

Brief report on the archaeological survey of the Shishiwang site in Huining County, Gansu

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Abstract. The Shishiwang site, located in the Zuli River basin, is a relatively large prehistoric site within this watershed. Investigations indicate that the site contains cultural remains from the Yangshao, Majiayao, and Qijia cultures, with Yangshao cultural remains being predominant. The survey provides abundant material evidence for understanding the dissemination of Yangshao culture within Gansu Province and patterns of human migration.

Keywords: Shishiwang site, Yangshao culture, Majiayao culture, Qijia culture, Zuli River

1. Introduction: overview of the site

The Shishiwang site is situated approximately 500 meters east of Liangjiabao Village, Zhongchuan Town, Huining County, on a secondary terrace. The site is adjacent to County Road X329 on its western side, bordered to the south by Liangbao Village Primary School, and extends eastward to the ridge of Dongshanliang (Figure 1). The site is primarily distributed on the fore-slopes and plains at the base of surrounding ridges. Its geographic coordinates are 35°35'25.72"N, 105°5'14"E, with an elevation of 1,778 meters above sea level. The site covers nearly 200,000 square meters [1]. Human activities such as the construction of irrigation channels and leveling of terraced fields have caused significant site disturbance, with the Beichuan Canal cutting through the site from south to north. In 2011, the site was listed as a provincial-level cultural relic protection unit by the Gansu Provincial People's Government (Seventh Batch). In 2021, the Gansu Provincial Institute of Cultural Relics and Archaeology conducted field surveys along the Zuli River and reported on the associated cultural remains of this site.

In April 2025, the School of History and Culture of Northwest Normal University, in collaboration with the Baiyin Museum, conducted an archaeological survey of the Shishiwang site. Based on the preliminary analysis of collected artifacts, the site contains Neolithic cultural remains primarily from the Yangshao and Majiayao cultures, with a small number of Qijia culture remains. The survey findings are summarized as follows.

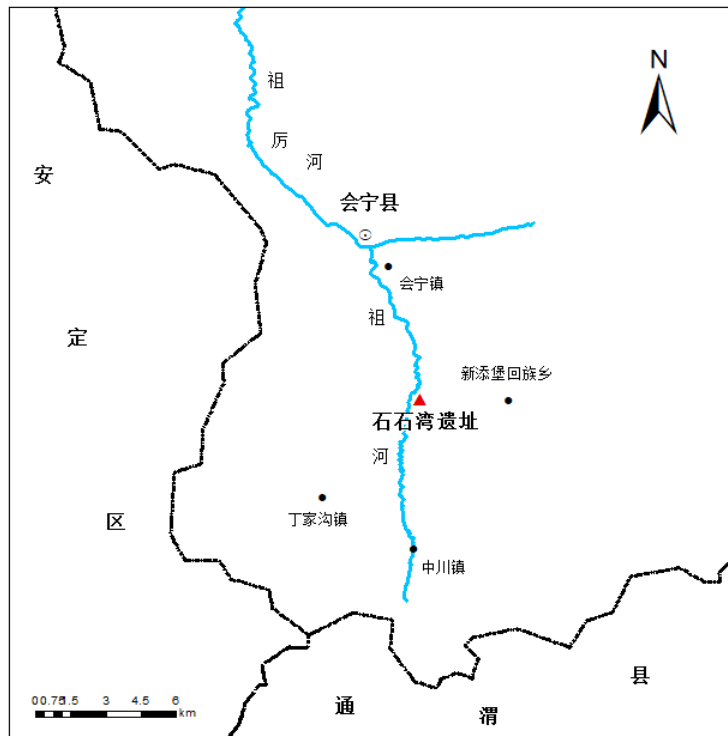


Figure 1. Geographical location of the shishiwang site

2. Archaeological features

The survey at the Shishiwang site identified several types of features, including house foundations and roads. The following section introduces a selection of representative features.

