



东方考古

第13集

山东大学文化遗产研究院

编



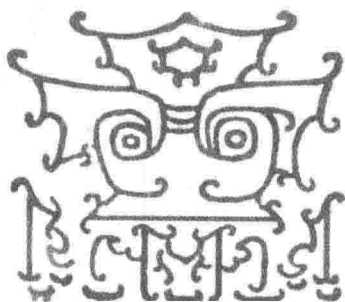
科学出版社

山东大学重点学科建设基金资助

东方考古

第 13 集

山东大学文化遗产研究院 编



科学出版社

北京

内 容 简 介

《东方考古》是山东大学文化遗产研究院编辑的关于考古学和古代东方文明研究的系列丛书，分集陆续出版。本丛书以中国东方地区和东亚地区考古学为重点，广泛吸收国内外学者的最新研究成果，体现考古学研究的新思路、新理论和新方法。

第13集收录18篇研究论文和3篇调查、发掘报告，内容涉及聚落考古、动物考古和运河考古等方面的研究。

本书可供历史学、考古学等方面的专家学者和大专院校相关专业师生参考、阅读。

图书在版编目(CIP)数据

东方考古. 第13集 / 山东大学文化遗产研究院编. —北京: 科学出版社, 2016. 12

ISBN 978-7-03-051396-0

I. ①东… II. ①山… III. ①考古学—研究—亚洲—文集 IV. ①K883-53

中国版本图书馆 CIP 数据核字 (2016) 第 314997 号

责任编辑: 刘 能 / 责任校对: 彭 涛
责任印制: 肖 兴 / 封面设计: 陈 敬

科学出版社出版

北京东黄城根北街16号

邮政编码: 100717

<http://www.sciencep.com>

中国科学院印刷厂印刷

科学出版社发行 各地新华书店经销

*

2016年12月第一版 开本: 787×1092 1/16

2016年12月第一次印刷 印张: 19 1/4 插页: 6

字数: 450 000

定价: 150.00 元

(如有印装质量问题, 我社负责调换)

《东方考古》编辑委员会

主 任 栾丰实

副主任 方 辉

委 员 (以姓氏笔画为序)

王 芬 王 青 方 辉 白云翔

任相宏 陈淑卿 郑 岩 郑同修

赵 辉 栾丰实 崔大庸 靳桂云

秘 书 陈淑卿

目 录

The Human Role in Constructing Settlement Patterns and Landscapes: A Caution

Based on Systematic Archaeological Survey in Coastal Shandong Province, China···

····· Gary M. Feinman Linda M. Nicholas Fang Hui (1)

海岱地区史前聚落结构的演变····· 栾丰实 (16)

略论中国早期复合城市的形成····· 惠夕平 (28)

滕州前掌大墓地的国族问题····· 方 辉 (33)

莱国出土异地商周金文通释绎论····· 孙敬明 (39)

胶东半岛西周时期遗存的文化因素分析····· 曹 斌 王晓妮 (53)

武进淹城遗址功能新考····· 徐 峰 施建刚 (64)

论山东枣庄东江墓地春秋时期贵族墓的埋葬特点——与长清仙人台等墓地之比较

····· 印 群 (74)

《墨子》“戮于社”考——兼谈社的文化功能····· 吴玉萍 (80)

汉画像石墓出土仿木结构石立柱初步研究——兼谈白杨店画像石墓出土立柱位置

····· 邢 琪 房 振 李 铭 郭俊峰 (87)

磨制石器的量化分类方法初探——以中锋端刃器的分类为例····· 黄可佳 (101)

两城镇遗址农业生产遗存探查····· [日] 宇田津彻朗 (113)

两城镇陶器的脂类残留物分析····· [美] Rheta E. Lanehart 著 姜仕炜 译 (134)

大辛庄商代制陶工艺研究····· 邢 琪 (174)

常见古代人类骨骼标本在博物馆中的价值····· 赵永生 曾 雯 (204)

牟平蛤堆顶遗址 2013 年出土软体动物分析····· 宋艳波 王泽冰 (208)

大连王家村遗址软体动物分析····· 宋艳波 王 强 (220)

张掖西城驿遗址 2014 年出土动物遗存分析·····

····· 宋艳波 陈国科 王 辉 范宪军 靳桂云 (233)

山东聊城市西梭堤遗址发掘简报····· 山东大学文化遗产研究院 (243)

西梭堤周边运河文化考古调查····· 王 迪 (259)

山东聊城周家店闸遗址调查、发掘简报·····

····· 山东大学文化遗产研究院 聊城市文物局 聊城市东昌府区文物管理所 (270)

