



The Nantaizi site and GIS based archaeological research on craft specialization

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Craft specialization

is a relative state that can be defined as the ratio between producers and consumers.

Craft specialization

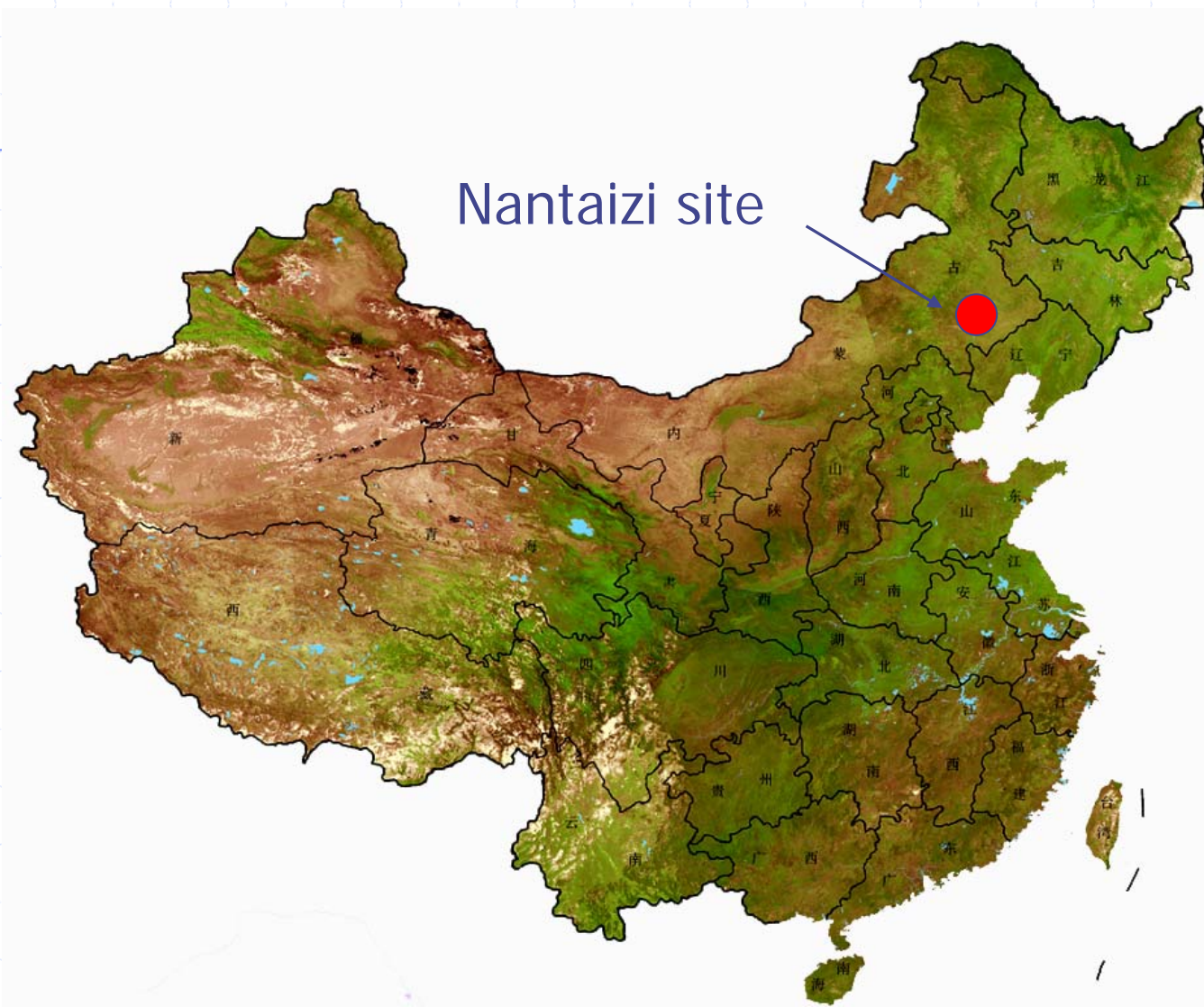
is one of the crucial criteria for the evaluation of social complexity.

