

**重建海上丝绸之路史前史：
东亚新石器时代海洋文化景观**

国际学术研讨会会议程

**The prehistoric maritime silkroad:
New research on Neolithic seascapes of
East Asia**

International Conference

(Oct.29 – Nov.2, 2017, Xiamen University, China)

Meeting Schedule

厦门大学海洋考古学研究中心

The center for maritime archaeology, Xiamen University

2017, 10, 29 - 11, 2

1，会议简介

海洋文化是史前以来影响人类文明起源与发展最重要的机制之一。海洋环境造就了不同于内陆的社会文化系统，包括海洋文化景观、聚落形态、海洋生活等。近百年来，中国东南沿海与东南亚地区的考古调查与发掘揭示了这一地区史前海洋文化的繁荣发展景象，这是一个依靠海洋捕捞、采集狩猎、原始航海等而发展的独特原始海洋生态文化景观，迥然不同于中原、北方内陆的新石器时代农耕文化和早期文明形态。

民族考古发现与研究表明，史前和原始的航海术是中国东南与东南亚新石器时代人类的一项重要技术发明。新石器时代人类的航海实践不仅产生了东亚早期的文化互动和人群扩散，而且创造了原始海船与航海术的重要基础，这一基础在过去数千年来亚太地区海上丝绸之路的形态与发展过程中发挥了关键的作用。

东亚新石器时代航海史与史前海上丝绸之路是一个具有挑战性的新课题，涉及考古学、人类学、民族学、语言学、历史学等多学科的综合研究。该课题的研究涉及东亚大陆与西太平洋岛弧间海洋地带的史前土著文化分布、扩散和人群迁移，将极大地深化这一地区历史时期海上丝绸之路的形成与发展历史的认识。

厦门大学的海洋考古中心（CMAXMU）重视环中国海海洋文化史的考古学调查研究，本次研讨会由该中心与美国夏威夷大学人类学系合作组织，以中国东南和东南亚史前时代海上丝绸之路发展史为主题。

本次研讨会收到的论文主要围绕以下两个议题：

1、新石器时代陆海文化的变迁、传播与史前航海。通过东亚沿海、岛屿新石器\青铜时代文化内涵的类型学比较与文化传播研究，分析史前人群的海洋扩散与航海史。提交论文涉及华南与东南亚的“新石器化”的模式与途径、华南与东南亚沿海史前遗址的分布、文化内涵与时空类型的比较研究、新石器时代沿海岸或跨越海峡的陆岛间文化传播与人群移动、新石器时代的史前航路及其与历史时期海上丝绸之路的延续传承关系。

2、新石器时代海洋文化景观、海洋经济生活。在史前大陆海岸与海岛生态环境变迁史复原的基础上，重建新石器\青铜时代海洋聚落形态、经济生活与海洋活动。提交论文涉及中国东南及东南亚海岸与海岛地带古生态环境复原、新石器时代陆岛沿海遗址的分布与海洋聚落形态变迁、新石器时代海岸与海岛人群的生活方式与海洋经济形态等。

来自中国大陆、香港、台湾及日本、菲律宾、越南、新西兰、澳大利亚、美国、英国等国家和地区的考古学者及相关领域的多学科学者等，将就东亚及东南亚地区的史前海洋文化、航海术起源与原始海上丝绸之路的最新发现与研究交换资讯，交流看法，增进相互理解，促进这一重要的跨界海洋文化地带考古与史前史的研究。

Introduction

Origins of the maritime silk road can be traced to prosperous prehistoric maritime cultures dispersed along the coastlines of China and Southeast Asia. Across much of this vast coastal area, technologically advanced maritime-oriented peoples were well established prior to the arrival of rice farmers, who spread south from an agricultural center near the lower reaches of the Yangtze River. Comparatively little is known about these Neolithic coastal peoples during the pre-rice dependency era. Even less well understood is their transformation following encounters with rice farmers. This seminar-type conference is designed to address these and related topics from an international and multidisciplinary perspective. We are especially interested in understanding the incubator role of coastal Neolithic cultures in the development of silk road seafaring traditions - the “One Belt, One Road” of the ancient world.

This conference is sponsored by the Center for Maritime Archaeology of Xiamen University and organized in cooperation with the Department of Anthropology of the University of Hawaii at Manoa. More than 30 archaeologists and geologists from mainland

China, Hong Kong, Taiwan, and Japan, Philippines, Vietnam, New Zealand, Australia, America, United Kingdom participate and present on the prehistoric maritime cultural and navigation in oceanic region of southeastern China and southeastern Asia.

The themes of this meeting cover both the Neolithisation and diffusion of maritime cultures, and the Neolithic seascapes and maritime economies. The proposed presentation topics include the characteristics of Neolithisation and development of prehistoric maritime culture, the distribution, content, chronology and cultural change of Neolithic and early Bronze Age, the expansion and interaction of Neolithic cultures by migration and diffusion along coastlines and across straits, prehistoric sea routes, navigation traditions and seafaring technology, the paleogeography and vegetation history of coastal region, the evolution of prehistoric coastal and estuarine settlement patterns in relation to paleoenvironmental change, Neolithic maritime livelihoods and the spread of rice/Hunting/fishing/foraging adaptations, cultural interaction between farmers and maritime-oriented hunter/fisher/foragers. The international academic exchange and roundtable talking focusing on these topics will definitely promote the understanding of the arising prehistoric navigation and origin of maritime silk road of Asian-Pacific region.

2，议程安排

Meeting Schedule

2017， 10， 29

会议报到，厦门市思明区环岛南路 3068 号，金沙湾宾馆

Oct. 29, 2017

Registration

**Jinshawan Hotel, No.3068 Huandao south road, Siming
District, Xiamen**

6: 00 PM, 晚餐，金沙湾酒店一楼餐厅

Dinner, at Restaurant of Jinshawan Hotel

2017， 10， 30

会议研讨，厦门市金沙湾宾馆二楼一号会议室

Oct. 30, 2017

Meeting presentation

No.1 meeting room at second floor, Jinshawan Hotel

No.3068 Huandao south road, Siming District, Xiamen

上午 8: 30 —9: 00 AM

开幕式与会议简介

(1) 厦门大学历史系主任张侃教授致欢迎词

(2) 夏威夷大学人类学系 Barry Rolett 教授介绍会议筹备与内容

Opening ceremony and introduction

(1) Welcome speech (Professor Zhang Kan, chairman of History Department, Xiamen University).

(2) An introduction of the meeting organization and the content of the presentations (Professor Barry Rolett, Department of Anthropology, University of Hawaii at Manoa)

9: 00—12: 00 AM

第一节：陆海文化变迁：新石器时代的文化传播与史前航海

主持及点评：北京大学考古文博学院教授，孙华

Panel 1: The Neolithisation of maritime cultures in China and SE Asia: Rethinking migration, diffusion, seafaring and interaction

Moderator: Sun, Hua, School of Archaeology and Museology, Peking University

9: 00—9: 20 AM

1, 新西兰奥特加大学人类学系, 查尔斯·海格姆

《新石器时代文化传入东南亚半岛的沿海通道》

**A Coastal Route for the Neolithic Expansion into Mainland
Southeast Asia**

**Charles Higham, University of Otago in Dunedin, New
Zealand**

9: 20—9: 40 AM

2, 香港中文大学中国考古艺术研究中心, 邓聪

《树皮布拍石拍在东南亚岛屿的海洋扩张》

**Bark cloth Beaters as an Evidence of Seafaring in
Prehistoric Southeast Asia**

Tang, Chung, Chinese University of Hongkong

9: 40—10: 00 AM

3, 菲律宾国家博物馆考古部, 尤塞比奥·迪松

《菲律宾群岛间的史前移民与文化交流》

**Prehistoric migration and cultural change in the Philippines
archipelagoes**

Eusebio Z. Dizon, National Museum of Philippines

10: 00—10: 20 AM

茶歇 Tea Break

10: 20—10: 40 AM

4, 越南考古学会, 阮金容

《新石器时代晚期至青铜时代早期的越北沿海文化》

**The Late Neolithic – Early Bronze Age of Northern Coastal
Vietnam**

**Nguyen Kim Dung, The Vietnam Association of Archaeology,
Vietnam**

10: 40—11: 00 AM

5, 广西壮族自治区文物考古研究所, 李珍

《北部湾沿海的早期海洋经济和适应性文化》

**Archaeological investigation on the prehistoric maritime
cultures in the coast region of Beibu Gulf.**

Li, Zhen, Institute of Archaeology of Guangxi

11: 00—11: 20 AM

6, 广东省文物考古研究所, 李岩

《广东新石器时代晚期至先秦考古所见文化传播与影响途径》

**The Cultural Diffusion of Guangdong Region during late of
Neolithic and pre-Qin period**

Li, Yan, Institute of Archaeology of Guangdong

11: 20—11: 40 AM

7, 厦门大学南海研究院, 吴春明

《海上丝绸之路传统格局的史前基础》

**A synthetic analysis on the Neolithic Origin of Historical
Maritime Silkroad in the Eastern and SE Asian Region**

**Wu, Chunming, South China Sea Institute, Xiamen
University**

11: 40—12: 00 AM

讨论与点评

Discussion and review

12: 00 AM—2: 30 PM

午餐及午休

Lunch and break

2: 30—5: 30 PM

第二节：海洋经济发展：新石器时代海洋文化景观与海洋经济

主持及点评：中国社会科学院考古研究所研究员，赵志军

Panel 2, Neolithic seascapes and maritime economies

Moderator: Zhao, Zhijun, Institute of Archaeology, Chinese

Academy of Social Sciences

2: 30—2: 50 PM

8, 美国夏威夷大学人类学系, 巴里·罗莱

《台湾海峡新石器时代海洋贸易的比较模式》

Contrasting modes of Neolithic maritime trade in the Taiwan Strait

Barry Rolett, Department of Anthropology, University of Hawaii at Manoa, USA

2: 50—3: 10 PM

9, 北京大学考古文博学院, 秦岭

英国伦敦大学学院考古系, 傅稻濂

《不爱远航的稻农：近海史前生业经济传统与海洋偏好》

Why Rice Farmers Don't Sail: Near Coast Subsistence Traditions and Maritime Predilection

Qin,Ling, School of Archaeology and Museology, Peking University

Dorian Fuller, Institute of Archaeology, University College London

3: 10—3: 30 PM

10, 中山大学地球科学与地质工程学院, 郑卓

《第四纪晚期中国东南沿海海侵与植被变化、人类活动的关系》

**Late Quaternary marine transgressions and their
relationship with coastal vegetation and anthropogenic
influence in southeast China**

**Zheng, Zhuo, School of Earth Science and Engineering, Sun
Yat-Sen University**

3: 30—3: 50 PM

茶歇 Tea Break

3: 50—4: 10 PM

11, 中山大学中山大学地球科学与地质工程学院, 马婷

《中国东南全新世气候变迁与农耕发展导致的森林变化与森林火灾》

**Holocene forest changes and fire events in relation to
climate change and agriculture development in southeastern
China**

**Ma,Ting, School of Earth Science and Engineering, Sun
Yat-Sen University**

4: 10—4: 30 PM

12, 山东大学历史文化学院, 靳桂云、陈松涛

《海岱地区史前稻作农业的产生发展及其向东北亚地区的传播》

The origin and development of prehistoric rice agriculture in Haidai region and its transmission to northeast Asia.

