly are covered with dense and fine horizontal band motifs, neck and upper shoulder being covered with cross-hatched bands, interspersed

with pit lines, followed by a wide band of spiralling meander filled with slanting hatches. The surface in between and below the decorated zones is polished; mouth diameter 14 cm (Fig. 3:7). Sample T1106 ③:21, from rim to belly inflection zone, it is covered with incised fine and dense bands (cross-hatchings, herringbone motif, horizontal zigzag band of parallel lines), all consisting of fine and dense hatches and cross-hatches edged with pit lines. In between the banded decoration, the vessel surface is polished; mouth diameter 17 cm, height 14 cm (Figs. 3:9; 6). Sample T1105 ⑦ A:29, three horizontal bands filled with fine and dense slanting hatches cover the neck. The small protruding shoulder is decorated with wavy lines. In between and below the decoration the vessel surface is polished; mouth diam-



eter 27 cm.

*Guan*-jars with inverted rim: 19 items, with protruding round belly and a flat base. Some types resemble the *guan*-jars with steep rim, or even tiered vessels. Sample T1107 ⑩:21, with bands of fine and dense hatches and pit lines. In between the decoration zones and below the vessel surface is polished; mouth diameter 22 cm (Fig. 3:11).

*Hu*-flasks : 11 items, with small mouth, high neck and round belly. Sample T1104 ⑪:68, the inflection between neck and shoulder is accentuated by a band of dense and fine incised hatches; mouth diameter 8 cm.

*Bo*-bowls : 43 items, mostly undecorated. Sample T1104 ⑧:70, the outer rim is covered with a band of dense and fine incised hatches and pit lines; mouth diameter 20.8 cm (Fig. 3:10). Sample T1104 ⑪:72, with a fingertip band applied to the outer rim and a dotted line below; mouth diameter 17.8 cm (Fig. 7).

*Pan*-plates : 26 items, belonging to two subtypes, either with a flat base or a ring foot. Sample T1205 ⑥:1, with false sunken foot, the outer rim being decorated by a band of fine and dense incised hatches edged with pit lines; mouth diameter 12 cm, height 4.4 cm (Fig. 3:12). Sample T1303 ⑥:14, deep bowl on a ring foot, undecorated; mouth diameter 22 cm, height 7 cm (Fig. 3:13).

Studded vessels: 9 items, an unusual vessel typical for this site. It slightly resembles jars with steep rim, but has four protruding hollow studs modelled out of the vessel wall. Sample T1406 ⑥:1, with its neck destroyed, the inflection between neck and shoulder being accentuated by a dotted line; base diameter 9 cm (Fig. 3:14).

### III. Conclusions

Since the end of the initial campaign (its results being reported above), the site of Xinguang has been object to four additional excavations. During these large-scale excavations, artifacts have been unearthed in rich quantities, greatly enhancing our knowledge on the principal outline and chronology of the Neolithic in

Note: The original report is published in *Kaogu Xuebao* 考古学报 2002.2: 203–234, with 19 figures, 8 pages of plates and 8 tables, written by Dai Zongpin 戴宗品. The present version, an abridgment from the original, is prepared by the author himself and English-translated by Jeanette Werning 韦莎亭.

Western Yunnan. Studies on the artifacts have provided us with a sequence of four phases; <sup>14</sup>C-dates produced by the Archaeology Department of Peking University show a time frame of 300 years approximately for the Xinguan Culture, lasting between ca. 4000 to 3700 BP. Both the lithic industry and pottery of the Xinguan Culture display a definite particularity. The small and exquisite stone artifacts with adzes, willow leaf-shaped arrowheads and spear points predominating resemble those already known from many other Neolithic sites in western Yunnan, while the rectangular or trapezoid axes represent a northern Chinese tradition.

The pottery is characterised by a flat base, occasionally showing variations like sunken foot or ring foot constructions; there are neither round-bottomed vessels nor tripods. The *guan*-jars display a rich variety of forms and may have been used for cooking or keeping water. Pottery decoration is exquisite and manifold, the most common types of ornamentation being comb patterns or bands of fine and dense hatchings, composite bands, geometric motifs, dotted or pit lines. Often, the vessel surface between the band zones and below is polished. This kind of ornamentation can be partly related to certain cultures in Southeast Asia. Shallow wavy line decoration occurs in the Baodun 宝墩 Culture of the Chengdu 成都 Basin (Sichuan 四川 Province).

Other sites closely resembling the Xinguan Culture in their material culture do seem to occupy a zone between the townships of Baoshan and Dali, roughly following the course of the River Lancang. The author proposes to name it “Xinguang Culture.”

The site of Xinguang belongs to the warm-humid subtropical climate zone. Its pollen spectrum shows Bryophyta and Pteridophyta occupying one third of the total pollen. Gymnospermae are slightly less represented, consisting mostly of Pinaceae and Cupressaceae; Angiospermae reach a percentage of 30 to 40% with *Betula*, *Corylus*, *Quercus*, *Castanea* and *Compositae*, *Artemisia*, *Polygonum*, *Mimosa pudica*, *Gramineae*, *Cyperaceae* and *Jussiaea*.