**Archaeological method
on craft specialization:**
intra-site distribution of
artifacts and raw materials

GIS:
computer-based system for
handling spatially
referenced databases that
allow the description
analysis

**GIS in
Archaeology**

Nantaizi site

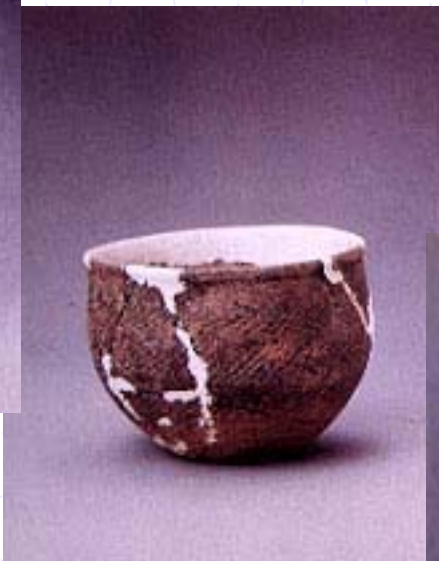


Chronology

- Xinglongwa culture : 6000-5000 B.C.
- Zhaobaogou culture: 5000-4500 B.C
- Hongshan culture: 4500-3000 B.C.
- Xiaoheyuan culture: 3000-2200 B.C.

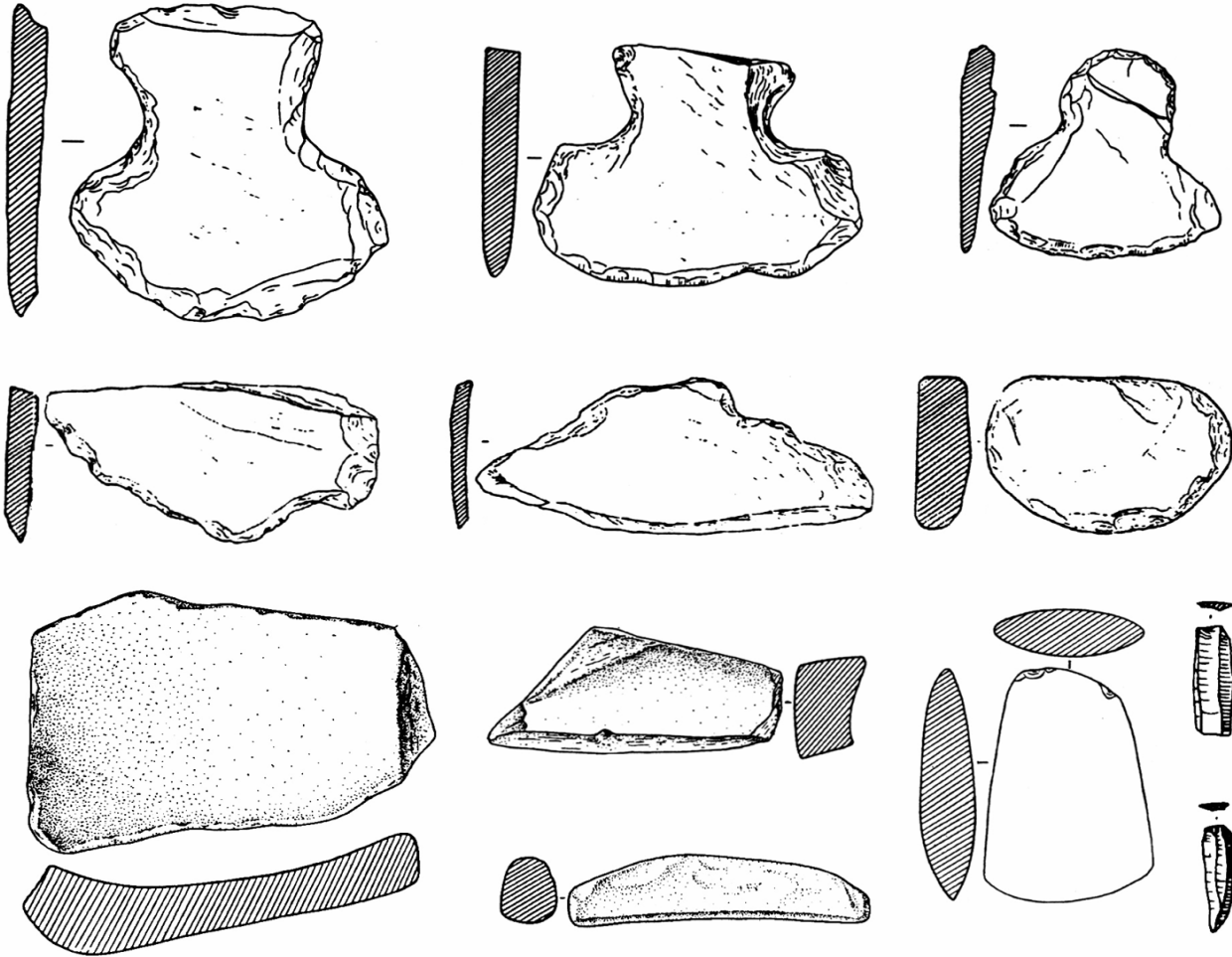
Xinglongwa site a typical settlement of the Xinglongwa culture