Jin, Guiyun, Archaeology Department of Shandong University

4: 30 —4: 50 PM

13, 上海市文物保护研究中心, 赵莘

《环中国海史前贝丘生业形态研究》

The Subsistence of Shell Middens in Coastal region of China during Pre-Qin Period

Zhao, Luo, Shanghai Cultural Heritage Conservation and Research Center

4: 50—5: 10 PM

14, 南京大学考古系, 赵东升

《浙东沿海新石器时代的海洋文化景观与海洋经济》

Neolithic seascapes and marine economy of eastern coastal of Zhejiang

Zhao, Dongsheng, Department of Archaeology, Nanjing University

5: 10—5: 30 PM

讨论与点评

Discussion and review

6: 00, 晚宴，厦门大学逸夫楼餐厅

**6: 00 PM, Banquet at Yifu Restaurant of Xiamen University
campus**

2017, 10, 31

会议研讨，厦门市金沙湾宾馆二楼一号会议室

Oct. 31, 2017

Meeting presentation

No.1 meeting room at second floor, Jinshawan Hotel

No.3068 Huandao south road, Siming District, Xiamen

上午 8: 30 —11: 30 AM

第三节：陆海文化变迁：新石器时代的文化传播与史前航海（续）

主持及点评：中山大学人类学系教授，郑君雷

**Panel 3; The neolithisation of maritime cultures in China
and SE Asia: Rethinking migration, diffusion, seafaring and
interaction (continuing P1)**

Moderator: Zheng, Junlei, Anthropology Department, Sun Yat-Sen University, China

8: 30—8: 50 AM

15, 日本熊本大学, 木下尚子

《日本琉球群岛新石器时代航海中的环境与文化因素》

Environment and culture as factors in seafaring in the Ryūkyū Archipelago during the Neolithic

Kinoshita Naoko, Kumamoto University of Japan

8: 50—9: 10 AM

16, 国立澳大利亚大学人类学系, 洪晓纯

《跨越台灣海峽兩岸的新石器化歷程, 西元前 13000-3000 年》

Paleolithic to Neolithic Transition across the Taiwan Strait, 13,000-3,000 BC

Hung, Hsiao-chun, Australia National University

9: 10—9: 30 AM

17, 台湾中研院史语所, 陈仲玉

《从亮岛人遗存看台湾海峡全新世早期的海洋族群》

A Study on the Maritime Ethnic Groups of the Early Holocene Taiwan Strait from the Perspective of “Liangdao

Man”

Chen, Zhongyu, IHP of Sinica, Taiwan

9: 30—9: 50 AM

18, 台湾中研院史语所, 郭素秋

《台湾四、五千年的史前文化样相及周边關係探讨》

**Archaeological Cultures of Taiwan and Southeast China
around 5000~4,000 B.P.**

Kuo, Suqiu, IHP of Sinica, Taiwan

9: 50—10: 10 AM

茶歇 Tea Break

10: 10—10: 30 AM

19, 厦门大学历史系, 付琳

《从几何形印纹陶看台海两岸的早期文化交流》

**A Study on Stamped pattern pottery and the Early Maritime
Cultural Interaction between Mainland China and Taiwan**

Fu, Lin, Xiamen University

10: 30 —10: 50 AM

20, 国立澳大利亚大学人类学系, 图卡·凯坤

《台湾海峡谷物传播踪迹的植物考古学考察》

**Tracing the cereal trail: Archaeobotanical evidence for plant
use across the Taiwan Strait**

Tuukka Kaikkonen, Australia National University

10: 50—11: 10 AM

21, 中央民族大学考古文博系, 佟珊

《林惠祥有段石锛时空“谱系”的新证据》

**The New Evidence for Stone Stepped Adze Spatiotemporal
Genealogy Theory of Lin-Huixiang**

**Tong, Shan, Department of Archaeology and Museology,
Minzu University of China**

11: 10—11: 30 AM

讨论与点评

Discussion and review

12: 00 AM—2: 30 PM

午餐及午休

Lunch and break

2: 30—5: 30 PM

圆桌会议

Afternoon meeting, Round table talking,

6: 00 PM

晚餐，金沙湾酒店一楼餐厅

Dinner, at Restaurant of Jinshawan Hotel

2017, 11, 1

考察世界文化遗产华安土楼

Nov. 1, 2017

Fieldtrip to UNESCO listed cultural heritage Tulou

2017, 11, 2

离会

Nov. 2, 2017

Closing meeting and departure

3, 论文摘要 (中英)

Abstract (Chinese/English)

1, 《新石器时代文化传入东南亚半岛的沿海通道》

查尔斯·海格姆 (新西兰奥特加大学人类学系)

学术界有很多研究都聚焦从中国大陆到台湾、菲律宾群岛及更遥远地区的农耕文化扩张史，但对经华南大陆海岸向东南亚半岛的传播史却关注很少。考古学者已经找到了水稻驯化栽培的两个中心，一个在长江流域的下游，另一个在长江中游。小米的驯化发生在中原地区。栽培水稻、小米及家养的猪、狗都已经发现于东南亚最初的新石器时代聚落遗址中，华南农业向东南亚的传播路线有多种可能，考古学者较多讨论经萨尔温江、湄公河和红河河谷的传播，但对经华南沿海到越南和泰国的海路传播却很少重视。

最近考古学者在福州盆地的考古发现提供了长江下游稻作起源区和越南北部冯原文化遗址之间的重要联系。新的年代学成果也揭示了稻作农业的渐进南扩过程，福州盆地稻作农业发生于 5000-3500 BP，而越南的 Man Bac 遗址的稻作年代为 4000 bp。

Man Bac 是一个关键遗址，墓地中发现了与南岛语族美拉尼西亚土著采集狩猎人种和外来入侵的农人匹配的颅骨形态和 DNA 信息，丧葬仪式则与前期的狩猎人群不同。陶瓷和装饰品等物质文化内涵与广州等地所出有相似之处，还找到了栽培稻的植硅体。许多人主张，海洋和沿海文化的扩张带来了越南南部同奈河平原的稻作农业，这里

的安松（An Son）遗址的水稻经 DNA 鉴定为粳稻，这里的丧葬文化内涵经研究也属于北方文化的南传。再往西，在 khok Phanom Di 遗址，最初的农人占领原为海洋性采集狩猎者据点的河口地带，这里的人体头盖骨形态与长江下游新石器时代吻合，这批农人在这个遗址有五百年的聚落变迁史，还存在海洋文化交流稻作农业共存的明确证据，以及丧葬仪式、制陶业、石器和贝器加工业。这三个遗址，证明了从华南到东南亚的海洋文化传播模式。

A Coastal Route for the Neolithic Expansion into Mainland Southeast Asia

C.F.W. Higham

University of Otago

Documenting and explaining the expansion of farming communities from the Chinese mainland into Taiwan, the Philippine islands and beyond has a long history. A twin expansion along the coast of Southern China into mainland Southeast Asia has received less attention. At least two centers for the long period of the domestication of rice have been identified, one in the lower and the other in the middle reaches of the Yangzi Valley. Millet domestication took place in the Central Plains. Both domesticates, together with at least pigs and dogs, characters the initial Neolithic settlement of mainland Southeast Asia. There are multiple possible

routes whereby farmer group expanded south. The Salween, Mekong and Red river valleys have often been cited, rather less attention has been given to the possibility of maritime movement following the coast of southern China, Vietnam and Thailand.

Recent research in the Fuzhou Basin in Fujian province now provide a vital link between the seminal area of the lower Yangzi and the Phung Nguyen culture sites of Northern Vietnam. Moreover, the new chronologies reveal a progressive southern expansionary movement. The establishment of rice farming in the Fuzhou Basin took place between 5000-3500 BP, that at Man Bac in Vietnam dates to about 4000 BP.

Man Bac is a key site. The cemetery includes individuals whose DNA and cranial morphology match the Australo-Melanesian indigenous hunter gatherers as well as intrusive farmers. Mortuary rituals present a stark contrast to those of the preceding hunter gatherers. Material culture, including ceramics and ornaments, have parallels in Guangzhou. Rice phytoliths have been identified. Further maritime and coastal expansion, it is argued, brought rice farmers to the lowlands of the Dong Nai floodplains in southern Vietnam, where, at An Son, the DNA of rice has identified *Oryza japonica*. Mortuary traditions and material culture again points to northern origins. Further west, at Khok

Phanom Di, the initial rice farmers occupied an estuarine site already exploited by maritime hunter gatherers. Cranial morphology is a precise match with Yangzi Neolithic people. Here, they established themselves for half a millennium in a habitat prone to rapid change, and present clear evidence for maritime exchange, rice farming when the habitat permitted it, the distinctive Neolithic mortuary rituals and manufacture of traditional ceramics, stone and shell artifacts.

These three sites, it is argued, underwrite a model of maritime coastal expansion into the mainland of Southeast Asia from ultimately Southern China.

2, 《树皮布拍石拍在东南亚岛屿的海洋扩张》

邓 聪（香港中文大学中国考古艺术研究中心）

樹皮布是南島語族最具代表性的物質文化之一。南島語人群從東亞向太平洋遷移的海上途徑，與樹皮衣服技術傳播的路線相似。構樹作為製作樹皮布的樹種，亦可能是由東亞經南島語人群傳播到太平洋地區。樹皮布技術是由南中國海洋擴散至東南亞島嶼，再傳至太平洋，抵達美洲中部。

Bark cloth Beaters as an Evidence of Seafaring in Prehistoric Southeast Asia

Tang Chung

The Chinese University of Hong Kong

Bark cloth is one of the most representative material cultures of the Austronesian people. The migratory route of these people from East Asia into the Pacific is remarkably similar to the propagation route of bark cloth technologies. *Broussonetia papyrifera*, which is a common tree species used to make bark cloth, is also thought to have been introduced from East Asia into the Pacific by the Austronesian voyagers. While silk products were transported westward from China to Western Europe and the British Isles along the Silk Road, bark cloth technology that originated in South China had spread to Southeast Asian Islands through Indochina and entered Central America via sea route through the Pacific Islands.