2.1. House foundations

F1 is located in the central part of the site, west of the irrigation channel and adjacent to a residential courtyard (Figure 2). According to the remaining cross-section, the opening lies beneath the fill layer, with a total length of 3 meters, containing baked clay, a lime surface, pottery sherds, and carbon fragments. The baked clay is situated at the far right, covering a relatively large area, with a thickness of 4–14 cm and a length of 1 m. This area was likely an original hearth pit, possibly used as a long-term living space. The lime surface is located on the left, with a thickness of 2–4 cm and a length of 1.1 m. The left-side floor, due to a slightly lower terrain, appears to have been artificially raised by about 2 cm and mixed with grass and mud, resulting in a dense, gray-white layer that includes a small number of pottery sherds. The central section is relatively flat, with minimal fill, containing a few fragments of baked clay. A gray pit overlays the baked clay, possibly formed from refuse discarded after the house was abandoned. The gray pit measures 1.1 m in width, 5 cm in thickness, with gray-brown, loose soil, and contains a few carbon fragments. This feature is broadly consistent with F12 at the Fulinbao site in Baoji [2], and is therefore inferred to date to the late Yangshao period.

F2 is located on the terrace section east of the irrigation channel, oriented roughly north–south. Its total length is 2.4 m, at a depth of 1.5 m below the surface. The left side consists of a trampled activity surface with gray-brown, dense soil, containing scattered lime particles and carbon fragments, measuring 1.74 m in length and 3 cm in thickness. The right side is stratified into three layers: the first layer is a large area of baked clay, 60 cm in length and 3 cm thick, containing large carbon fragments, and shaped like a pot bottom. The second

layer is a gray layer with numerous carbon fragments, gray-brown in color, and relatively loose in texture. The third layer is a thin baked clay layer, 1–2 cm thick, likely representing secondary use after the original hearth pit was filled in.



Figure 2. Cross-Section of F1

2.2. Roads

L1 is located approximately 5 meters south of F2. It lies 2 meters below the surface and is divided into three layers. The second layer represents the trampled activity surface, the third layer is natural soil, and the first layer is backfill. Above these lies a disturbed soil layer containing numerous plant roots. The cultural layer extends 1.2 m in length, with a trampled surface thickness of 20 cm. It contains carbon fragments, pottery sherds, and baked clay, with gray-white, dense soil, showing trampling traces resembling hornet nests. The backfill layer is 20 cm thick, yellow-brown in color, relatively loose, and contains a few sherds from cord-marked pointed-base vessels. The natural soil layer is dense, yellow-brown in color, and relatively clean.

3. Artifacts unearthed

The artifacts recovered during the survey were primarily ceramics, with a smaller number of lithic items.

3.1. Ceramics

Based on clay composition, color, vessel forms, and decorative motifs, the collected ceramics can be divided into three groups: Group A, Group B, and Group C.

3.1.1. Group A

This group consists mainly of clay pottery, with sand-tempered ware as a secondary component. The dominant colors are orange-yellow, followed by red and gray. Most vessels are plain, with decorations primarily consisting of cord impressions, and a smaller number showing mat impressions and linear motifs. Painted pottery is rare. The main vessel types include basins, jars, bowls, bottles, large jars, urns, dou vessels, zun-shaped vessels, vessel stands, and knives.

(1) Basins, Based on rim characteristics, basins can be divided into two types:

Type A: 3 specimens. Folded rim, round lip, flared mouth. Specimen 1: Clay grayware, interior shows evidence of wheel finishing. Preserved height: 3.4 cm. Specimen 2: Clay redware, decorated with black paint

on the surface; only partial black decoration remains due to post-burial conditions. Preserved height: 5.5 cm (Figure 3-1). Specimen 3: Clay redware, round lip, slightly constricted mouth; wheel finishing traces visible below the rim. The rim is decorated with black triangular patterns, upper belly with black arc patterns, and scraping traces are visible on the surface. Preserved height: 7.5 cm (Figure 3-2).