Contents

The Human Role in Constructing Settlement Patterns and Landscapes: A Caution Based on Systematic Archaeological Survey in Coastal Shandong Province, China	Gary M. Feinman Linda M. Nicholas Fang Hui (1)
Settlement Development in the Prehistoric Haidai Region	Luan Fengshi (27)
A Brief Review on the Formation of the Double City in Early China	Hui Xiping (32)
Discussion about the State-nation of Qianzhangda Cemetery in Tengzhou	Fang Hui (38)
Explanation of Inscriptions on Bronze Objects of Foreign States Unearthed in Lai State	Sun Jingming (52)
The Analysis of Culture Elements on the Remains of Jiaodong Peninsula during the Western Zhou Period	Cao Bin (63)
A New Research on the Function of Yancheng Site in Wujing District	Xu Feng Shi Jiangang (73)
Discussion on the Burial Characteristics of Dongjiang Noble Tombs in Zaozhuang City, Shandong Province during the Spring and Autumn Period: Compared with Changqing Xianrentai Cemetery	Yin Qun (79)
Reach of Slaughtering in the She in <i>Mo-tse</i>	Wu Yuping (86)
The Research on Stone Pillar with Wood Imitation Structure during the Eastern Han Dynasty: and Speculate the Specific Location of the Pillar in the Tomb of Baiyangdian	Xing Qi Fang Zhen Li Ming Guo Junfeng (100)
A Preliminary Study on Classification of Polished Stone Tools with Quantitative Methods: Using Symmetrical Side Edge Axes as Case Study	Huang Kejia (111)
Investigation of Rice Production Areas at the Liangchengzhen Site	Tetsuro Udatsu (132)
Lipid Residue Analysis of Ceramics at Liangchengzhen	Rheta E. Lanehart Translated by Jiang Shiwei (173)
The Research on Pottery-making Craft of Shang Dynasty in Daxinzhuang Site	Xing Qi (203)
The Value of Ancient Human Skeletons in Museum	Zhao Yongsheng Zeng Wen (207)

Molluscs Analysis of Geduiding Site of Muping County in 2013	Song Yanbo Wang Zebing (219)
Molluscs Analysis of Wangjiacun Site, Dalian City	Song Yanbo Wang Qiang (232)
Faunal Remains Analysis of Xichengyi Site of Zhangye City in 2014	Song Yanbo Chen Guoke Wang Hui Fan Xianjun Jin Guiyun (242)
A Brief Archaeological Report of the Xisuodi Site, Liaocheng City, Shandong Province	Institute of Cultural Heritage, Shandong University (258)
An Archaeological Survey of the Canal Culture Found at Xisuodi Village	Wang Di (269)
A Brief Report of the Excavation of the Zhoujiadian Navigation Lock in Liaocheng, Shandong Province	Institute of Cultural Heritage, Shandong Univeristy Liaocheng Municipal Administration of Cultural Heritage Administration of Cultural Heritage of Dongchangfu County, Liaocheng City (297)

The Human Role in Constructing Settlement Patterns and Landscapes: A Caution Based on Systematic Archaeological Survey in Coastal Shandong Province, China*

Gary M. Feinman¹ Linda M. Nicholas¹ Fang Hui²
(1. The Field Museum; 2. Shandong University)

Introduction

The recent advances in archaeobotany that have fostered our understanding of agricultural origins and variable crop regimes across Neolithic and Bronze Age Eastern Asia represent major contributions for which we applaud our colleagues who have presented their discoveries and results at this conference. These findings help us see how early villagers in this part of the world constructed diverse niches that they inhabited thousands of years ago. Greater knowledge regarding the cultivation, domestication, and diffusion of plant varieties is crucial, both to understand the innovation of early farmers in this region and to provide a fuller picture of how the inhabitants of these ancient Eastern Asian communities made a living.

This paper takes a somewhat different perspective than many of the others in the conference. Although we offer great praise and see unquestionable significance in the archaeobotanical research reported here, we also offer a caution regarding how these new exciting findings and the implications drawn from them are ultimately employed for interpretation and analysis. Our perspective is not presented as a specific response to any research results presented at this symposium but rather is offered in a friendly, constructive vein based on both the results of our regional-scale and long-term investigations (some of the findings of which we present here) and the experiences of the two senior authors, who witnessed the analytical perspectives advanced by archaeologists in another global region (prehispanic Mesoamerica) following new breakthroughs in archaeobotanical knowledge decades ago (e.g., MacNeish 1964; Sanders 1971; Sanders and Price 1968). Subsequent and more expansive findings and more in-depth analyses generally have led to the theoretical reconsideration of these narrow perspectives on the determinants of human settlement and to the recognition that a wider

* Revised paper prepared for International Symposium on the Origin and Diffusion of Agriculture and New Developments of Archaeobotany in China. Shandong University, Jinan, China 2013.

web of often spatially more widespread factors were important (e.g., Balkansky 2006; Kowalewski 2004).

Our concern is with how we, as archaeologists, come to interpret and understand the distribution and sizes of human settlements as a fundamental part of the ways that humans construct their niches and landscapes. More specifically, in contrast to certain earlier perspectives that viewed human settlement as a relatively direct consequence of environmental and subsistence considerations, we see the niches and landscapes that humans built, even in preindustrial times, as more complex outcomes of diverse phenomena and variables. Settlement decisions, of course, heavily weigh environmental and subsistence realities, but they also are a product of other economic variables (e.g., distance to non-food resources, exchange routes, and markets) as well as social, political, and military concerns. In archaeology, we too often have presumed that local environmental and agrarian concerns determined patterns of human settlement, but decades of archaeological settlement pattern studies have shown, in global region after global region (Kowalewski 2008), that many factors frequently enter into settlement decisions and histories, and that human-environmental interrelations generally are recursive and not unidirectional (Fisher and Feinman 2005).