3, 《菲律宾群岛间的史前移民与文化交流》

尤塞比奥·迪松（菲律宾国家博物馆考古部）

菲律宾群岛最早的移民和文化变迁可能发生在 4500 — 4000 年前，即新石器时代，南岛语族先民有可能从台湾南部航渡到巴坦（Batanes）岛和吕宋岛北部。南岛先民迁徙菲律宾之后，他们的造船技术和航海技术得到了发展，使得他们能方便于回到来源地台湾以及向更遥远的菲律宾其他岛屿迁徙，如巴拉望岛、米沙鄢岛（Visayas）和民都乐（Mindanao）岛等。新石器时代或新石器时代文化变迁的最

好证据之一是石器或石器技术由原始的打片技术向磨制技术的转变，这个阶段考古遗存中最重要的是磨制石斧和石斧的广泛使用，从洞穴聚落到旷野聚落的变迁，从旧石器时代的狩猎和采集的生活方式，发展为定居生活、动物驯养和植物栽培，3000 年前后的金属时代出现了制陶业。

Prehistoric migration and cultural change in the Philippines archipelagoes

Eusebio Z. Dizon

National Museum of Philippines

Perhaps, the earliest migration and cultural change in the Philippine archipelago, happened between 4500 – 4000 years ago, the period of the Neolithic. There was probably the initial crossing of the Austronesian speakers from southern Taiwan to Batanes and northern Luzon in the Philippines. After this initial crossing, the boat building technology developed and sea voyage became more convenient for these people in order for them to go back where they came from and further explored and colonized other distant islands of the Philippine archipelago, such as Palawan, the Visayas and Mindanao. One of the best evidence for cultural change in the Neolithic Period or the New Stone Age is the change of lithic or stone tool technology from the crude flaking technique to the

grinding technique. The manufacture of adze and axes became evident in the archaeological record. Settlement pattern from cave to open sites became prevalent. From hunting gathering way of life during the Palaeolithic or Old Stone Age, there was a change of sedentariism, domestication of animals and cultivation of plants. Pottery became present and developed until the Metal Age from about 3,000 years ago.

4, 《新石器时代晚期至青铜时代早期的越北沿海文化》

阮金容（越南考古学会）

越南北部沿海新石器时代晚期文化是从和平文化以及后和平时代的 CAI Beo 和多笔（Da But）文化（距今 6500 - 4500 年）连续发展起来的，主要有下龙文化（Ha Long）与 Man BAC 文化，这些文化代表了越南北部各种不同的早期经济文化类型的时空分布。

特别值得一提的是，在早期青铜时代第一阶段的冯原文化（Phung Nguyen），作为这一时期最重要的史前文化，原始居民在经济活动中做出了巨大的贡献。本文将论述冯原文化在越南和东南亚史前文化体系中的作用与地位，以及冯原文化与下龙文化、Man Bac 文化的关系，也试图阐述冯原—Man Bac 文化与华南同期文化的互动。

The Late Neolithic – Early Bronze Age of Northern Coastal

Vietnam

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The late Neolithic of Northern Coastal Vietnam has been continuously developed from Hoa Binh culture and different post-Hoa Binh cultures: the Cai Beo and Da But (c.a 6500 – 4500 BP), from which the late Neolithic has evolved into the next stage of the Stone age Ha Long culture and Man Bac. These cultures are really early distribution of various economic, cultural types of North Vietnam.

Particularly, in the first stage of early Bronze age, the Phung Nguyen – the most remarkable culture have great contribution in economic activities of the Prehistoric inhabitants. The paper presents the role of Phung Nguyen culture in the prehistoric Vietnam and South East Asia, with reference to the relationship between Phung Nguyen, Ha Long and Man Bac. The cultural relationship with South China during Phung Nguyen – Man Bac period is also mentioned in the paper.

5, 《北部湾沿海的早期海洋经济和适应性文化》

李 珍（广西壮族自治区文物考古研究所）

北部湾（Beibu Gulf，旧称东京湾），位于中国南海的西北部，是一个半封闭的海湾，为中越两国陆地与中国海南岛所环抱，丰富的资源，为人类的生存提供了一个稳定的食物来源，而且沿岸浅海和滩涂广阔，便于人类捕捞渔猎，这为人类生存和文化创造准备了一个条件优越的平台。

考古发现证实，北部湾沿海是古人类定居生活的主要地区之一。无论是在中国的广西、广东和海南等省（区）还是在越南中北部沿海都发现了数量众多的新石器时代聚落遗址。据不完全统计，已发现约 80 余处，主要集中分布在越南和中国的广西、海南等地，尤以越南为多。

北部湾沿海的早期海洋经济和适应性文化发生于距今 5000-7000 年间，主要有以下特征：(1)遗址所处的地理环境一般临近海边及海湾旁沙丘地带的山岗上，有的前临水，背靠山，也有的就在海潮浸泡的小岛上，还有的靠近河流入海口的沿岸沙丘台地上或因海退而形成的湖沼盆地。(2)遗址类型有海岸贝丘和沙丘两类，以海岸贝丘为主，地层堆积以大量的贝壳和人类食用后丢弃的水、陆生动物遗骸为主。(3)出土遗物有陶器、石器、骨器和蚌器，以石器为主。石器有打制和磨制两种，打制石器所占的比重大，器类主要有蠔蛎啄、砍斫器、手斧状石器、石锤和网坠等，其中的尖状石器—蠔蛎啄最具特色。(4)生业系统中不存在农业的因素，主要包括采集热带可食性植物和狩猎陆生动物，同时也稳定依赖海洋鱼类和贝类资源。特别是贝丘遗址的先民主要依赖的是海洋鱼类和贝类资源。鲤鱼墩遗址出土人骨的稳定同位

素分析显示，该遗址的先民以海生类作为主要食物来源可能来源于海中的贝类和鱼类，陆生动物在人类的食物结构中只处于辅助地位。而且出土的生产工具也充分证明了这一点。(5)从鲤鱼墩、多笔、琼文、保卓文化等遗址发现较多墓葬看，说明多为长期面向海洋定居的聚落。

总体来看，北部湾沿海早期的海洋经济和文化表现的是对海洋资源的依赖和利用，更多的是对海洋的适应而不是开发利用。距今 5000 或 4500 年之后，随着农业扩散至岭南地区，北部湾沿海地区海洋适应性文化发生了一定程度的改变。

Archaeological investigation on the prehistoric maritime cultures in the coast region of Beibu Gulf.

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The Beibu Gulf locates in the northwest of the South China Sea, surrounded by the Hainan island, coastal region of Guangxi China and Vietnamese, which provides abundant resources of terrestrial and marine for human being's life since prehistoric period.

Archaeologists have discovered in these regions more than 80 sites of neolithic age, distributing mostly in the coastal region of north Vietnam and some in Guangxi and Hainan of southern China. These sites and content show us the prehistoric livelihood and cultural adaption of neolithic people.

Preliminary analysis revealed the content and traits of early maritime cultural adaption of these neolithic sites dating to 5000—7000 BP.. The geographical environment of the sites are mostly seascape oriented as patterns of coastal beach, estuary of river and island. These neolithic sites include both shell mound and sand dune, which contain plenty of shells and discarded marine and terrestrial animal remains. The unearthed artifacts from the sites includes pottery, stone tools, bone and shell artifacts, in which one of point stone tool famous as Oyster picking tool is the most representative. The main livelihood had been hunting and gathering and no agricultural domestication had been identified. The isotope analysis of human bone from Liyudun site of Guangxi showed that the ancient people of the site had lived mainly on the marine resource, which is also proved by the tools artifacts collected from the sites. The content of tomb sites in this region also present a maritime oriented pattern.

Generally speaking, the economy and livelihood of early stage of neolithic people in Beibu Gulf coastal region depended mostly on the utilization of marine resources. This maritime adaptation pattern changed after the spread of agricultural economy from north to southern coastal China Since 5000 -4500BP.

6, 《广东新石器时代晚期至先秦考古所见文化传播与影响途径》

李 岩（广东省文物考古研究所）

本文以点带面，梳理了广东地区从新石器时代晚期（古椰文化开始至南越国时期）不同时间段，考古学文化遗存与岭北及海南等地的文化交流与传播，包括有海路、陆路的传播；并列举了不同阶段的一些典型器物之分布和流传途径。

广东地区新石器晚期从古椰文化开始，与外界的交流已经有了不同的选项和改变。追溯到咸头岭文化阶段，是以高庙为主要的吸收对象，其途径大体是经过湘粤桂走廊进入西江，从而入粤，并在广东沿海走廊向东经珠江口达到汕尾地区。而古椰文化阶段，则吸收了来自马家浜、松泽及良渚文化的因素，珠江口地区起到了非常重要的作用，应与海路交通密切相关。虎头埔文化较早阶段，则延续了前段之交往，但是，吸收的内容发生了重大的转变，来自良渚文化的玉琮在海丰地区出现。

石峡文化阶段，承袭了前段的传统，良渚式玉器的使用成为主流，而珠江三角洲及粤东地区则保持了自身的发展轨迹，这段时间，自和平通往江西的陆上交通线发挥了重要作用。至石峡文化晚期，则可见来自石家河文化的高圈足盘或豆，良渚文化已经消失。正是在龙山时代较早阶段，珠三角粤北为轴心的文化遗存中，将自身的几何印纹风格向前推进了一步，即石峡遗址第三期的早期、南沙鹿颈村和村头的相关遗存可见一斑，这个阶段，由于环太湖地区的考古学文化所具备的文化势能远非良渚阶段可比，因此，交流的主线也随之发生了变化。

进入石峡文化第三期以 M110 为代表的有流带把壶出现，环太湖地区为广富林文化阶段，对广东同期的影响，一路来自武夷山西麓，自闽北进江西，经和平达到石峡，另一路则经海路出现在珠海阿婆湾遗址，而珠三角的腹地反而不见此类器物。

自夏商之际至商，由闽北南进广东的有两种重要的文化因素，即黑釉陶和戈，其中黑釉陶至晚商阶段自粤东沿海进入珠江口，牙璋进入广东的途径目前不甚明朗，但广西与越南的牙璋当与珠三角及珠江口的牙璋密切相关，很大的可能是经海路向越南传播的。

西周早期的原始瓷器目前发现最早的在揭阳面头岭，为舶来品，而西周中期之后，随着葵纹陶与原始瓷豆的在广东本地化，形成了一定区域优势，向东已经进入福建，西入广西，北达湖南，然而，在广东西部沿海，自江门以西仅有零星发现，从考古学文化面貌的角度而言，于广东地区达到了空前的统一，故此，笔者推断，该阶段已经进入古南越族时期，即从西周中期开始了一个新的历史阶段，这个发展的时期一直延续到战国早期。战国中期的和平、揭阳、以及广西合浦的战国中期墓则又出现了环太湖地区同期文化因素，代表有米字纹瓮及原始瓷盅，笔者认为这当与楚灭越有关，导致江浙的同期文化因素先以一些原装产品的方式进入广东，并取代了原有夔纹陶传统，进入了米字纹陶阶段，这个阶段，一直延续到南越王墓甚至稍晚的一段时间内，南越国阶段的米字纹在广东已经普遍进入雷州半岛东西两侧的沿海地区，同时进入了海南岛，而宝镜湾岩画，从南越王墓所见提筒的纹样可知，当为南越国时期的产物，树立于珠江口岸边，与米字纹

进海南如果联系起来看，其通过海路向西南的影响力则进一步增强。

结合上述，在本文所涉及的不同历史时期，陆上通道中，经和平、江西、闽北至浙江是一条十分重要的通道；海路方面则榕江口、珠江口亦然。

The Cultural Diffusion of Guangdong Region during late of Neolithic and pre-Qin period

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This paper intends to analyzing the cultural interaction and diffusion of Guangdong area with other regions of southern China as north inland and south Hainan island since neolithic age. These cultural inter-regions cultural contacts include exchange and dissemination by both territorial and maritime routes.