Type B: 6 specimens. Rolled rim. Specimen 4: Clay redware, pointed round lip, flared mouth, plain surface; calcite nodules attached below the rim. Preserved height: 5.4 cm. Specimen 5: Clay redware, round lip, flared mouth, plain surface; interior polished with scraping traces, calcite nodules below the rim. Preserved height: 6.2 cm. Specimen 6: Clay redware, thick round lip, slightly constricted mouth, wide rim surface, plain; interior and exterior polished with scraping traces, calcite nodules below the rim. Preserved height: 3.8 cm. Specimen 7: Clay grayware, round lip, flared mouth; interior and exterior polished, plain surface. Preserved height: 4.6 cm (Figure 3-3). Specimen 8: Clay orange-yellow ware, round lip, flared mouth, plain; wheel finishing traces visible on interior and exterior. Preserved height: 3.2 cm. Specimen 9: Clay orange-yellow ware, polished rim, wide rim surface; black decoration on upper belly; wheel finishing traces visible on interior. Preserved height: 4.7 cm.

Basin Bottom: 1 specimen. Specimen 10: Sand-tempered redware, flat base, polished plain surface, slanted straight lower body. Preserved height: 3.2 cm (Figure 3-4).

(2) Jars: 7 specimens, Based on rim characteristics, jars can be divided into two types:

Type A: 2 specimens. Constricted mouth, folded rim. Specimen 11: Clay grayware, round lip, wide flat rim, plain, polished surface. Preserved height: 7.0 cm. Specimen 12: Sand-tempered redware, pointed round lip, wide flat rim; body decorated with diagonal coarse cord impressions and two added cord relief bands on upper belly. Preserved height: 8.3 cm (Figure 3-5).

Type B: 5 specimens. Flared mouth, subdivided into three forms based on rim surface:

Form I: 3 specimens. Folded rim. Specimen 13: Sand-tempered redware, square lip; wheel finishing traces on rim, coil-building traces on interior; diagonal cord impressions below rim. Preserved height: 4.1 cm. Specimen 14: Sand-tempered redware, round lip; rim shows finishing traces; diagonal coarse cord impressions below rim with added linear relief bands. Preserved height: 4.3 cm (Figure 3-6). Specimen 15: Sand-tempered redware, round lip; diagonal coarse cord impressions with circular relief decoration on the body. Preserved height: 4.6 cm.

Form II: 1 specimen. Rolled rim. Specimen 16: Sand-tempered redware, round lip; interior shows coil-building traces; rim decorated with incised and shallow cord patterns. Preserved height: 4 cm (Figure 3-7).

Form III: 1 specimen. No rim. Specimen 17: Sand-tempered redware, square lip, plain surface. Preserved height: 5.7 cm (Figure 3-8).

(3) Jar Bases, Based on base shape, two types are recognized:

Type A: Concave Base, 2 specimens. Specimen 18: Clay redware, slanted body; base decorated with mat impressions, polished surface with scraping traces. Preserved height: 1.1 cm. Specimen 19: Sand-tempered redware, slanted body; polished surface, scraping traces visible, traces of soot on base. Preserved height: 1.6 cm (Figure 3-9).

Type B – Flat Base, 5 specimens. Specimen 20: Clay redware, slanted straight body; gray slip applied on interior and exterior, scraping traces, polished surface. Preserved height: 5 cm. Specimen 21: Fine sand-tempered redware, slanted body, plain, surface covered with yellow slip. Preserved height: 3.7 cm. Specimen 22: Fine sand-tempered redware, slanted body, plain. Preserved height: 3.6 cm. Specimen 23: Sand-tempered redware, slanted body; diagonal cord impressions on body, cross-cord impressions on lower belly, cord impressions on base; white slip applied. Preserved height: 9.7 cm. Specimen 24: Sand-tempered redware,

slanted straight body; cord impressions on belly and shallow cord decoration on base interior and exterior; scraping traces inside, soot traces outside. Preserved height: 5 cm (Figure 3-10).