In this paper, we draw on the systematic archaeological settlement pattern results from our full-coverage walkover in eastern Shandong to make the case that factors other than environmental and agricultural variables played critical roles in the changes in human settlement distributions across this area over time. In particular, we argue that long-standing inter-polity tensions and possibly conflicts between the people residing in the coastal basins that are the focus of our research and populations to the north (at the southern limits of the Shandong Peninsula) may have been a key consideration for understanding major settlement pattern shifts in the northern sector of our study region (Figure 1).

Background to Full-Coverage Survey in Coastal Shandong and Field Methods

Around the globe, systematic, full-coverage pedestrian surveys have brought a new spatial, diachronic, and theoretical vantage to the study of early civilizations (Blanton 2004; Blanton et al. 1999; Feinman 2001; Feinman and Nicholas 1990, 1999, 2013; Fish and Kowalewski 1990; Sabloff and Ashmore 2001; Sanders et al. 1979; Wilkinson 2000; Wright 1986). The principal objective of archaeological survey is to map changes in settlement patterns across time and space to provide long-term, regional histories of shifting settlement and demography. These settlement pattern studies have revolutionized what we know about the past by providing broadbrush views of the long sweep of history that cannot be obtained from ancient texts or the excavation of single sites.

Full-coverage surveys are being conducted in an increasing number of areas in China (Chifeng Project 2003; Fang et al. 2012; Linduff et al. 2004; Liu and Chen 2001; Liu et al. 2004; Murowchick 1997; Shelach 1997, 1999; Underhill et al. 2008; Zhouyuan Team 2005). We began our systematic, full-coverage walkover of two large, mountain-ringed coastal basins in southeastern Shandong Province in 1995 (Figure 1).

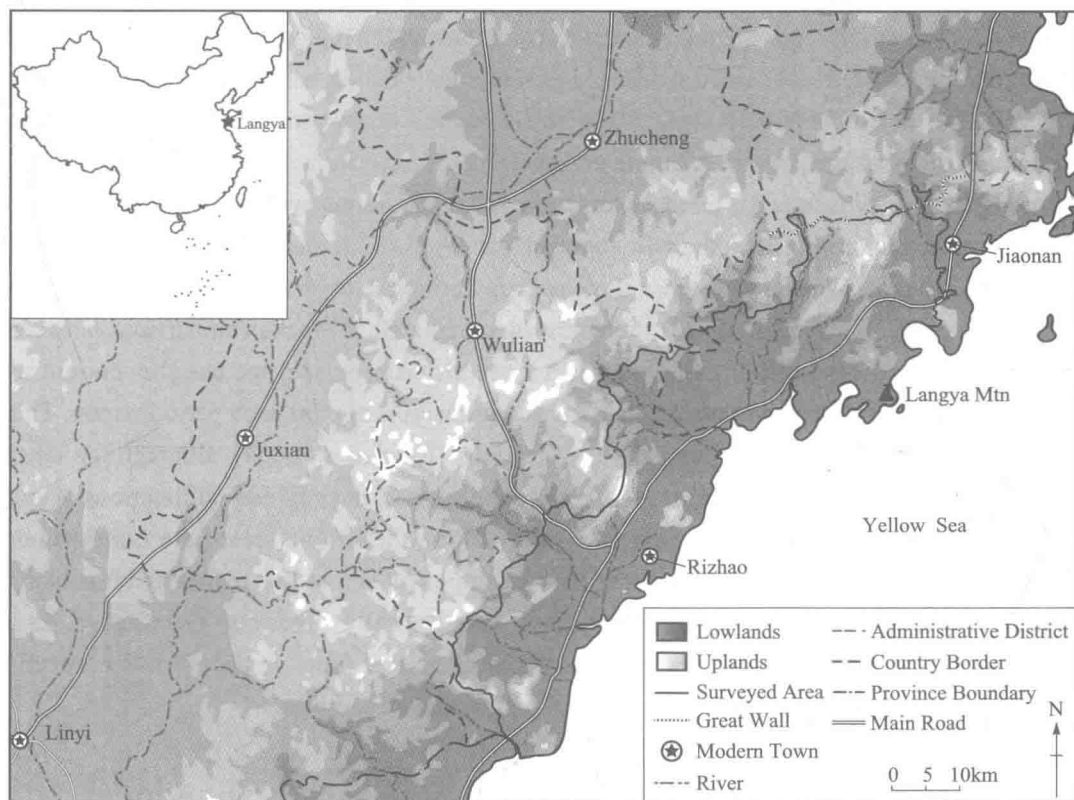


Figure 1 Location of survey area coastal southeastern Shandong Province

Over 17 field seasons we have systematically walked over an area of 2140 sq km. The surveyed area comprises relatively flat basins made up of low slopes and floodplains along a series of rivers that descend from the rocky ridges to the coast of the north Yellow Sea and hillier, less bounded terrain at the northern edge of the basins, south of the port city of Qingdao.