The earliest cultural contact happened in Xiantouling Culture period when the content of Gaomiao Culture of Hunan diffused across valleys of Lingnan mountain to the upper reach of Xijiang river, then Pearl River Delta and coastal region of eastern Guangdong.

During Guye Culture stage, Majiabang, Songze and Liangzhu cultures from lower reach of Yangtse river arrived to Pearl River estuary area by the way mostly along the coastal region of

southeast China. This coastal route continued in the early period of Hutoupu Culture when jade of Cong of Liangzhu Culture appeared at Haifeng area.

Shixia Culture continued the situation of cultural interaction with the northern region of Yangtse river by the territorial route of Heping-Jiangxi when the jade artifacts of Liangzhu jade became the mainstream of social life. The late period of Shixia Culture accepted more cultural influence from Shijiahe Culture of middle reach of Yangtse rather than Liangzhu. The III period of Shixia culture got cultural elements of Guangfulin Culture of Lower reach of Yangtse by the ways as both old territorial routes of Heping-Jiangxi and coastal route to Apowan site if Zhuhai.

During the Xia and Shang Dynasty of early Chinese civilization, cultural content of Fujian region characterized as black glazed pottery and stone Go knife arrived at Guangdong by the coastal route of eastern Guangdong, while jade Yazhang transferred west to Guangxi and Vietnam along Pearl River Delta and coast of Guangdong. The cultural interactions of Guangdong continued to inland region of southern China by territorial routes as Hunan, and maritime region as Jiangsu, Zhejiang, Fujian, Hainan and Guangxi along the coastal routes.

7,《海上丝绸之路传统格局的史前基础》

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“海上丝绸之路”是由“丝绸之路”派生出来的关于中外海洋交通史的象征表述。大部分学者都将海上丝绸之路等同于中西交通史上的海路通道，也都将“海丝”看成“陆丝”的“延伸”与“转移”，说成是唐宋以后生成的。

我们不否定陆海交通的互动与关联，不排除唐宋以来陆上丝绸之路衰落、甚至所谓“堵塞”之后，海路通道承载更多的东西方经济文化交流的功能，但古代中国对外的陆、海交通或陆、海“丝绸之路”基本上是两个不同的交通史体系。将以南海、印度洋航路为主轴的早期东西方航路割裂于环中国海航路体系之外，冠以“海上丝绸之路”，作为东西方早期陆路交通的延续、补充与转移，不符合航海史发展的实际。

海上丝绸之路实际上是以中国东南沿海为中心的“四洋”航海实践，以“登州海行入高丽、渤海道”为核心的北洋航路，相继以“徐闻、合浦南海道”和“广州通海夷道”为核心的南洋与西洋航路，以及以闽粤放洋台澎吕宋为核心的东洋航路，以及相互间的环形与交叉联系，成为有机统一、持续发展的“四洋”航路体系，构成了历史时期“海上丝绸之路”的传统格局。这一格局初创于“背倚华夏，面向南岛”的东、南沿海夷、越先民至少七八千年逐岛梯航的史前航海。

“北洋”海域以跨越黄海海峡的“登州海行入高丽、渤海道”为核心航路，就是源于胶东半岛新石器文化的海洋扩张，胶东半岛沿岸

与庙岛群岛，是我国史前海洋聚落密集发育区，庙岛群岛几十处新石器时代遗址内涵与海峡两端的胶东、辽东沿岸史前文化一致，反映了东夷先民数千年的逐岛航海历史，东夷史前文化还传播到朝鲜半岛南部与日本列岛。

“东洋”海域的夷洲、琉球、吕宋海路，也是源于东越、南岛先民的史前迁徙。东海沿海地带散布着成千上百的大小岛屿，大陆海岸与陆缘海岛的新石器文化面貌基本一致，闽、浙沿海岛屿都发现了与距今 7000~4000 年间的河姆渡文化、良渚文化、昙石山文化遗存，史前文化的海洋移动还发生在台湾海峡、巴士海峡、东南亚群岛与太平洋群岛间的众多大小海峡之间，并形成了百越-南岛语族海洋文化圈。

“南洋”、“西洋”航路，从秦汉时期的“徐闻、合浦南海道”到唐宋时期的“广州通海夷道”，同样源于南越、骆越先民的海洋文化。珠江三角洲沿海的几十处岛礁也发现了史前、上古的岛屿文化遗存，与珠江三角洲腹地距今 7000~4000 年之间新石器文化面貌一致，应是沿海人群向海洋移动的遗存。海南环岛也发现 5000~2500 年的海岸沙丘、贝丘遗址几十处。越南海岸距今 6500-4500 年 CaiBeo、Quynh Van 文化，与岭南沿海的咸头岭、后沙湾等遗存，距今 4500—3500 年的 Ha Long、BauTro 文化与华南沿海以树皮布石拍、双肩大石铲、带四突纽玉玦和牙璋为特征的龙山时代至夏代前后文化遗存，都有高度一致性；青铜时代 Dong Dau、Go Mun、Dong Son 文化序列中，更发现大量闽越、南越、瓯骆等文化的代表性内涵，显示出华南

沿海百越系统文化的陆海交流。

可见，具有鲜明海洋文化倾向的新石器时代东夷、百越先民，在创造了从黄海之滨到南海北岸的海洋文化初期繁荣的同时，相继完成了近岸陆岛穿梭、远海甚至远洋逐岛梯航等史前航海实践，并成功地从我国大陆东部、东南部沿海向东亚岛屿带（岛弧）、东南亚群岛和西南太平洋群岛的航行，形成东亚大陆文化经由海洋的对外传播与交流的初期形势，创就了“海上丝绸之路”的史前格局。

A synthetic analysis on the Neolithic Origin of Historical Maritime Silkroad in the Eastern and SE Asian Region

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The "Silk Road" had been the most important concept of modern academy describing the ancient transportation between east and west. The most of the research work in last a few decades took it for granted that maritime silk road had been the result of the geographical transfer and cultural change of silk road after the decline and block of northwest China inland silk road since Tang dynasty. According to the archaeological investigation and ethno-archaeological research on the cultural heritages in southeast China coast region recently, the maritime silk road in fact originated in neolithic period when the prehistoric ancestor of indigenous Yi (夷) and Yue (越) ethnicities carried out early ancient

navigation island by island. The origin of the maritime silk road had not been later than that of the inland territorial Silk Road. The prehistoric Yue ethnicity and proto-Austronesian of southeast China thousand years ago initiated earliest nautical techniques as compound canoe, primitive sailing device and celestial navigation, which had been basic foundation of maritime silk road of historical period. So the maritime silk road had not been the result of cultural change of silk road from land to sea, and shift of economic technology center from north to south of ancient China.

8，《台湾海峡新石器时代海洋贸易的比较模式》

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在海洋交易研究中，通常区分两种截然不同的模式，即“有消费目的地的海上商业贸易”和“随机交易”。有消费目的的商业贸易包括运输如茶叶、瓷器等商品，从起源地发送到一个或多个特定目的地交易，有计划性的贸易路线、大量货物的运输、基于供求关系的定期贸易往来。

欧洲历史学家 Ferdinand Braudel 将“随机交易”描述为完全不同的交易模式，它的特点是，主要为沿海航行交易、开放海域航行有限、有很多的贸易地点、常常曲线迂回和随机航行、有限的货物总量、以及单一航行过程中船舶货物的多样性。

区分这两种截然不同的海洋贸易/交易模式，有助于理解台湾海峡

新石器时代的贵重玉制品和实用性石器工具的贸易关系。台湾海峡两岸贸易形态的多样性，有力地说明了航海活动在中国东南沿海新石器时代文化发展中的重要作用。

Contrasting modes of Neolithic maritime trade in the Taiwan Strait

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Two contrasting modes of maritime trade are “destination-conscious commerce” and “tramping.”

Destination-conscious commerce consists of shipping commodities, such as tea or porcelains, from their place of origin to one or more specific destinations. It implies planned trade routes, the transport of large quantities of goods, and regular contacts at a degree of frequency based on supply and demand.

Tramping, as described by the European historian Ferdinand Braudel, is quite different. Tramping involves mostly coastal travel, with limited open-sea voyaging. It implies many trading stops, circuitous and opportunistic travel, smaller quantities of goods, and significant changes in a ship's cargo during the course of a single voyage.

Drawing the distinction between these contrasting modes of

maritime trade is useful for understanding the Neolithic trade of jade prestige goods and functional stone tools in the Taiwan Strait. The diversity of trade, on both sides of the Taiwan Strait, illustrates the significant role of voyaging among the Neolithic cultures of southeast China.

9, 《不爱远航的稻农：近海史前生业经济传统与海洋偏好》

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通过中国长江下游和印度东部马哈纳迪河下游奥里萨邦这两个沿海早期水稻农业区的案例分析，本报告提出关于沿海地区文化与海洋资源利用的相关性问题。目前看来，早期水稻文化聚落，即使位于沿海地带，也很少利用海洋资源、缺乏海洋贸易。究其原因，可能同水稻经济这种特殊的农业形态有关。东北亚水稻的跨海东传，可能是早已存在的海洋贸易与文化交流管道上新增的内容；东南亚岛屿农业、语言及新石器先民的传播，其农作物主体则不一定是水稻。

Why Rice Farmers Don't Sail: Near Coast Subsistence Traditions and Maritime Predilection

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This report discusses the relevance of near coast subsistence tradition and marine resource utilization through the case study of two early wet rice cultures along the Chinese and Indian coasts, respectively the Lower Yangzte and Mahanadi delta (Odisha). Early wet rice cultures near the coast utilize few marine resources and have no maritime trade. The reason may be related to the characteristics of wet rice agriculture, which will be examined in this talk. When wet rice did spread overseas in Northeast Asia, it appears to be adopted by already established coastal and maritime traditions. While in the context of Island Southeast Asia, wet rice may not be the main crop or the only crop relates to the agriculture dispersal and migration of proto Austronesian-speaking populations.