Pottery and jade of the Xinglongwa culture

Stone artifacts of the Xinglongwa culture





Subsistence economy

hunting-gathering

broomcorn domestication

permanent settlement



Initial stage of social complexity

large inner-room burial

jade ornament

large house

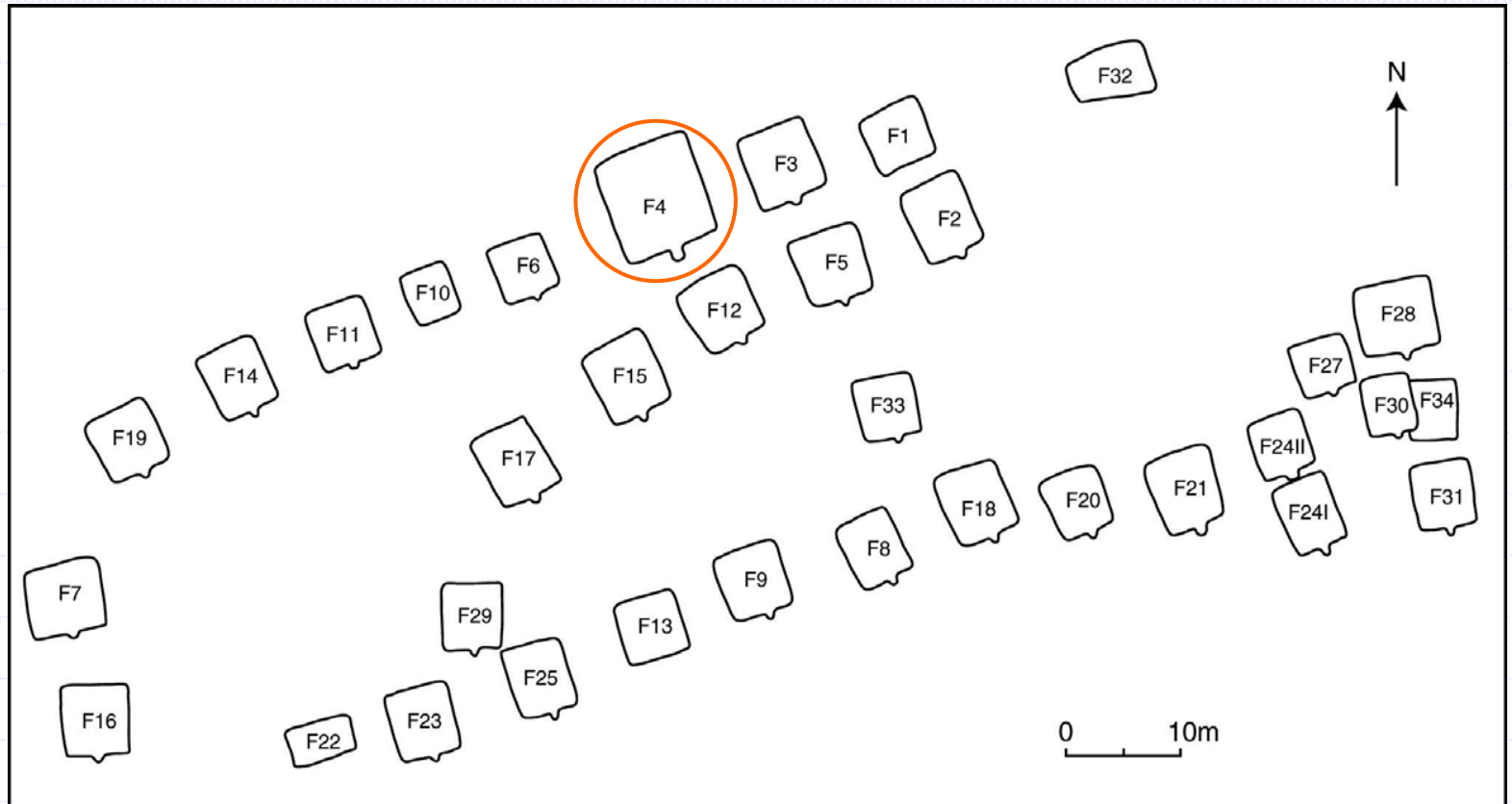


Questions

Had craft specialization appeared?