We systematically traverse the terrain, including terraced fields, vegetable gardens, soggy rice fields, fruit orchards, and forested hills, in crews that average 6-7 people, spaced approximately 50-75 m apart, looking for such traces of past settlements as pottery fragments, stone tools, exposed pits or layers of ancient cultural deposits, and, less frequently, the remnants of archaeological features such as tombs, walls, and platforms. Surface archaeological materials, especially pottery, carry temporal information that allow for the dating of the ancient sites. We make collections of diagnostic pottery at almost all sites. To

estimate the relative extent of sites and how a site's size may have changed over time, larger sites are divided into many separate, smaller collection areas. The surface distributions of all archaeological materials are located on 1:10000 topographic maps. This recorded information provides the basic settlement pattern—the sizes and distribution of sites—for each archaeological phase under investigation. Given the fast pace of development that is destroying many ancient sites in eastern Shandong, the information we collect on survey will be the only preserved record of many ancient settlements in the region.

During the survey we recorded thousands of settlements dating between the early Neolithic and the Han period (5300 BC-AD 220). To illustrate and evaluate our perspective that settlement distributions are not a simple consequence of environmental considerations alone, we compare survey results for three sectors, or subregions, of our overall study region. These subregions largely conform to the two coastal basins (the south and central sectors) and the northern hilly area. We compare those three sectors during the temporal periods that are most evident (broadly represented) across the entire surveyed area. To make comparisons between the densities and distributions of settlement over time and space, we use the amount of occupied area, as determined through field investigation (survey), for each period/region. This is a more direct measure than population estimations (Fang *et al.* 2004), although the latter would yield comparable patterning. As we have discussed in previous publications (Fang *et al.* 2012; Feinman *et al.* 2010; Underhill *et al.* 2008), there is no clear Late Longshan or early Bronze Age (Yueshi and Shang) settlement component across this region and it is likely that diagnostics indicative of those time periods were basically either rare or intrusive. As a consequence, to assess patterns of settlement distribution over time, we focus on the six time periods for which we have the most ample and representative samples.

Settlement Pattern Change in Southeastern Shandong

Although a few earlier settlements, pertaining to the Beixin period (c. 5300-4100 BC), were recorded in our study area (Underhill *et al.* 2008), the first extensive and widespread occupation of this region occurred during Late Dawenkou (c. 3000-2600 BC) (Figure 2). These village farmers likely arrived in coastal Shandong from adjacent areas, carrying with them an existing agricultural way of life. The Late Dawenkou farmers established small and widely dispersed settlements across the region, but the number and density of their communities were much lower in the north, perhaps reflecting the more rolling, hilly terrain there that seemingly was less productive for farming.

The factors that resulted in the lower densities of settlement in the northern portion of the study area in Late Dawenkou were no longer relevant by the subsequent Early Longshan period (2600-2400 BC) when occupied settlement area increased across this coastal region by more than an order of magnitude, with growth in the north greater than in the other two subregions. Each sector of the study region was dominated by the emergence of a large