10, 《第四纪晚期中国东南沿海海侵与植被变化、人类活动的关系》

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马婷（中山大学地理科学与规划学院）

Barry V. Rolett（美国夏威夷大学人类学系）

我国杭州湾以南基岩海岸广泛分布，东南沿海大量的晚第四纪沉积记录显示该地区广泛拥有 2 套海相沉积，海相层在广东和福建的各个河口地区大量发现。利用粒度、有孔虫、孢粉、硅藻、地球化学等多

种古环境指标重建了该地区晚更新世至全新世的古地理、古植被、古气候，并探讨了第四纪沉积环境演变与人类文明发展的关系。一些记录显示，早期的海侵发生在 MIS 5 阶段，此时大片陆地被海水淹没，然而该次海侵的时间仍存在争议。另外一次海侵发生在全新世（MIS 1），精确测年结合有孔虫、硅藻等指标揭示此次海侵发生在~9000 至~2100 cal yr BP 之间，2100 cal yr BP 以后，河口三角洲快速沉积使得海岸线向海的方向迅速推移，陆上三角洲形成。孢粉记录证实两次海侵发生的时间 MIS 5 和全新世（MIS 1）气候温暖湿润，浓密的亚热带常绿阔叶林覆盖。全新世最大海侵发生于 ca. 9000 至 5000 cal yr BP 之间，对应了全新世最适宜期。7000 cal yr BP 开始，全新世适宜的气候以及海侵带来的丰富的海洋资源使得渔猎经济为主的新石器文化在东南沿海地区兴起和发展，东南沿海贝丘遗址广泛分布。然而，孢粉记录显示 3000 cal yr BP 以后该地区人类活动对自然植被的影响才开始显著，揭示早期渔猎文明对植被的影响甚微。全新世晚期（4000 cal yr BP 以后），珠三角水松淡水湿地沼泽的大面积发育，说明海水开始后退，适宜水稻种植的湿地沼泽开始形成。此时，许多钻孔显示碳屑含量迅速增加，孢粉组合突变为以先锋植物芒萁属、禾本科、松属等类型为主，揭示了植被受到人类农业刀耕火种的影响而发生显著的变化。2000 cal yr BP 以后，指示水稻的禾本科花粉明显增加证实陆上三角洲出陆以后水稻农业在东南沿海得以广泛发展。

Late Quaternary marine transgressions and their

relationship with coastal vegetation and anthropogenic influence in southeast China

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Chinese coastlines to the south of the Hangzhou Bay geomorphologically belong to the type of hilly coast in general. A great number of sedimentary records of Late Quaternary indicate that there are at least two major marine transgression beds. The marine sediment phases were found in many areas deep into the lower reaches of the rivers in the coastal areas of Guangdong and Fujian Provinces. The environmental proxies including sediment grain size, foraminifers, pollen, diatom and geochemistry were used to contribute to our understanding of Late Pleistocene and Holocene paleogeography, including geomorphology, vegetation, climate and prehistory cultural developments. Some detail sediment profiles reveal a marine environment which submerged a large areas of the coastal regions during the last interglacial (MIS 5) despite remaining many dispute on its timing. Regarding to the

Holocene marine transgression, more clear process of sea-level change since the last deglaciation and spatial variation of marine transgression were revealed. The evidence of well-dated layers containing abundant marine foraminifers and diatoms implies that the most coastal areas was under marine influence between ~9000 and ~2100 calyr BP. After 2100 calyr BP, a rapid retreat in coastline possibly caused by fluvial aggradation produced more riverine wetlands and initiated formation of deltaic floodplain. The pollen records for the late Pleistocene (MIS 5) and the Holocene (MIS 1) both reveal the presence of a dense subtropical evergreen broadleaved forest, indicating interglacial warm/humid climate conditions. The Holocene age between ca. 9000 and 5000 cal yr BP, representing the Holocene thermal maximum, is linked with high stand of sea level rise and maximum marine transgression in most river mouths. The abundant Neolithic relics shows rapid increase in human population along the paleocoasts beginning at 7000 cal yr BP that coincides with the high stand of Holocene sea level. However, the impact on natural forest was only observed in the pollen diagrams as early as ~3000 cal yr BP, indicating anthropogenically induced land cover change was negligible prior to the early stage of cultural period. More obvious changes in the vegetation (e.g. a large-scale deforestation possibly by fire) took

place at around 2000 cal yr BP. Widely distribution of buried swamp tree (*Glyptostrobus pensilis*) in the Pearl River delta suggests suitable wetland and floodplain environment for rice cultivation during the late Holocene (after 4000 cal yrBP). The pollen transition at ca. 4000-1500 calyr BP, distinguished by rising frequencies of grass, ferns and Pine may be related with late Neolithic land-use. More reliable evidence of large-scale rice agriculture development reflected in the pollen diagram began after ca. 2000 calyr BP. This alternation coincides with the rapid retreat of coastline, emergence of the floodplain and increasing population by historical documents.

11, 《中国东南全新世气候变迁与农耕发展导致的森林变化与森林火灾》

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选取华南沿海丘陵山地 4 个不同地理位置及不同海拔高度的钻孔岩芯进行了孢粉和碳屑分析，揭示全新世以来的该地区植被变化与火灾历史，并探讨火灾事件、植被、季风变化和人类活动四者之间的

关系。结果表明, 9.5 and 5.5 calka BP, 以常绿栎和栲为主的常绿阔叶乔木花粉含量很高, 反映了亚热带阔叶林繁盛, 并指示全新世大暖期湿润和降雨丰沛的气候特征。5.6 calka BP 以后, 由于气候逐渐变干, LTY 钻孔水松沼泽湿地开始发育, 对应了全新世中期以后亚洲季风的逐渐减弱。同时, 钻孔 SZY 和 GT-2 都显示出常绿栎的减少, 揭示出由于气候的变干亚热带常绿阔叶林在一定程度上退化。另一方面, 3.5 cal yr BP 以前高含量的乔木花粉以及极低的碳屑浓度, 指示此阶段人类活动对植被的影响甚微。3.5 cal yr BP 开始, 钻孔 GY1 和 LTY 火灾开始频繁发生, 这与华南地区夏季风减弱导致降雨减少、气候变干相关, 但我们认为华南地区人类历史从新石器晚期进入商周时代的转折期是火灾频繁发生的关键因素, 此时人口明显增加。同时, 孢粉指示的阔叶类木本植物含量显著减少, 表明火灾对森林破坏逐渐严重。2 000 cal. a B.P. 以后, 人口出现第一次增长高峰, 考古出土的器物证明牛耕和铁器农具开始广泛使用, 农业快速发展。这一时期低海拔的 GY1 和中海拔的 LTY 钻孔碳屑含量维持高值, 禾本科以及芒萁属等次生植物孢粉含量快速增加。这反映了秦或南越国以后在华南地区较低海拔山地和平原农业活动得到迅速发展。此外, 位于海拔 1 600 m 以上的钻孔 GT-2 的碳屑记录显示, 高海拔山区在 1000 cal. a B.P. 以后才开始出现频繁的森林火灾, 这一结果反映了人类农业活动和人口逐步向山区迁移的过程。我们的结果证实华南地区人类活动对植被造成深入影响以及大规模的农业活动开始于唐宋。

Holocene forest changes and fire events in relation to climate change and agriculture development in southeastern China

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Four cores (GY1, LTY, SZY, GT-2) from mountains to lowland in southeastern subtropical China were studied. Pollen and charcoal analyses were conducted to examine the regional Holocene vegetation history and fire events, discussing the relationship among climate, vegetation, fire, and anthropogenic activities. Our results show high proportion of pollen from evergreen broadleaved

forests (e.g. evergreen *Quercus* and *Castanopsis*) between 9.5 and 5.5 calka BP, demonstrating expansion of subtropical forest. This phase is consistent with the Holocene moisture maximum in eastern China. After 5.6 calka BP, the spread of the wooded swamp taxon (*Glyptostrobus*) revealed by LTY core, suggests shallow water conditions and peat formation caused by gradual drying. The drying trend generally corresponds with the speleothem isotope record from this region, revealing a weakening Asian summer monsoon (ASM) due to a decrease in Northern Hemisphere summer insolation (and in air temperature). Meanwhile, the decrease of evergreen *Quercus* in SZY and GT-2 sites demonstrate a regional retreat of subtropical evergreen forests. On the other hand, dense forest and low fire frequency revealed by pollen and charcoal records demonstrate that human-induced land cover change was negligible before 3.5 calka BP. We consider the abrupt increases in fire frequency revealed by core GY1 and LTY after 3.5 calka BP may be closely related with gradual drying towards the late Holocene, which, however, mainly result from the strengthened impact of human activity during Shang-Zhou Bronze period. The notable decreases of arboreal pollen demonstrate severe damage of forest by fires. After 2.0 ka, the obvious growth of *Poaceae*, *Dicranopteris* and *Pinus* recorded in the core GY1 and

LT demonstrate agriculture development in low-altitude plains and hills, synchronized with the first population booming and big progress in agricultural technology during Warring States to the Western Han Dynasty. However, pollen and charcoal records of core SZY and GT -2 did not show frequent local fires and agriculture development until 1.0 calka BP, revealing that profound human impacts and extensive agriculture began in South China after Tang dynasty.

12, 《海岱地区史前稻作农业产生发展及其向东北亚地区的传播》

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稻作农业的起源与传播一直是学界关注的热点。海岱地区是我国史前稻作农业发展以及向东北亚传播的重要区域, 因此其稻作农业的产生、发展以及传播等问题也是众多学者热切讨论的话题, 尤其是长青月庄和章丘西河遗址发现的距今约 8000 年的水稻遗存吸引了学界的极大关注。目前海岱地区发现史前时期稻作遗存的遗址 30 余处, 为探究海岱地区史前稻作的诸多问题提供了丰富的线索。

海岱地区的稻作农业发展还存在明显的时间先后问题。稻作农业首先出现在苏南、鲁南地区, 之后逐步扩展到鲁中和胶东半岛, 到龙山文化时期扩散至整个海岱地区。随着时间的推移, 稻作农业的分布逐渐北进, 海岱地区稻作农业扩散是一个由南向北逐渐发展的过程。而关于扩散的路线, 栾丰实认为存在东西两条路线。东线为沿海路线,

也是向北扩散的主要路线。稻作沿海边和沂沭河谷北上，经江苏赣榆、山东日照、临沂，北上到达胶东半岛。西线为陆路线，该路线相对来说次要，经苏北皖北、汶泗河流域北进，进而达到鲁北。在发现较早稻作遗存的连云港二涧村、临沭东盘遗址和滕州官桥村南遗址分属于这两条线路上，因而两条路线可能齐头并进，不断向北扩散。

稻作农业的北传这里主要指稻作农业向辽东半岛的传播，而东传则指稻作向朝鲜半岛和日本的传播。关于水稻东传学界存在不同意见，一般认为有三条路线，即南路说、中路说和北路说。三条路线各执一词，莫衷一是，不同路线均存在一定的合理性和漏洞。而北路说即由长江下游——山东半岛——辽东半岛——朝鲜半岛——日本曾获得许多学者的支持。但这一路线存在的问题在于以往辽东半岛发现的稻作遗存较少，明确的稻米遗存发现于距今约 3000 年的大嘴子遗址。而朝鲜半岛发现的最早的稻作遗存约距今 4500 年，其年代明显早于辽东半岛，这使得北路说难以信服。而最新的植物考古研究表明至迟在小珠山三期时，辽东半岛既已发展稻作农业。小珠山遗址和大连王家村遗址分别浮选出属于小珠山三期和五期的炭化稻米遗存，而对郭家村、王家村、文家屯等遗址的植硅体分析中发现丰富的稻类植硅体，包括来自稻壳、茎秆和稻叶等不同部位，证实水稻已为本地种植。这说明在小珠山三期时，稻作农业已由海岱地区向北传播至辽东半岛南部地区。由此辽东半岛稻作农业的年代早于朝鲜半岛的稻作遗存，而稍晚于海岱地区，由此从时空上均贯穿起稻作农业由长江下游——山东半岛——辽东半岛——朝鲜半岛——日本的传播路线。这一路线也

越来越得到学界的认可。

不过关于北路说的认识虽整体方向基本一致，然而在细节上仍存在分歧。即稻作农业由经胶东半岛直接传到朝鲜半岛和日本还是由胶东半岛先北扩至辽东半岛，由此中转再传播至朝鲜半岛和日本。产生这一分歧的主要原因在于目前朝鲜半岛发现的稻作遗存都位于半岛中南部，而北部未有发现，由此造成路线链条上存在缺环。虽然在朝鲜半岛北部暂时没有发现稻作遗存，但不能断然否定这一可能性，日后仍需要开展更多的工作和研究。

The origin and development of prehistoric rice agriculture in Haidai region and its transmission to northeast Asia.