Who controlled craft manufacture?

Plan of the Nantaizi site



Process

Scan site map



Digitalize site map by *cartalinx*



Design and fill in attached table

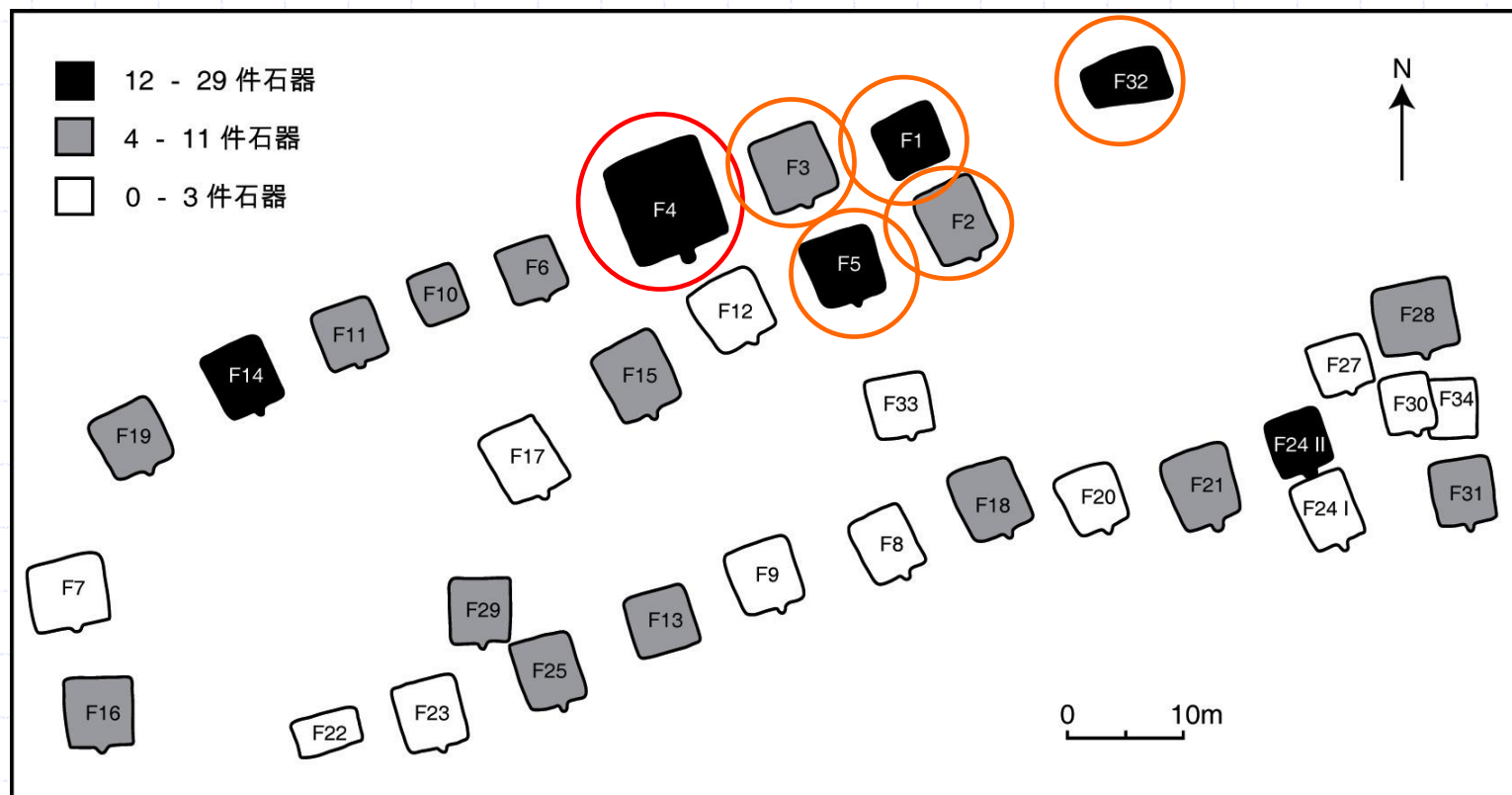


Export map and table to *Arcview*

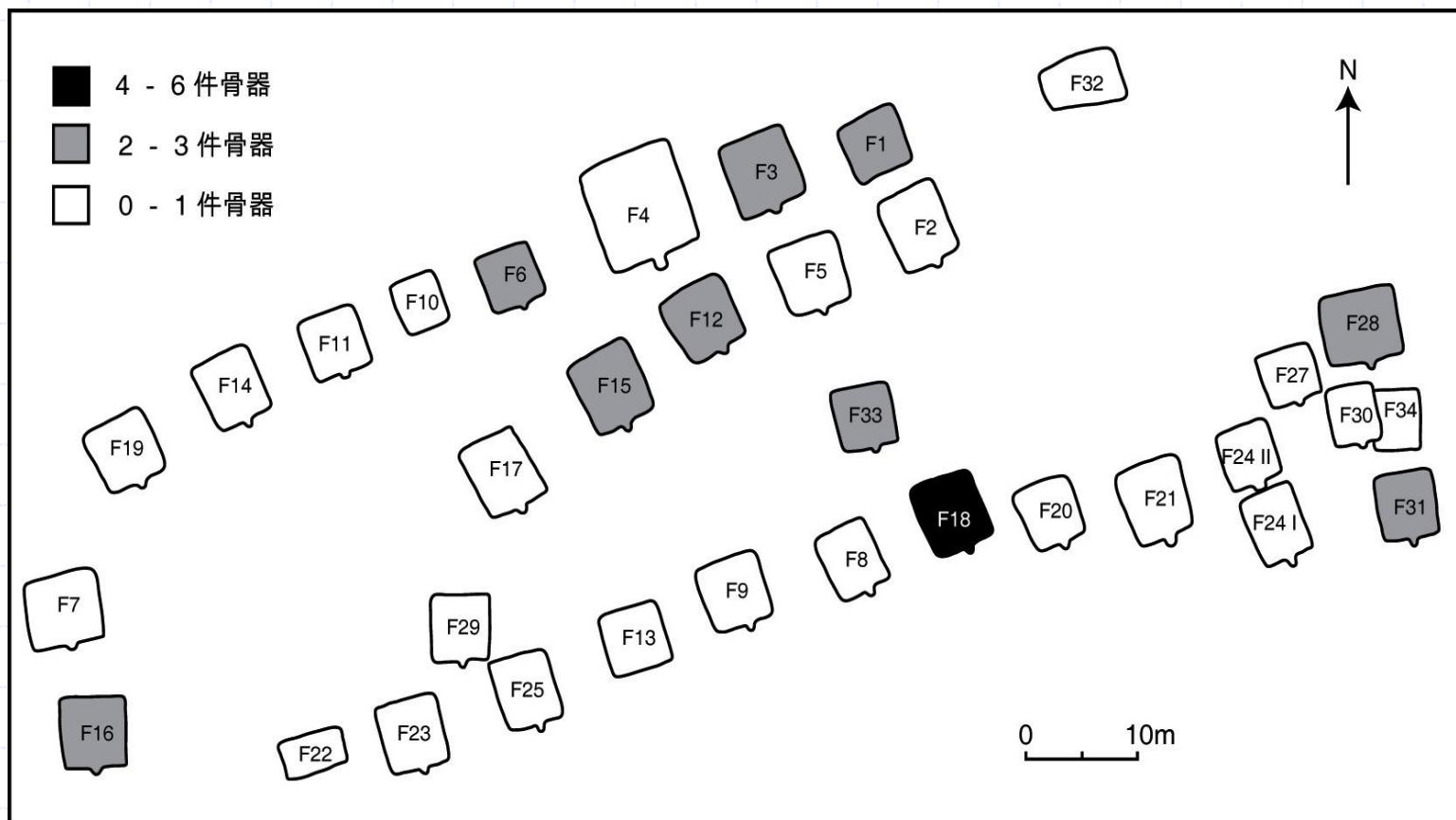


Analyze data by *Arcview*

Distribution of stone artifacts at Nantaizi



Distribution of stone artifacts at Nantaizi





Conclusion

elementary specialization controlled by leading household might have emerged as early as in the middle Neolithic period in China