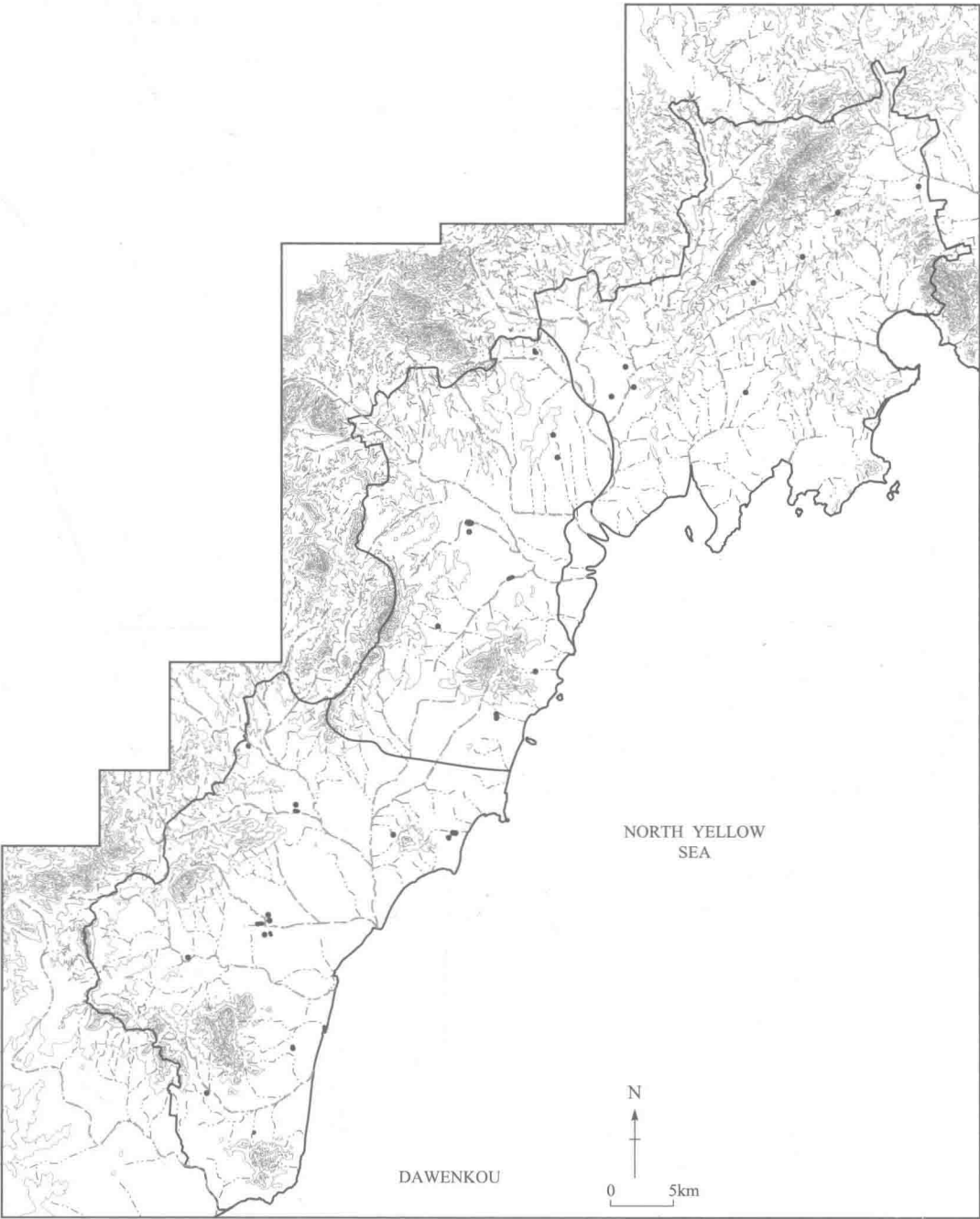


Figure 2 Late Dawenkou settlements

center (Yaowangcheng, Liangchenzhen, and Hetou) (Figure 3). These three large communities are spaced relatively evenly across the overall region, perhaps indicating their similar roles as central places for their respective hinterlands.

During the subsequent Middle Longshan period (2400-1900 BC) (Figure 4), occupied settlement area decreased by a modest amount across the entire study region, but that

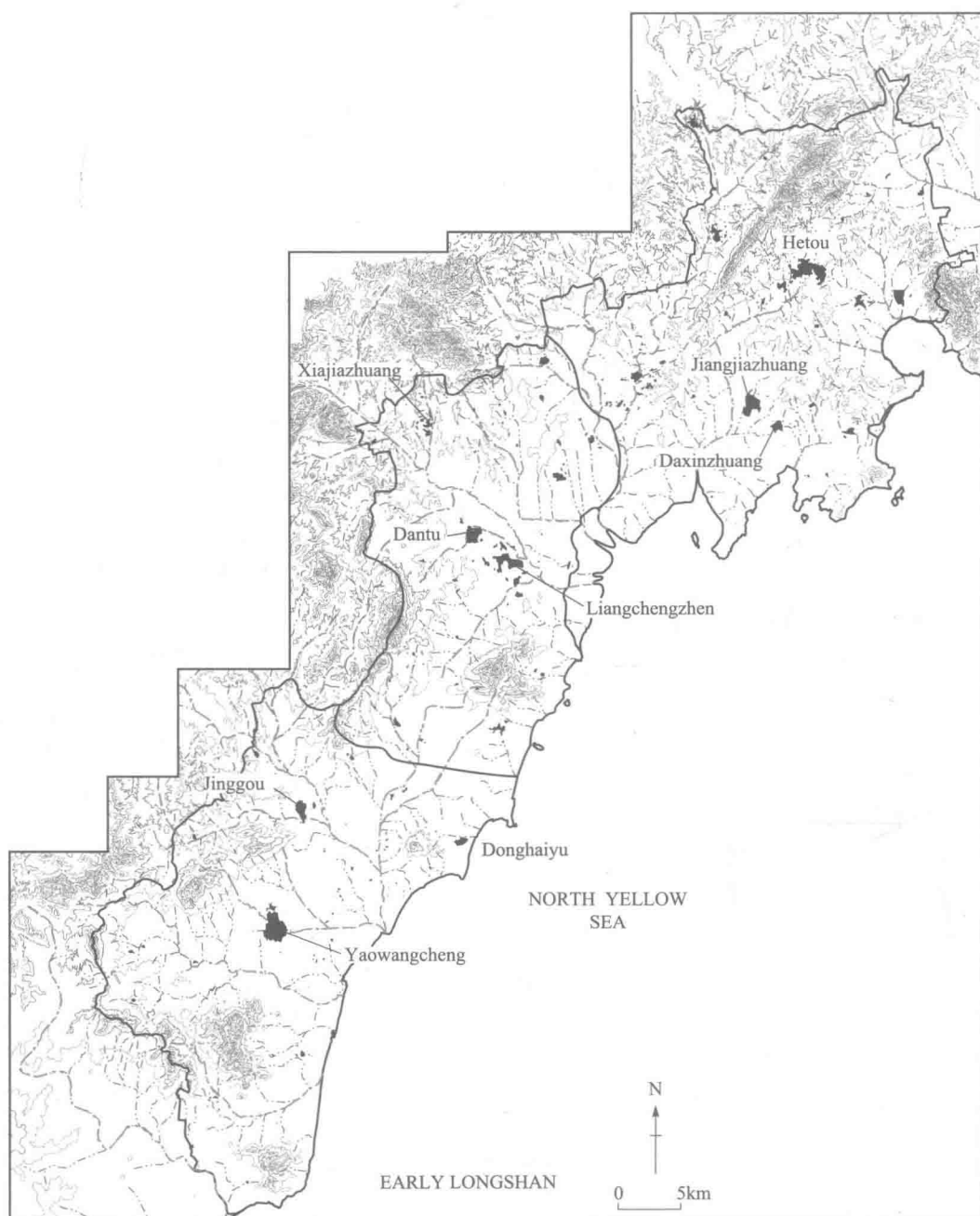


Figure 3 Early Longshan settlements

population decline was much greater in the northern subregion. In particular, the population decreases at the Hetou site and its immediate surrounds near the northern edge of the area were particularly marked. Given the magnitude and spatial unevenness of this demographic decline across the entire area, it is unlikely that it was a product of local environmental or agrarian factors alone. The recovery of more Longshan-era stone arrow points from this northern edge of our study region than in the entire rest of the surveyed