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The origin and transmission of rice agriculture has been a hotspot in the academia. Haidai region is an important area for the development and the spread to Northeast Asia for prehistoric rice agriculture in China. Thus, the issues of its rice farming, like the emergence, development and transmission, have also been discussed intensely by scholars. Especially, rich remains about 8000 years ago found in Changqing Yuezhuang site and Zhangqiu Xihe site has aroused great concern in the academic circles. At present, there are more than 30 prehistoric sites that discovered

rice remains in Haidai region, thereby providing rich clues for exploring prehistoric rice cultivation.

There existed distinct chronological sequence for the development of rice agriculture in Haidai region. Rice farming firstly appeared in southern Jiangsu and southern Shandong, then gradually extended to middle Shandong and Jiaodong Peninsula, and spread to the entire Haidai region in the period of the Longshan culture. As time passed by, rice farming came to disperse northward, so rice agricultural diffusion of Haidai region was developed from south to north. Regarding to the routes of its dissemination, Mr. Luan Fengshi thinks there are the east route and the west route. As a coastal line, the east route is the principal line to disperse northward. Rice agriculture diffusion went north from the seaside and Yishu Valley, through Ganyu county of Jiangsu province, Rizhao City and Linyi City of Shandong Province, up to the Jiaodong Peninsula. The west route, a subordinate land line, was that rice agriculture diffusion proceeded north to northern Shandong from northern Jiangsu and northern Anhui, and Wensi River Basin. Erjian Village Ruins of Lianyungang City, Dongpan Ruins of LinShu Basin and Tengzhou Guangqiao Village South Ruins, which found the earlier rice remains, all separately belonged to the two routes. Given these, the two lines possibly kept pace and

dispersed northward.

In this text, north transmission of rice agriculture chiefly means its spread to Liaodong Peninsula, and east transmission refers to the diffusion towards Korean Peninsula and Japan. Concerning east dissemination of rice, there are three different views in the academic circles and generally they think that it has three routes, that is, South Route, Middle Route and North Route. The academia sticks to their own argument on the three routes which hold certain rationality and loopholes. North Route, transmission from lower reaches of Yangtze River–Shandong Peninsula–Liaodong Peninsula–Korean Peninsula–Japan, has once obtained support from many scholars. But its problem lies in the less rice remains previously found in Liaodong Peninsula, among which clear rice remains was discovered in Dazhuizi Ruins about 3,000 years ago. However, the earliest discovered rice remains in Korean Peninsula dated back over 4500 years ago, and its age earlier than the Liaodong Peninsula made the theory unconvincing. And the latest archaeobotany research indicated that rice agriculture in Liaodong Peninsula was developed in the third phase of Xiaozhusan culture. In Xiaozhusan Site and Wangjia Village Site of Dalian City, they had carbonized rice remains which separately belonged to the third phase and fifth phase of Xiaozhusan

culture. In many sites such as Guojia Village, Wangjia Village and Wenjia Village, its phytolith analysis showed ample rice phytolith, containing rice husk, stem and rice leaves. It verified that its rice was grown locally and rice agriculture had spread northward from the Haidai Region to the south of Liaodong Peninsula. As a result, the age of rice agriculture in Liaodong Peninsula is earlier than rice remains of Korean Peninsula, but later than the Haidai Region; the transmission route of rice agriculture via the time dimension, from lower reaches of Yangtze River–Shandong Peninsula –Liaodong Peninsula–Korean Peninsula–Japan, has been increasingly recognized by the academia.

What's more, the ideas about North Route are uniform in general, but there are still differences in the details. That is, rice farming is directly spread to the Korean Peninsula and Japan from Liaodong Peninsula, or is firstly extended to Liaodong Peninsula and then is transferred to Korean Peninsula and Japan. The major reason for this divergence is because the rice remains discovered in Korean Peninsula so far are all located in the south-central peninsula but without remains found in the northern part, which results in vacancy of the route chain. Although rice remains has not yet found in northern Korean Peninsula, but its possibility cannot be flatly denied and more work and research still need proceeding.

13, 《环中国海史前贝丘生业形态研究》

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以人为因素造成的贝壳堆积为主要特征的贝丘遗址，在中国已经发现了近 500 处，其中约 440 处位于环中国海地区，属于史前时期遗址（秦以前）。距今约 7000 年前贝丘遗址大多位于中国南方地区，渔猎采集为代表的消耗性经济为主导；距今约 7000 以后，贝丘遗址普遍分布于环中国海地区，栽培植物和饲养动物的食物生产行为不同程度地存在，以中国中部沿海为界，北部的贝丘遗址表现出更多生产型经济因素，南部的贝丘遗址还是不同程度地保留渔猎采集这类消耗性经济因素。

以驯化动植物的栽培和饲养为标志，贝丘遗址生业形态经历了三个阶段：渔猎采集、亦渔亦农和农业主导。然而农业（食物生产）为主导的贝丘遗址似乎仅有胶东半岛的即墨北阡遗址。此外，环中国海地区贝丘遗址还表现出一定的差异，北方贝丘遗址比南方贝丘遗址表现出更多定居的特征，并且部分贝丘遗址还出现了社会分层；区域间贝丘遗址有一定程度的交流。

生产型经济（即植物栽培和动物饲养）的出现和发展程度，标志着贝丘遗址生业形态的改变。从已有的材料来看，北方贝丘的持续时间短于南方贝丘，北方贝丘的消亡的速度高于南方，与生产型经济的发展速度成正比，另一方面，社会复杂化程度也对贝丘的消亡产生影响。

The Subsistence of Shell Middens in Coastal region of

China during Pre-Qin Period

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The shell midden is a kind of special archaeological site with shellfish accumulations which had been wasted by prehistoric and historical people. According to the published archaeological materials, nearly 500 sites were identified as shell middens in China, of which about 440 located in coastal region, dating to the pre-Qin period.

Most of shell middens before 7000 B.P. are discovered in the southern China. The dominated subsistence of this early stage was of consumption economies such as foraging, hunting and fishing. Since 7000 B.P., the distribution of shell middens extended to northern coastal regions of China, showing the diversity of food production economies, domestication of plants and animals in different areas. The factors of food production were more common in the northern than that in the southern coastal areas where the livelihood as foraging and fishing continued relatively.

According to arising and developing of the domestication, the subsistence of shell middens can be divided into three stages, the fishing/foraging/hunting stage, the mix type and the agriculture stage. The emergence of food production economies marked the

change of shell middens subsistence. However, the Beiqian site in the Jiaodong peninsula maybe the only agriculture-led shell midden.

The diversity of shell middens happened with the cultural diffusion and social complication. The cultural diffusion and people migration presented more in the southern coastal areas than in the northern areas. Social stratification also appeared in some shell mound settlement.

The shell middens pattern declined sooner and earlier in the northern coastal areas than that in the southern areas, being related to the different situation of the development of food production economies and social complexity.

14, 《浙东沿海新石器时代的海洋文化景观与海洋经济》

赵东升（南京大学考古系）

以宁波地区为中心的浙东沿海目前可见河姆渡文化、良渚文化和钱山漾文化等考古学文化遗存。根据已发掘遗址的统计，这一区域的文化发展大致可以分为以下三个阶段：河姆渡文化一-三期（距今 7000-5600 年）；河姆渡文化四期-良渚文化早期（距今 5600-5000 年）；良渚文化中晚期-钱山漾文化时期（距今 5000-4000 年）。这一分期成果不是以独立的考古学文化的始终为依据，而是在综合考虑文化遗存时空变迁的基础上划分的。这一遗址分布的时空变迁与浙东沿海相对

封闭的自然环境和变迁的生态环境密切相关。不同的时代和不同的人群受到海洋生态变迁的影响，形成不同的文化面貌。本文通过对考古遗存时空变迁的研究得出结论：在良渚晚期以前，人们更多的是在适应海洋，而不是利用海洋，这里的海洋文化和海洋经济并不发达。直到良渚晚期-钱山漾时期海盐经济的出现，真正的海洋经济才出现，也才彻底改变了当地悠久的浓厚的农业文化传统。

Neolithic seascapes and marine economy of eastern coastal of Zhejiang

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According to the archaeological chronology and typology, the development of maritime culture in the coastal region of Zhejiang can be divided into three stages: Hemudu culture 1th-3th phases (7000-5600a.BP), Hemudu culture 4th phase to the early period of Liangzhu culture (5600-5000a.BP), the middle and late period of Liangzhu culture to Qianshanyang culture (5000-4000a.BP). These three stages reveal the social and cultural change being adapted to the ecological environment. Different content and cultural features in this sequence were formed by the influence of the changes of marine ecology in different times. This paper present a systematic analysis on these cultural changes related to maritime economy

and marine environment. The maritime economy during Hemudu culture and early Liangzhu culture had been under-developed and mainly adapt to the oceanic environment. It was not until the late period of Liangzhu and Qianshan culture, the maritime economy emerged at coastal region of Zhejiang with the exploitation of sea salt, completely changing the landscape of Neolithic agriculture.

15，《日本琉球群岛新石器时代航海中的环境与文化因素》

木下尚子（日本熊本大学）

琉球群岛是日本列岛的最南端，由 188 个岛屿组成，分布于日本九州和台湾之间的超过 1300 公里的南北海域，亚热带气候和外围众多的珊瑚礁分布，形成了独具特色的文化基础，造成自史前时代以来琉球文化的特殊性，不同于日本本土。

在新石器时代，琉球文化可以分成两大区域类型。北方类型又可细分为北琉球和中琉球，包括冲绳群岛、奄美群岛。南琉球向南延伸很远，距台湾仅约 110 公里，从它的南端可以看到台湾岛。北、中琉球的文化关系非常密切，而南琉球则相对孤立，并没有任何迹象表明在 12 世纪之前与中北琉球有任何往来。这种差别的原因似乎是空间距离，北、中琉球从北到南岛礁间可以相互望见，而南琉球的最北部与中琉球间也隔着 220 公里的宽阔海域。

琉球群岛的史前考古资料显示这一岛礁地带航海史变迁如下信

息：

公元前 6000 年起，九州与北琉球、中琉球之间的几乎所有的互动都是从北到南的，没有任何相反方向上的文化传播的例子。

公元前 800 年左右开始，在相距大约 1000 公里的中琉球与北琉球和九州间，出现了长距离的贝壳贸易，持续了超过一千年，直到六世纪前后。主要的贸易内容是中琉球的海螺，作为茎被要求在北琉球和九州地区宗教性的手镯制品原料。从南琉球人（冲绳群岛）采集贝壳，奄美群岛和中琉球人充当贸易商人，而在北部九州的人则是消费者。

虽然台湾和南琉球的西部岛礁可以相互望见，但台湾的考古发现中很少有南琉球的器物，反之亦然。因此，我们必须考虑是文化的原因导致分离，而不是地理上的原因。

基于上述分析，我们得出琉球群岛新石器时代航海史的三个结论：航海活动不一定是相互往来的，也可以是单向片面的；经济因素导致长距离贸易和相互间航海往来的重要原因；文化因素是航海活动的决定因素而不是地理因素。

Environment and culture as factors in seafaring in the Ryūkyū Archipelago during the Neolithic

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The Ryūkyū archipelago is the southernmost part of the

Japanese archipelago, a chain of 188 islands extending over 1300 km between Kyūshū and Taiwan. Subtropical climate and fringing coral reefs around many islands led to the formation of a distinctive culture, which differs from that of the Japanese mainland since prehistoric times.