(4) Bowls: rims only; divided into two types:

Type A: Straight-mouthed bowls, 3 specimens. Specimen 25: Clay grayware, square lip, straight inner rim, slightly constricted outer rim; wheel finishing traces on interior and exterior; decorated with red paint. Preserved height: 3.3 cm (Figure 3-11). Specimen 26: Clay redware, pointed round lip, straight rim slightly flared, deep curved belly; plain, polished; wheel finishing traces visible. Preserved height: 5.4 cm. Specimen 27: Clay redware, pointed round lip, straight rim slightly constricted; wheel finishing traces inside; exterior polished. Preserved height: 4.8 cm.

Type B: Constricted-mouthed bowls, 3 specimens. Specimen 28: Pointed round lip, wheel finishing traces inside and outside. Preserved height: 10.1 cm (Figure 3-12). Specimen 29: Pointed round lip; wheel finishing traces inside and outside; interior decorated with two red arc lines. Preserved height: 5.3 cm. Specimen 30: Thick round lip, plain; wheel finishing traces visible inside. Preserved height: 4.7 cm.

(5) Pointed-Bottom Bottles: 7 specimens

Rims: 2 specimens: Specimen 31: Sand-tempered redware, flat rim, round lip, slightly flared mouth, plain surface; wheel finishing traces visible. Preserved height: 2.2 cm. Specimen 32: Clay redware, flat rim, pointed round lip, slightly flared mouth, plain surface; wheel finishing traces visible. Preserved height: 2 cm (Figure 3-13).

Shoulder and Body: 2 specimens: Specimen 33: Fine sand-tempered redware; shoulder decorated with cross cord impressions, body with vertical cord impressions; narrow strip at shoulder-body junction where cord impressions were removed for five circuits. Preserved height: 15 cm. Specimen 34: Clay redware; body with vertical cord impressions, interior shows coil-building traces. Preserved height: 12 cm.

Bottle Bases: 3 specimens: Specimen 35: Fine sand-tempered redware; nipple-shaped pointed base with near right angle, body decorated with diagonal fine cord impressions, interior shows smoothing and finger-dimple traces. Preserved height: 8 cm (Figure 3-14). Specimen 36: Fine sand-tempered redware; body with vertical cord impressions, coated with white slip; interior shows coil-building and smoothing traces. Preserved height: 6.8 cm (Figure 3-15). Specimen 37: Fine sand-tempered redware, plain surface; interior shows coil-building and smoothing traces. Preserved height: 7.1 cm.

Flat-Bottom Bottles: 2 specimens: Specimen 38: Clay orange-yellow ware, long neck; neck decorated with parallel black stripes, polished; interior shows smoothing traces. Preserved height: 4.5 cm. Specimen 39: Clay redware, long neck; neck decorated with parallel black stripes, polished; interior shows smoothing traces. Preserved height: 6.1 cm (Figure 3-16).

Hu Vessels: 3 specimens: Specimen 40: Remaining neck and body; fine sand-tempered redware, long neck; junction of neck and body decorated with a narrow applied relief band with stamped impressions; interior shows coil-building and smoothing traces. Preserved height: 12.5 cm (Figure 4-1). Specimen 41: Remaining rim and neck; flared mouth, fine sand-tempered redware, long neck, round lip; polished surface, rim shows wheel finishing traces. Preserved height: 8.2 cm. Specimen 42: Remaining neck and body; fine sand-tempered redware, constricted neck, plain surface. Preserved height: 7.4 cm.



Figure 3. Ceramics collected from the shishiwang site

1, 2. Type A basins (Specimens 1, 3), 3. Type B basin (Specimen 7), 4. Basin bottom (Specimen 10), 5. Type A jar (Specimen 12), 6. Type B, Form I jar (Specimen 14), 7. Type B, Form II jar (Specimen 16), 8. Type B, Form III jar (Specimen 17), 9. Type A jar base (Specimen 19), 10. Type B jar base (Specimen 24), 11. Type A bowl (Specimen 25), 12. Type B bowl (Specimen 28), 13. Pointed-bottom bottle rim (Specimen 32), 14, 15. Pointed-bottom bottle bases (Specimens 35, 36), 16. Flat-bottom bottle (Specimen 39), 17. Type A large jar (Specimen 43)

(6) Large Jars: 7 specimens. Based on rim shape, jars are divided into three types:

Type A: Pointed lip, 1 specimen: Specimen 43: Coarse sand-tempered redware, flat rim, slightly constricted mouth; below the rim, one applied relief cord band created by pressing. Preserved height: 5.3 cm (Figure 3-17).