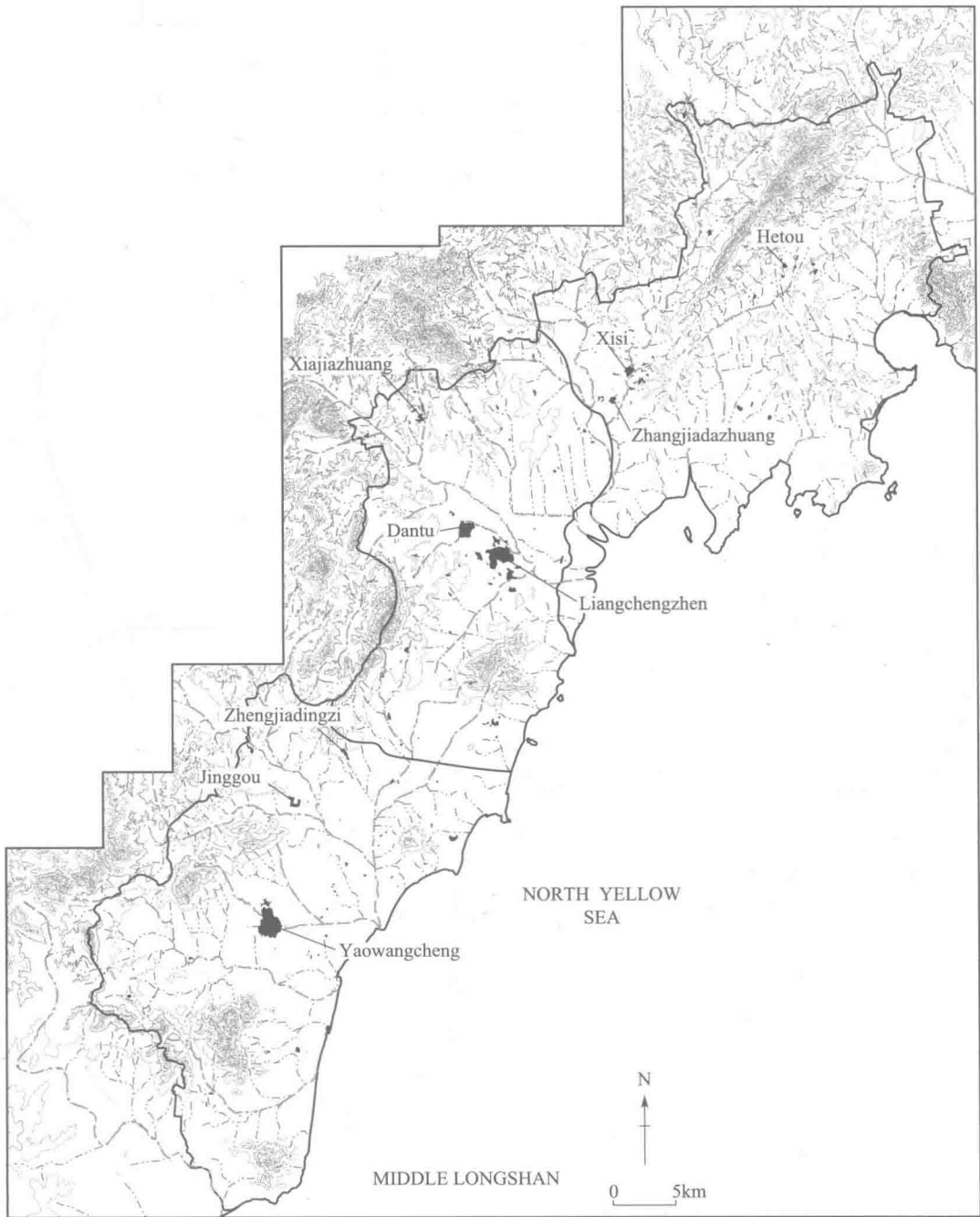


Figure 4 Middle Longshan settlements

area lends some evidential support to the interpretation that other factors, namely military concerns, may have been primary.