During the Neolithics, two larger regional cultures can be observed. The northern group can further be divided into North Ryūkyū (NR) and Middle Ryūkyū (MR) – which covers Okinawa islands and the Amami islands. South Ryūkyū extends to about 110 km distance to Taiwan, and from its southernmost tip one can see the island of Taiwan. While the cultures of NR and MR are closely related, SR seems isolated, and there are no signs of interaction prior to the 12th century. This separation seems to be due to the fact that on the one side in NR and MR, islands are in visibility from north to south, whereas the northernmost islands of SR are separated by 220 km open sea, therefore they are out of visibility.

Archaeological data from prehistoric Ryūkyū show the following tendencies related to seafaring:

Since 6000 BC, almost all interaction between Kyūshū and NR through MR is directed from north to south, hardly any example of opposite direction can be found.

Around 800 BC, long distance shell trade over about 1000 km between the people of MR on the one side and those of NR and Northern Kyūshū on the other side started and lasted for more than a thousand years until the 6th century. Object of trade were conch shells that stem from the MR and were demanded in North Kyūshū for bracelets as religious items. Three groups of people were involved in the trade: People from the southern MR (Okinawa islands) gathered the shells, people from the Amami islands and NR transported them between the south and the north, while people in North Kyūshū were consumer.

Although Taiwan and the western part of SR are in visible distance, artifacts from Taiwan are rarely found on the SR and vice versa. Therefore, instead of geographical reasons for interaction we have to assume cultural reasons that led to separation.

Based on the above, I draw three conclusions about seafaring in the Ryūkyū archipelago during the Neolithics:

(A) Seafaring is not necessarily mutual but can be one-sided.

(B) Economical factors were the reason to keep long distant trade and mutual seafaring over a long period.

(C) Cultural factors may be decisive for seafaring rather than geographical factors.

16,《跨越台灣海峽兩岸的新石器化歷程, 西元前 13000-3000 年》

洪晓纯 (国立澳大利亚大学人类学系)

多元視角的考古學證據, 尤其是聚落、器物、古植物和人類遺骸, 讓我們得以重新檢視台灣海峽兩岸從舊石器過渡到新石器的歷程。本文探討的地理區涵蓋台灣海峽西側的福建和廣東, 台灣海峽的馬祖、金門及澎湖群島, 以及海峽東側的台灣。台灣海峽兩岸新石器化的歷程至少可以區分出三個主要年代階段, 即 (1). 更新世晚期到全新世早期, 在洞穴或岩蔭遺址、利用石器工業的狩獵採集生活; (2). 全新世早期到西元前 3000 年前後, 出土較多陶器、位於沿海地區的貝丘或沙丘所代表的海洋漁獵採集生活; (3). 大約西元前 3000 年之後, 有稻作或兼有粟作農業的大型聚落所代表的農業生活。

最近的研究讓我們認識到第二階段的這些海洋漁獵採集者相當多樣而且複雜, 他們在文化和生物上有多個來源。本文將探討在這個大的地理區內、這段長時間內, 不同族群在新石器化歷程中的相互關係。

Paleolithic to Neolithic Transition across the Taiwan Strait, 13,000-3,000 BC

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Multiple lines of archaeological evidence, especially settlements, artifacts, archaeo-botany, and human remains, allow a reconsideration of the Paleolithic to Neolithic transition across the

Taiwan Strait, covering a geographical range of Fujian and Guangdong in the west side of Taiwan Strait, the Matsu, Kinmen and Penghu Islands in between, and Taiwan in the east. The Neolithization process here can be understood with reference to three major chronological periods. (1) From the Late Pleistocene to early Holocene, hunter-gatherer sites at cave shelters have been characterized primarily by stone tool industries. (2) From the early Holocene through ca. 3000 BC, pottery-bearing shell middens and other maritime fisher-gatherer sites were situated in sand dunes and other coastal areas. (3) After ca.3000 BC, farmers established large settlement sites with evidence of rice and sometimes also millet.

Recent studies have led us to recognize that the maritime fisher-gatherer in the region are rather diverse and complex. They have multiple origins with different cultural and biological sources. This paper will provide a new picture about different populations inter-relating in variable ways over the Paleolithic to Neolithic transition in a large-scale and long-term perspective.

17, 《从亮岛人遗存看台湾海峡全新世早期的海洋族群》

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自从 2011~2012 年“亮岛人”遗骸以来，已经过去 6 年，因为这

两具亮岛人遗骸是台湾海峡地区全新世时期最古老的人类遗存，引起了社会及学术界的广泛关注，尤其是考古学者和人类学者，不同领域的学者也展开了多学科的探索。然而，最重要的收获仍是田野探索，本文作者及亮岛考古队的成员在马祖列岛开展了卓有成效的发掘，其中最重要的收获是从亮岛人遗骸中提取了 DNA 信息，亮岛人线粒体 DNA 和 Y 染色体的分析也取得了显著的成果。本文将集中讨论亮岛人的种族特征及其在早全新世台湾海峡的活动。

A Study on the Maritime Ethnic Groups of the Early Holocene Taiwan Strait from the Perspective of “Liangdao Man”

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Since 2011 ~ 2012, two “Liangdao Man” skeletons have been found in the Liangdao (Liang Island or Brighten Island) of Matzu Archipelago for six years. They are the earliest human remains in the early Holocene of Taiwan Strait. The discovery carries a series of attention of academy and society, especially the archaeologists and anthropologists. Therefore, the scholars in different disciplines worked on the “Liangdao Man” in many topics. However, the most important work have been carried out in the field. The author and the colleagues of Matzu archaeological team made three years of

excavations with fruitful result. The most notable achievement is the extractions of DNA sample from the remains. Both the mitochondrial analysis and Y chromosome research for the "Liangdao Man 1" have got to good results. This article will focus on the results of the studies and discuss the race of and their maritime activities of "Liangdao Man" in the early Holocene Taiwan Strait.

18，《台灣四、五千年的史前文化样相及周边關係探讨》

郭素秋（台湾中研院史语所）

本文將台灣新石器時代早中期（四、五千年前）的文化樣相，放在整個東亞地區來加以檢視，與同時期的周邊地區之考古文化進行比較研究的結果，發現台灣這個時期先後的文化內涵與中國東南沿海地區的許多要素有類緣性，包括福建的殼丘頭下層類型、曇石山文化，浙江北部的同時期文化、浙江西南地區好川墓地，廣東珠江三角洲以寶鏡灣遺址等為代表的考古文化等，顯示這個時期台灣對外的文化接觸，涵蓋福建、浙江、廣東等中國東南沿海地區，台灣與閩浙粵隔著台灣海峽等海域相望，推測當時透過海路存在著多條的接觸路線，彼此交織而構成一個互動網絡，使得這個時期跨區域的考古文化呈現出一定程度的類似性，但是卻又各自保持著各地的傳統文化要素。

其中，在較早階段（約 5500~4800 年前後），可見台灣大坌坑文化中與福建殼丘頭下層類型有許多相同的器物內涵。在較晚階段（約

4800~4000 年前後），則可見到台灣與中國東南沿海區域，新出現許多共同的文化特徵，包括高圈足陶豆、泥質黑陶、鼎等三足器的出現，及良渚文化晚期的製玉技術（直線切割、穿孔、圓形旋截等技法）和相關器物在各地的出現。製玉技術為當地的人們所吸收，並運用當地的玉材進一步發展出各地特有的玉器形制等，可知台灣在約 4800~4000 年前後所出現的許多新的要素，與良渚文化晚期向中國東南地區的南向擴散所造成的間接影響有關。

Archaeological Cultures of Taiwan and Southeast China around 5000~4,000 B.P.

Kuo, Suqiu

IHP of Sinica, Taiwan

The archaeological cultural comparison of the early and middle stage of Neolithic cultures of Taiwan (4000—5000 years ago) with those in the eastern Asia region reveal that the Neolithic Taiwan share a series of similar cultural content with the Zhejiang, Fujian and Guangdong in mainland of southeastern China, including Keqiutou and Tanshishan cultures in Fujian, Haochuan culture in Zhejiang, and Baojingwan culture in Guangdong. For example, some similar artifacts appeared at the early stage of Neolithic cultures as Dapengkeng of Taiwan and Lower Stratum of Keqiutou dated to 5500—4800BP.. There also other similar artifacts as high

stem pottery Dou, black fine pottery artifacts, tripod pottery Ding and jade technique of Liangzhu culture appeared in both side of the straits, dating to 4800—4000BP.. The similarity of these Neolithic cultures reveal the prehistoric cultural contact across the Taiwan straits by a series of different navigation routes resulting a primitive maritime transportation network.