Type B: Round lip, 4 specimens: Subdivided into two forms based on rim surface:

Form I: 3 specimens: Constricted mouth, coarse sand-tempered redware, round lip, flat rim. Specimen 44: Surface shows smoothing traces. Preserved height: 3.1 cm. Specimen 45: Just below rim, decorated with one embossed cord-like applied relief band; surface shows smoothing traces. Preserved height: 5.1 cm. Specimen 46: One circuit of finger-dimple marks below rim; body adorned with a coil-applied relief band, above which is cross blue decoration, and diagonal blue decoration above and below the band. Preserved height: 19 cm (Figure 4-2).

Form II: 1 specimen: Specimen 47: Coarse sand-tempered redware, flat rim, flared mouth, round lip; body decorated with horizontal cord impressions; surface shows soot traces. Preserved height: 8 cm (Figure 4-3).

Type C: Square lip, 2 specimens: Specimen 48: Coarse sand-tempered grayware; constricted mouth, flat rim, square lip; diagonal cord impressions on body, below rim decorated with an impressed applied relief

band. Preserved height: 4.6 cm (Figure 4-4). Specimen 49: Coarse sand-tempered redware; below rim, one impressed applied relief band; above the band, diagonal cord impressions; below the band, horizontal cord impressions; surface shows soot traces. Preserved height: 7.9 cm.

Urns: 3 specimens: Specimen 50: Clay grayware, constricted mouth, round lip, plain surface; rim exterior has a groove; surface polished; wheel finishing traces visible on lip and interior wall. Preserved height: 8.8 cm. Specimen 51: Clay grayware, constricted mouth, pointed round lip, plain surface; rim exterior with groove; polished surface; wheel finishing traces visible on lip and interior. Preserved height: 8.3 cm (Figure 4-5). Specimen 52: Small constricted mouth, rounded shoulder, bulging body, clay orange-yellow ware; one handle fragment remains on exterior of rim. Preserved height: 5.3 cm.

(7) Dou Vessels: 4 specimens: All specimens preserve only the dou plates. Based on the plate shape, they are divided into two types:

Type A: Bowl-shaped Dou: 2 specimens: Specimen 53: Clay redware; plate resembles a small bowl, constricted mouth, pointed round lip, plain surface; interior and exterior show wheel-finishing traces. Preserved height: 4.3 cm. Specimen 54: Sand-tempered redware; interior and exterior show wheel-finishing traces; exterior also shows scraping and smoothing traces. Preserved height: 4 cm (Figure 4-6).

Type B: Plate-shaped Dou: 2 specimens: Specimen 55: Sand-tempered redware; plate resembles a shallow dish, open mouth, plain surface; interior and exterior show wheel-finishing traces. Preserved height: 3.1 cm (Figure 4-7). Specimen 56: Clay redware; round lip; plain surface. Preserved height: 3 cm.

Zun-shaped Vessels: 2 specimens: Specimen 57: Clay grayware; remaining rim flat, constricted mouth, plain surface; round lip; upper body slightly rounded; upper body decorated with one raised spiral band; surface polished; interior shows smoothing traces. Preserved height: 7 cm (Figure 4-9). Specimen 58: Clay redware; square lip; upper body decorated with one raised spiral band. Preserved height: 6.4 cm.

Vessel Stand: 1 specimen. Specimen 59: Clay redware; constricted waist; interior slightly curved; upper opening slightly smaller than lower opening; upper opening beveled flat, interior rim slightly higher than exterior rim; lower opening flat. Preserved height: 3.3 cm (Figure 4-8).