Some of these patterns were amplified during the Western Zhou period (1100-771 BC) when again the northern subregion was less densely occupied than the two subregions to its south(Figure 5). For the entire region, settlement levels and the sizes of the largest centers

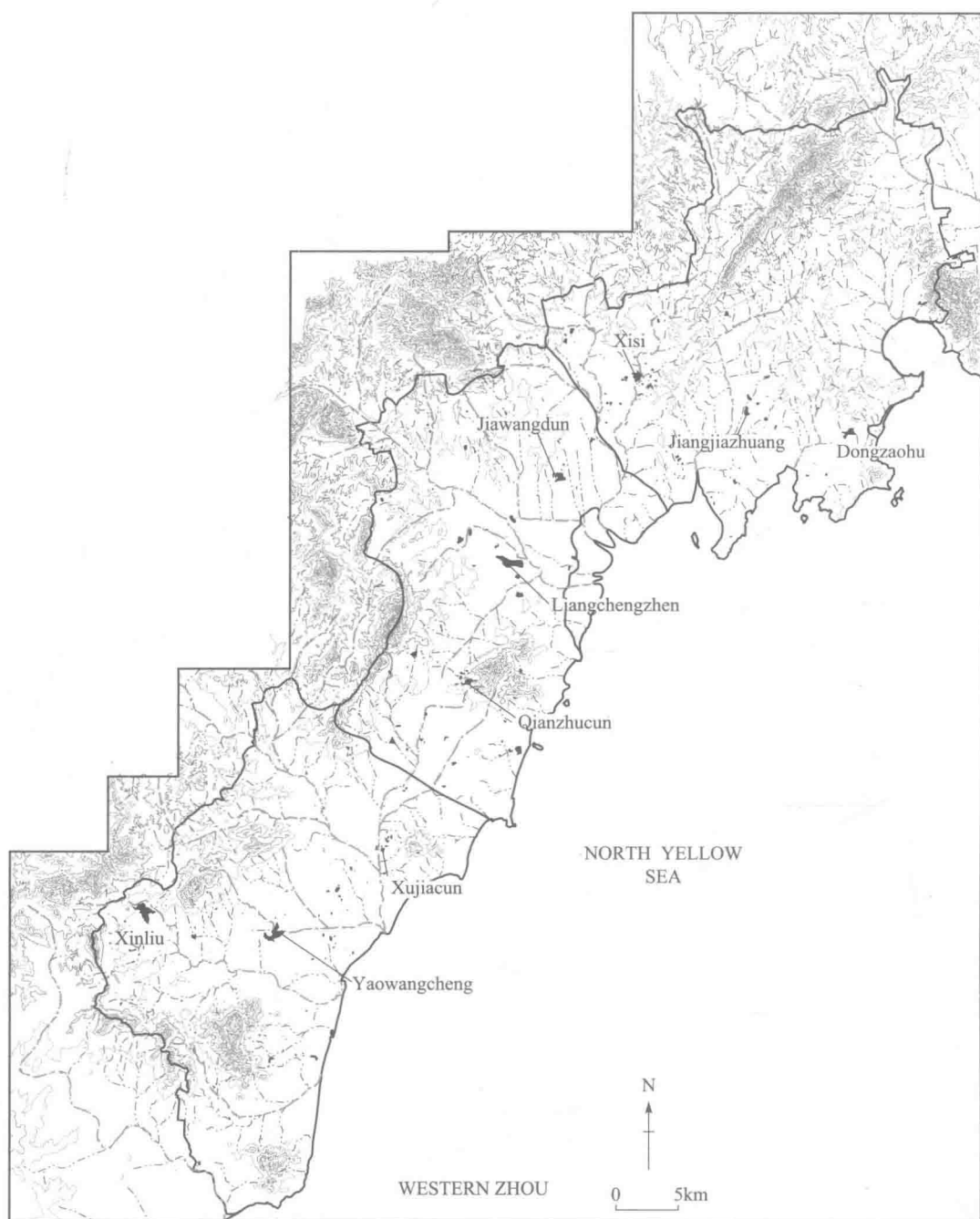


Figure 5 Western Zhou settlements

declined as earlier Longshan period polities were reorganized, perhaps under the hegemony of centers and rulers whose capitals were situated outside the boundaries of our study region (Underhill *et al.* 2008). In the northern subregion, population (occupied settlement area) increased a bit from the low levels of the prior period, but this growth was concentrated in the southern part of the northern subregion (including sites at Xisi, Jiangjiazhuang, and

Dongzaohu). This linear array of settlement appears to constitute the northern border of a polity that extends to the south (Figure 5). To the north of this linear array in Western Zhou, the number of settlements declined so that there almost was no settlement (in the northern part of the northern subregion). This northern realm of the archaeologically surveyed region may have been a boundary or shatter zone at this time, marking a boundary with a competing Western Zhou era polity centered to the north.

That militarism and competition had a key role in the low population densities across this northern edge of the study region is evidenced further by the construction of the great wall of the Qi state in precisely this area during the Eastern Zhou period (770-221 BC) (Figure 6). The rammed earth wall built around 500 BC served as an impediment to large infantry invasions that were increasingly used at this time (Lewis 1999). The Qi state was centered to the north of the wall, and the area that we surveyed immediately adjacent to the wall (on both sides) was largely absent of settlement indicating that this northern part of the northern subregion remained a dangerous shatter zone, particularly to the west of the mountains that partly define the coastal basin in the north.