19, 《从几何形印纹陶看台海两岸的早期文化交流》

付 琳（厦门大学历史系）

闽台区一向被作为中国南方几何形印纹陶遗存分布的重要地区。然而，几何形印纹陶在闽江流域和台湾岛的原始文化中，实际上有着不同的发展轨迹和阶段划分。对之进行梳理，将有助于了解几何形印纹陶在东南地区原始文化中的特殊地位，以及其在台海两岸早期文化交流中扮演的角色。

在闽江流域的早期文化中，几何形印纹陶的发展脉络可分为萌生与初步发展（距今约 5000 至 3500 年）、兴盛（距今约 3500 至 3000 年）、衰落与消亡（距今约 3000 至 2000 年）三大阶段。在本区新石器时代晚期的昙石山文化和牛鼻山类型中，开始出现少量拍印方格纹或折线纹的陶器，其萌发的时间点和拍印纹样大致与赣鄱地区（山背下层和筑卫城下层）及岭南地区（石峡文化和涌浪类型）相同，并略早于太湖-杭州湾地区（钱山漾类型）。在闽江流域稍晚的黄瓜山类型和马岭类型中，几何形印纹陶平稳发展。虽然拍印纹饰在这一时期陶

器的装饰风格中并非主流，但几何形纹样的传统却一直延续，以彩绘几何形纹样或陶衣之下的拍印方格纹、席纹而存在。本区的几何形印纹陶兴盛于约当中原商代的黄土仑类型和白主段类型阶段，拍印的云雷纹、席纹、菱形填线纹、回纹、梯格纹和各种组合纹饰大量流行。至周代前期吴越文化因素开始渗入闽江流域，区内几何形印纹的应用局限于少数几类陶罐上，纹样愈发规整，以小型席纹居多。闽江流域的几何形印纹陶在春秋晚期至闽越国时期急剧衰落，纹样仅见于坛罐上的小方格纹或麻布纹。最终，几何形印纹陶随着闽越国的灭亡和汉文化因素的大量进入，在本区走向消亡。

台湾岛早期文化中几何形印纹陶的发展脉络大致可以公元前后为界，划分为萌生与初步发展（距今约 4500 至 2000 年）和持续发展（距今约 2000 至 200 年）两大阶段。在第一阶段以前，即台湾岛的大坌坑文化和海西的壳丘头文化阶段，台海两岸陶器均以绳纹为主流装饰，拍印的几何形纹样尚未出现。当大坌坑文化结束以后，在台湾岛北部的圆山文化、植物园文化、中部的牛骂头文化、南部的牛稠子文化和东部的卑南文化陶器中均出现少量拍印的方格纹和席纹，在北部的芝山岩遗址和南部的凤鼻头遗址及鹅銮鼻第二遗址出土陶器中还发现有几何形彩绘纹样，类似拍印与彩绘的几何纹样很有可能是受到了海西地区早期文化的影响。至第二阶段，在台湾岛早期铁器时代的诸文化中，几何形印纹陶得到了持续发展，如在台湾岛北部的十三行文化、中部的番仔园文化、东部的静埔文化中几何形印纹陶均占据一定比例。值得注意的是，这种装饰风格，在台湾岛东部以宜兰淇武

兰遗址为代表的噶玛兰文化中得到高度发展。在淇武兰遗址出土的陶器纹样中，除了方格纹、菱形纹、折线纹、齿纹、梯格纹外，还有各种组合纹样和部分拍印的象形纹饰。直到距今约 200 年前，台湾岛东部噶玛兰族群的几何形印纹陶才被来自大陆的釉陶和瓷器所取代。

台海两岸几何形印纹陶发展轨迹的差异，特别是流行时段的错位，显示出几何形印纹陶自萌发之初即为东南地区土著文化的重要原生特质，代表了东南地区土著族群的基本审美，在与北方文化互动的过程中，几何形印纹陶逐渐被原始瓷器、釉陶器和成熟瓷器所替代，闽江流域约在公元前后完成了这一更替过程。因台湾早期文化地处孤岛，所以在距今 2000 年以来的早期铁器时代，几何形印纹陶仍能持续发展。这些几何形印纹陶遗存也是植根于本地新石器时代文化基础上的继续发展，受到同期汉人文化因素影响较少，所见硬陶器和瓷器均为舶来品。就它们结束的时间来看，台湾岛西海岸又早于东海岸，这当与汉人文化对台湾岛早期铁器文化施加影响的先后及强弱有关。

A Study on Stamped pattern pottery and the Early Maritime Cultural Interaction between Mainland China and Taiwan

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Fujian and Taiwan have been an important area for the development of the geometric pattern pottery in the southeastern China. The typology and chronology on the geometric pattern

pottery in these two regions result a series of cultural types showing the originating, developing and changing of these cultures during 2000-3000 years. The cultural comparison of the geometric stamped pattern pottery between Fujian and Taiwan reveal the early cultural contact and exchange across Taiwan starts during early history of ancient China.

In the early culture of Minjiang River Region, the development of the geometric pattern pottery can be divided into three stages: initiation and primary period (about 4500 to 3500 years ago), flourishing period (about 3500 to 3000 years ago), and declining period (about 3000 to 2000 years ago). In the late period of the Tanshishan Culture and the Niubishan type, a small amount of geometric pattern pottery appeared. Similar culture also appeared in Ganpo region and Lingnan region, which is slightly earlier than that in Taihu region. Then in Huangguashan type and Maling type in the Minjiang region, the geometric pattern pottery developed steadily. During the Huangtulun type and the Baizhuduan type period, the geometric pattern pottery flourished a lot. During the Early Zhou Period, Wuyue cultural factors diffused to Minjiang region, the distribution of the geometric pattern pottery was limited to a small number of pots while the pattern increased regularly. In the late Spring and Autumn period to the Minyue state, the

geometric pattern pottery in the Minjiang river declined quickly.

The development of the geometric pattern pottery in the early culture of Taiwan can be divided into two stages: initiation and primary stage (about 4500-2000 years ago); and developed stage (about 2000 to 200 years ago). In the early stage, there were a small amount of stamped trellis pattern in the Yuanshan Culture, the Zhiwuyuan Culture, the Niumatou Culture, the Niuchouzi Culture and the Beinan Culture on the island of Taiwan. And in the Zhishanyan site of the north, the Fengbitou site and the Eluanbi site in the south, the painted geometric pattern were discovered, which is similar with those discovered in Fujian and Guangdong. In the second stage when the early iron culture appeared in Taiwan, the geometric pattern pottery had been continuously developed in Shisanhang Culture, the Fanzaiyuan Culture and the Jingpu Culture. The complicate stamped pattern in the Qiwan site of the eastern Taiwan which was taken as the representative culture of the Gamalan ethnicity had highly developed. About 200 years ago, the geometric pattern of the Gamalan Culture in eastern Taiwan was replaced by glazed pottery and porcelain from the mainland.

The geometric pattern pottery is an important cultural feature of indigenous people in southeastern China during pre-Qin and

Han dynasties. The differences and the similarity of the geometric pattern pottery in both sides of the Taiwan strait, show us the cultural interaction among the native peoples between Taiwan straits. For the reason of cultural change resulted from the immigration and acculturation of Han ethnicity from northern China, the geometric pattern pottery declined and was gradually replaced by primitive porcelain, glazed pottery and porcelain in Minjiang region 2000 years ago. The island and oceanic environment provide a relative enclosed background for continuing development of native cultural as the stamped geometric pattern pottery in Taiwan.

20, 《台湾海峡谷物传播踪迹的植物考古学考察》

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福建、台湾和台湾海峡的岛屿在重建亚洲和太平洋区域史前史上至关重要，在末次冰期以来，由于台湾海峡海平面的变化，福建和台湾时分时合，现在间隔着一段宽 140 公里海洋和岛屿。台海两岸在文化、历史和语言的联系是很重要的：距今 6000 年前，台湾岛是亚洲近海第一个接受来自大陆地区新石器时代文化影响的离岸区域，距今 4000 年又成为已经成为新石器文化与南岛语族先民进入东南亚群岛的第一块踏板。

台湾海峡环境所带来风险与回报、交通联系与海洋物产无疑对

海峡早期文化史提供了重要的型塑作用。但是，如果海洋是那么重要的，那么陆地提供人群的滋养、住所和与提供海上航行的保障方面同样重要。然而，有关台湾海峡两岸的史前陆生资源与种植经济的研究仍不够深入。今天，稻米是该地区一个重要的主食，小米也是台湾原住民节日特有的食品。考古发现，这些谷物在福建出现于 5000 年前，而后不久在距今 4800 年前出现于台湾，推测这两种作物的最初驯化应在中国大陆。然而，这些谷物在海峡地区两岸间传播的重要性在哪里？它们的重要性是如何随着时间推进而变化的呢？在引进这两种作物之前、期间和之后，台湾地区还有没有其他栽培作物的引进？

本文将对福建、台湾和海峡岛屿已有的史前植物利用的考古学资料予以综合分析，虽然材料的不系统带来许多认识上的问题，但却有助于促进全球学界共同关注的语言/农耕与作物传播模式。

Tracing the cereal trail: Archaeobotanical evidence for plant use across the Taiwan Strait

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Fujian, Taiwan, and the islands of the Taiwan Strait are important for reconstructing the prehistories of Asia and the Pacific. Since the Last Glacial Maximum, the changing seas of the Taiwan Strait have sometimes connected, sometimes separated Fujian and

Taiwan across what today is a stretch of 140 km or more of ocean and islands. This history of connections is important for cultural, historic, and linguistic reasons: at 6000 BP, Taiwan was among the first offshore regions to receive Neolithic cultural influences from continental Asia, and by 4000 BP had become a stepping stone for the further spread of Neolithic cultures and Austronesian languages and people into Island Southeast Asia.

The risks and rewards, connections and sustenance offered by the Taiwan Strait undoubtedly featured heavily in the early stages of this story. But if the ocean was important, so was the land that helped to nourish, shelter, and supply the people in between their maritime journeys. However, the prehistory of land-based resource use and plant economy is still incompletely studied on both sides of the Strait. Today, rice is an important staple in the region, and millets feature as festive foods for the Taiwan aborigines. Archaeologically, these cereals appear in Fujian by 5000 BP and in Taiwan soon after, at 4800 BP, presumably as domesticates originating from China. But how important were these cereals at the time of their introduction to the Straits region, and how did their importance change over time? What other plants were used before, during, and after domesticated cereals were introduced?

This paper presents an overview of existing archaeological

evidence for prehistoric plant use in Fujian, Taiwan, and the intervening islands. Although the patchy state of evidence raises many question, it also opens opportunities for testing and refining language/farming and crop dispersal models that are of global interest.

21，《林惠祥有段石铤时空“谱系”的新证据》

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有段石铤是中国东南及东南亚地区新石器时代的一种特有的文化内涵。20 世纪 50 年代，林惠祥先生将中国东南及东南亚地区发现的有段石铤区分为原始型、成熟型和高级型三种，通过其不同阶段形态的其分布研究，提出有段石铤发生于中国大陆东南区，后传播至台湾及东南亚、太平洋群岛的时空框架以及陆海间史前文化交流传播路线的看法，为东南沿海与东南亚海洋文化传播研究奠定了理论基础。

本文拟在现阶段中国东南沿海地区及东南亚考古新发现的有段石铤及共存物文化编年的基础上，重新考察林惠祥先生有段石铤三种类型的考古地层关系与时空分布，重新思考、评估林惠祥先生有段石铤类型学研究的方法论及其在东亚、东南亚史前陆海文化变迁传播史研究上的价值。

The New Evidence for Stone Stepped Adze Spatiotemporal Genealogy Theory of Lin-Huixiang

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Stone stepped adze is one of the characteristic artifacts of the Neolithic culture in the Southeast China and Southeast Asia. In 1950s, Prof. Lin HuiSiang classified the stone stepped adze of Southeast China and Southeast Asia into three types as three stages of the adze's development: the Primary, the Mature and the Higher type. Cooperated with the discovered numbers and types of different location, he established the spatiotemporal genealogy of stone stepped adze and proposed the spread path of this artifact, which is a basic hypothesis for the research of prehistoric interaction between mainland China, Taiwan and archipelagos of Southeast Asia.

Lin's theory of stone stepped adze spatiotemporal genealogy was established decades ago when the systematic and scientific archaeological work was few. That's why different scholars treated his theory differently. This work tries to re-analysis Lin's stone stepped adze spatiotemporal genealogy theory based on the new archaeological evidence. This kind of work would help us to revalue the methodological significance of Lin's theory on stone stepped adze, and would also help to advance our understanding of Lin's

academic contributions on the research of stone steeped adze and maritime cultural interaction in China and Southeast Asia.