

**TRANSITION FROM FORAGING TO FARMING
IN NORTHEAST CHINA**

VOLUME ONE

(TEXT)

A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR
ADMISSION TO THE DEGREE OF DOCTOR OF PHILOSOPHY

By

(Peter)

Wei Ming JIA

Department of Archaeology
The University of Sydney

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PREFACE

This study was carried out in Department of Archaeology, the School of Philosophical and Historical Inquiry, the University of Sydney from March 2000 to August 2004.

A portion of this study has been published elsewhere or presented in international conference:

- (i) Jia, Weiming, et al., 2003. Preliminary report of field observation in northeast China. In: Institute of Russian Far East eds. Proceeding of “Century to Century” Conference of Archaeology in East Pacific, 2003. Vladivostok, Russia: Institute of Russian Far East, 247-251.
- (ii) Jia, Weiming, 2003. The problem of the term “Neolithic” in the archaeology of northeast China. Conference. In: Institute of Russian Far East eds. Proceeding of “Century to Century” Conference of Archaeology in East Pacific, 2003. Vladivostok, Russia: Institute of Russian Far East, 252-254.
- (iii) Jia, Weiming, 2002. The method of settlement pattern research. *Wenwu*, 8.
- (iv) Jia, Weiming, 2001. The origin of agriculture and the Neolithic periods in northeast China. *Beifangwenwu*, 3.
- (v) Jia, Weiming, 2004. The study of environmental reconstruction and its application. Third International Congress, Society for East Asian Archaeology, Chungnam National University, Daejeon, Korea. June 16-19, 2004.

DECLARATION

I declare that all work in this thesis is the result of my own research and all references to the work of other researchers have been acknowledged. This thesis has not been submitted in whole or in part for any other degree.

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ABSTRACT

The main aim of this thesis is to demonstrate a new research method, using a framework of tool complexes analysis to trace back prehistoric economy. Using this framework the model of transition from foraging to farming such as “the availability model” proposed by Zvelebil and Rowley-Conwy (1984) can be tested with common archaeological data. Through case studies in northeast China, this thesis has made a contribution to this aim and has provided a useful method to study prehistoric economies relying on archaeological discoveries. The methodological approach in this thesis has suggested that the economies chosen by prehistoric societies are retrievable from the archaeological record without direct reference of faunal and floral data. This makes this method particularly useful for regions and periods where no faunal and floral information available. This method for retrieving economic information is also without direct reference to ethnographic analogy. This study has shown the potential significance of the use of common archaeological data without directly using highly technological equipment and a large amount of scientific analysis. This makes this method particularly valuable for the research in most archaeological records in China and elsewhere when there are few modern technologies, methodologies and research conditions available.

The theoretical approach in this thesis has implicated that the transition to agricultural economy is the result of the interaction between human societies and environment and many factors are involved in this interaction. The motivation may have to be the major factor leading to the transition to farming. This transition to agriculture would have to be the choice of society in the certain level of social complexity. Otherwise plant cultivation would not become a social economic behaviour and would have to become individual interest and remain in a very small amount.

Chapter 1 outlines the major purpose of this thesis and background of current archaeological studies in northeast China in relation to transition from foraging to farming. I have made some justifications for the “availability model” suggested by Zvelebil and Rowley-Conwy (1984) in this Chapter.

Chapter 2 reviews the studies in transition to farming worldwide, including transition research in the west, China and northeast China. A summary of Chinese archaeology in its method and theory is also included.

Chapter 3 establishes my methodological framework in studies of transition to farming in northeast China, including the explanation of tool complex analysis, interpretation of the results of this analysis and establishing a baseline based on studies in the transition to farming in central China.

Chapter 4 reconstructs Palaeo-environment in northeast China, involving sea level, temperature and precipitation, and vegetation changes during the Holocene in northeast China. Mainly based on pollen data, including present pollen reference, studies of the summer monsoon, this reconstruction provides an outline of environmental changes in northeast China.

Chapter 5 to 8 are case studies. Based on the archaeological records in the four regions: the Liao River region, Liaodong peninsula, Song-Nen plain and Changbaishan mountains in northeast China, they use my methodological framework to analyse the process of transition to farming in each region, to establish the patterns of transition in northeast China.

Chapter 9 synthetically analyses the process and model of the transition to farming in northeast China, including the analysis of transition patterns, the relationship between environmental changes, technological level and agricultural transition in northeast China. Some tentative explanations of the causes of the transition to farming are also included.

Chapter 10 extends some theoretical discussions, including discussion of the relationship between environment and economies in different transition models. The potential usage of tool complex analysis in other regions is discussed in this Chapter and followed by some suggestions in the future studies, such as transition to animal farming, transition within one archaeological culture and studies on individual species of plants and animals. The suggestion of studies using the same method of tool

complex analysis in present ethnic groups to compare to its economies is also included in this Chapter.

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