The millennia-long pattern of low population densities in the northern part of the study region ceased dramatically following the unification of China and the Qin Dynasty conquest of the Qi during the 3rd century BC. During the subsequent Han period (206 BC-AD 220) (Figure 7), following Qin Shi Huang's establishment of a provincial capital at Langyatai (Feinman *et al.* 2010), the northern sector of the survey region became by far the most densely occupied. Langyatai was much greater in size than any prior or contemporary settlement in the region. But even if urban Langyatai is not included in the calculation, the northern subregion was still more densely occupied in the Han period than the other two subregions. This marked shift in the density of regional settlement across the study region over millennia provides further support for the argument that factors beyond local environmental and agrarian considerations were involved. In fact, we (Feinman *et al.* 2010) have postulated that Qin Shi Huang's decision to establish Langyatai where he did likely was done both to consolidate previously acrimonious states and to take advantage of proximate salt resources and monitor/expand an emergent sea trade.

Concluding Thoughts Concerning Temporal Change

The temporal fluctuations in which the northern sector of the study region shifted from the most sparsely settled (especially at the northern edge) to the most densely occupied in Han (Figures 8, 9) seem to conform with a suite of causal factors that go well beyond local environmental and agrarian conditions. If environment or agricultural productivity were the prime factors, then greater consistency in the relations between regional sectors would be expected over time. That population ebbs and rises tended to occur over sizeable spatial areas

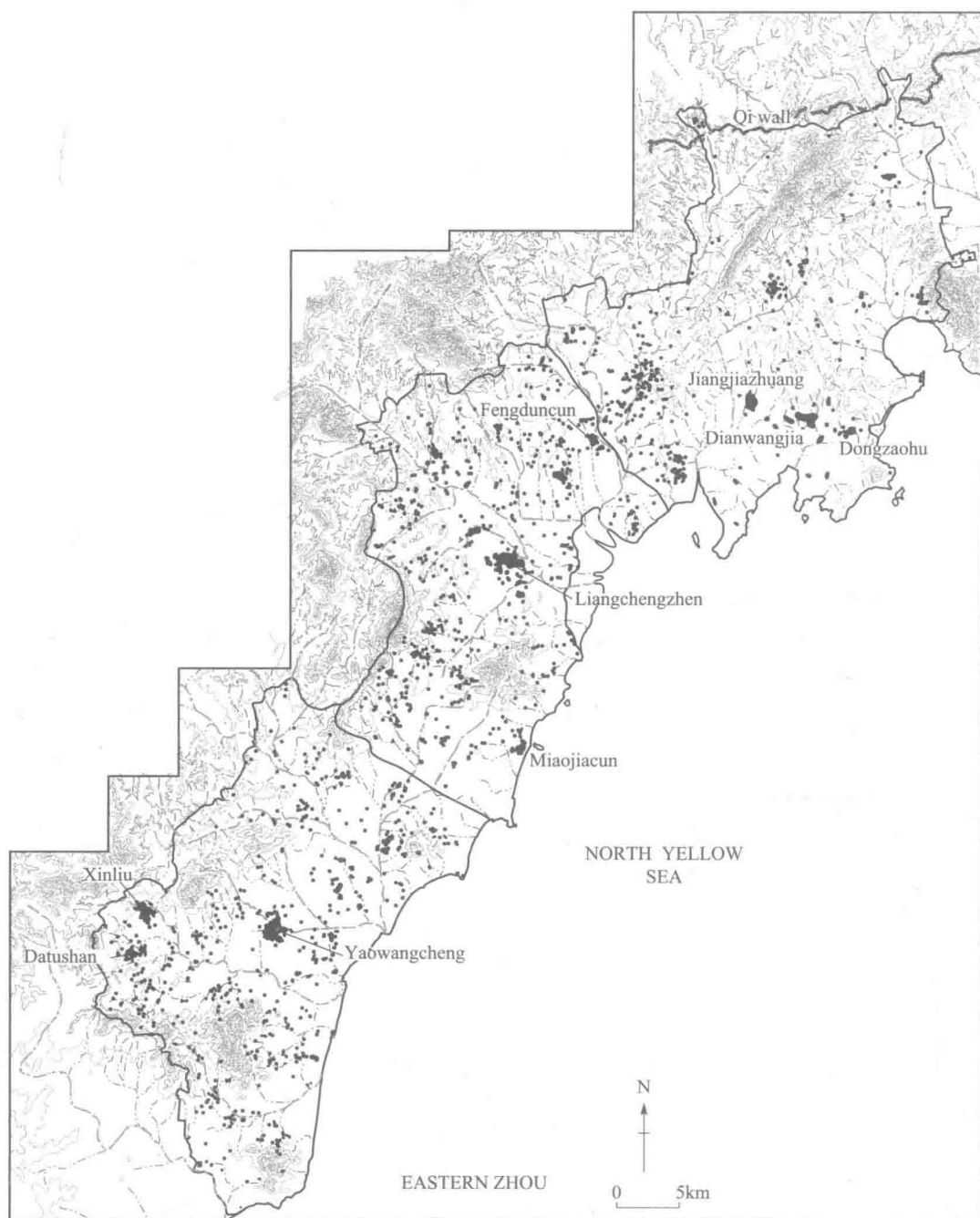


Figure 6 Eastern Zhou settlements

provides further support that broader-scale factors including military, political, and broader economic considerations (such as exchange) likely were important. There is no question that we, as archaeologists, need much more information on the relative productivity of different crop regimes using preindustrial technologies. Such findings would permit us to assess these issues with greater precision. They might even help us understand the lower densities in