Zeng (Steamer) Vessels: 2 specimens. Specimen 60: Clay redware; remaining base and part of body; base pierced with 8 small circular drainage holes; surface shows smoothing traces; hole diameters 1.7–2.4 cm; base diameter 13.8 cm; preserved height: 2.3 cm (Figure 4-10). Specimen 61: Bowl-shaped zeng; sand-tempered redware; slanting straight body; two remaining semi-holes at base; base flat. Preserved height: 4.7 cm.

Vessel Handles: 2 specimens. Specimen 62: Clay grayware; bridge-shaped handle; decorated with red pigment; preserved length 6.7 cm, width 5.7 cm. Specimen 63: Handle with a central applied relief band; soot traces visible. Preserved length 5.6 cm, width 2.3 cm (Figure 4-11).

(8) Pottery Knives: 3 specimens. Based on the blade shape, divided into two types:

Type A: 2 specimens: Both double-edged; flat surfaces irregularly rectangular, with central perforation. Specimen 64: Clay redware; modified from the body fragment of a pointed-bottom bottle decorated with fine cord impressions; surface coated with white slip; preserved length 4.2 cm, width 5.1 cm. Specimen 65: Fine sand-tempered redware; modified from the body fragment of a pointed-bottom bottle decorated with fine cord impressions. Preserved length 3.7 cm, width 4.1 cm (Figure 4-13).

Type B: 1 specimen: Single-edged; flat surface rectangular with one perforation near the back. Specimen 66: Clay redware; modified from the body fragment of a pointed-bottom bottle decorated with fine cord impressions. Preserved length 2.9 cm, width 4.9 cm (Figure 4-14).



Figure 4. Ceramics collected from the shishiwang site

1. Hu Vessel (Specimen 40), 2. Type B, Form I Round-lip Jar (Specimen 46), 3. Type B, Form II Round-lip Jar (Specimen 47), 4. Type C Square-lip Jar (Specimen 48), 5. Urn (Specimen 51), 6. Type A Dou (Specimen 54), 7. Type B Dou (Specimen 55), 8. Vessel Stand (Specimen 59), 9. Zun-shaped Vessel (Specimen 57), 10. Zeng Vessel (Specimen 60), 11. Vessel Handle (Specimen 63), 12. Type A Pottery Knife (Specimen 65), 13. Type B Pottery Knife (Specimen 66)

3.1.2. Group B

The group B ceramic assemblage is relatively small. Most specimens are clay orange-yellow ware, with sand-tempered redware as a secondary type. Decorations are predominantly black painted bands and arcs, while plain surfaces are rare. Only jars and basins were collected.

(1) Jars: 3 specimens

Specimen 67: Remaining rim and body; clay orange-yellow ware; everted rim, constricted mouth, square lip; body decorated with black arc-edged triangles on the rim, black bands above the lip, and parallel black bands on the body. Preserved height: 2.5 cm (Figure 5-1). Specimen 68: Remaining rim and body; sand-tempered redware; flared mouth, pointed lip, plain surface; surface polished. Preserved height: 4.7 cm. Specimen 69: Remaining neck and shoulder; sand-tempered orange-yellow ware; body decorated with parallel black bands; interior shows smoothing traces. Preserved height: 5 cm.

(2) Basins: 3 specimens

Specimen 70: Remaining base; clay orange-yellow ware; surface polished with smoothing traces; small flat bottom; interior preserves black painted parallel arc lines. Preserved height: 1.8 cm. Specimen 71: Remaining

rim and body; sand-tempered redware; square lip, everted mouth; interior coated with white slip and painted with three black arc lines; black bands on the lip; paint largely lost; wheel-finishing traces visible on the walls. Preserved height: 6.4 cm. Specimen 72: Remaining rim and body; clay orange-yellow ware; round lip, everted rim, constricted mouth; decorated with one thin black band on the rim and arc-edged triangles on the body. Preserved height: 5 cm (Figure 5-2).



Figure 5. Ceramics and lithics collected from the shishiwang site

1.Jar (Specimen 67), 2.Basin (Specimen 72), 3.Stone Knife (Specimen 79), 4.Jar Base (Specimen 76), 5.Jar (Specimen 73), 3.1.3. Group C

Group C ceramics are limited in number and include only jars. Most are clay-based, with some sand-tempered pieces; the color is primarily redware, with orange-yellow ware as secondary. Jars are mostly plain, with only the jar bases decorated with basket patterns.

(1) Jars: 3 specimens

Specimen 73: Clay orange-yellow ware; flared mouth, square lip; traces of clay coil joining on the neck; surface shows smoothing traces. Preserved height: 8.7 cm (Figure 5-5). Specimen 74: Clay orange-yellow ware; flared mouth, pointed round lip; surface polished. Preserved height: 6 cm. Specimen 75: Double-handled jar; clay redware; flared mouth, round lip; surface polished with smoothing traces. Preserved height: 3.5 cm.

(2) Jar Bases: 2 specimens.

Specimen 76: Fine sand-tempered redware; flat bottom, slanting body; waist and base decorated with basket patterns; surface polished. Preserved height: 9 cm (Figure 5-4). Specimen 77: Clay redware; flat bottom, slanting body; surface polished; base decorated with shallow basket pattern. Preserved height: 5 cm.

3.2. Lithic artifacts

The lithic assemblage is very limited, consisting of a single stone knife.

Stone Knife – 1 specimen. Specimen 79: Fragmentary; red sandstone; rectangular in plan; polished double-edged blade with relatively blunt edges; body preserves a circular hole formed by drilling from both sides. Preserved length: 5.1 cm; width: 4.5 cm (Figure 5-3). Comparable to Dadiwan Phase IV T339②:22, indicating this knife likely dates to the late Yangshao culture [3].

4. Conclusion

4.1. Determination of cultural attributes of the site

The Shishiwang site yielded abundant and diverse ceramic fragments. Based on an analysis of ceramic types, clay composition and color, and decorative motifs, the collected pottery can be divided into three groups.

Combined with related research, the chronological sequence of the site can be divided into three phases:

Phase One: The cultural remains and artifacts from Group A are the most abundant. Among these, constricted-mouth jars and vessels are highly similar in form to those from the Ligang Lixin Town site in Gangu [4]. The assemblage of flared-mouth jars, constricted-mouth jars, pointed-lip jars, round-lip jars, pointed-base bottles, flat-base bottles, and ewers corresponds closely to similar vessels excavated from Phase IV of the Dadiwan site [3]. Therefore, this phase is inferred to belong to the Late Yangshao culture (see Table 1).

Table 1. Comparison of Group A artifacts




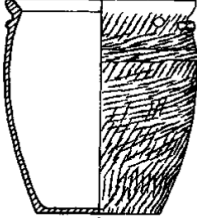


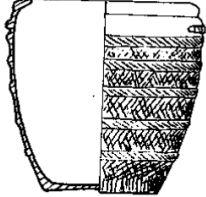
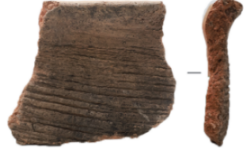


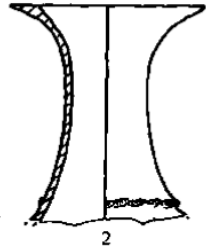
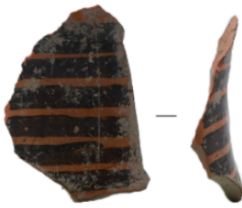


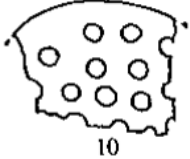



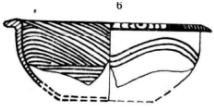

Vessel Type	Shishiwang Site	Dadiwan Phase IV	Ligang Lixin Town Site
Constricted-mouth urn	Specimen 51 		Specimen 24 
Flared-mouth jar	Specimen 14 	 H904:9 H820:7	Specimen 27 
Constricted-mouth jar	Specimen 12 	 H863:25	
Round-lip jar	Specimen 47 		

Table 1. Continued

Ewer	<p>Specimen 40</p> 	<p>T301②:10</p> 
Flat-base bottle	<p>Specimen 39</p> 	<p>F410:4</p> 
Steamer (Zeng)	<p>Specimen 60</p> 	<p>T803④:105</p> 


Phase Two: Group B yielded fewer ceramic fragments, with only basins and jars represented, though the specimens are typical. The jars decorated with parallel black bands and the basins with black arc-line motifs are comparable to artifacts excavated from the Shannashuzha site (H38) in Minxian [5] and the Xipoqiao site [6]. Therefore, this group is attributed to the Majiayao culture, specifically the Majiayao type (see Table 2).

Table 2. Comparison of Group B artifacts

Vessel Type	Shishiwang Site	Xipoqiao Site	Shannashuzha Site
Jar	<p>Specimen 73</p> 	 <p>T13:16</p>	
Basin	<p>Specimen 72</p> 	<p>T13:11</p> 	 <p>H38</p>

Phase Three: The Group C assemblage, including clay orange-yellow flared-mouth jars, double-handled jars, and flat-base jars decorated with basket patterns, corresponds closely with the vessel types and decorative motifs from the Qijiaping site in Guanghe [7]. Hence, this phase is attributed to the Qijia culture (see Table 3).

Table 3. Comparison of Group C artifacts

Vessel Type	Shishiwang Site	Qijiaping Site
Jar	Specimen 74 	M16:4 

Additionally, the survey uncovered a fragment of a half-mountain type black-and-red painted pottery. Similar half-mountain type pottery fragments have also been recorded in prehistoric archaeological surveys in the left-bank region of the Yellow River in Gansu [1], though no identifiable vessel forms were observed in these cases.

4.2. Related insights

The Zuli River lies at the transitional zone between the Loess Plateau and the Qinghai-Tibet Plateau. The Shishiwang site clearly demonstrates an archaeological cultural sequence from Late Yangshao Culture → Majiayao type → Ban Shan type → Qijia Culture, enriching the prehistoric cultural framework of the Zuli River basin. The site covers a large area and has yielded abundant remains and artifacts. Considering its geographic location and scale, Shishiwang may have been an important settlement during the Late Yangshao period.

Artifacts from Group A at the Shishiwang site—including gray pottery urns, zun-shaped vessels, red pottery bottles, and ewers—exhibit thorough surface polishing, reflecting the sophisticated and mature pottery craftsmanship of the period. The jars, pots, and ewers from Group A closely resemble vessels from sites such as Phase IV of the Dadiwan site, illustrating the cultural consistency of the Late Yangshao culture on the western side of the Longshan Mountains.

The Zuli River, where the Shishiwang site is located, represents one of the westernmost areas currently known to yield Late Yangshao cultural remains. This provides strong evidence for understanding the westward spread of the Yangshao culture and associated human migrations within this river basin.

Funding projects

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References

- [1] Gansu Provincial Institute of Cultural Relics and Archaeology. (2023). *Prehistoric archaeological survey in the vicinity of the Yellow River*, Gansu. Lanzhou: Gansu Education Press.
- [2] Baoji Archaeological Team, et al. (1993). *Baiji Fulinbao: Excavation report of a Neolithic site*. Beijing: Cultural Relics Press.
- [3] Gansu Provincial Institute of Cultural Relics and Archaeology. (2006). *Qin'an Dadiwan: Excavation report of a Neolithic site*. Beijing: Cultural Relics Press.
- [4] Gansu Provincial Institute of Cultural Relics and Archaeology, et al. (2022). *Archaeological survey report of the Tianshui section in the upper Wei River*. Beijing: Cultural Relics Press.
- [5] Yang, Y. (1983). Brief report on the survey of the Shanna Neolithic site, Min County, Gansu. *Archaeology and Cultural Relics*, (5).
- [6] Ning, D. (1960). Brief report on the excavation of the Xipo (Shangua) site, Lanzhou, Gansu. *Archaeology*, (9).
- [7] Gansu Provincial Institute of Cultural Relics and Archaeology, et al. (2023). *Guanghe Qijiaping*. Beijing: Cultural Relics Press.