The Archaeology of Asia-Pacific Navigation 4

Chunming Wu

The Prehistoric Maritime Frontier of Southeast China

Indigenous Bai Yue and Their Oceanic Dispersal

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The double outrigger type of “Mother-Son Boat” in Miao village of Shidong in Taijiang County, Guizhou Province of China

Foreword

When I began to pursue my interest in the prehistory of Southeast Asia, China was literally off the radar. There was hardly any communication with Chinese colleagues, and we tended to rely on the latest pronouncements from K. C. Chang at Harvard, and his seminal book on Ancient China for some leads on what was going on north of the Chinese border. I recall a momentous day in 1972 when Noel Barnard published his paper "The First Radiocarbon Dates from China", and his early articles outlining the bronzes from Gansu and Xinjiang that heralded the rise of the Xia and Shang bronze castings. If there was a common theme in those days, it was that centrally of the *Zhongyuen*, the Central Plains of the Yellow River, in all major developments, and innovations that were to spread out into other regions.

Now, how all this has changed. As the most recent excavations at Sanxingdui have emphasized, there was a civilization in the reaches of the upper Yangtze that ranked alongside, possibly even surpassed that of Shang. At Panlongcheng, we have the establishment of an urban community that stood shoulder to shoulder with Zhengzhou commanding as it did, access to southern tin and copper. And we now have documented the progressing rise of rice domestication culminating in one of China's earliest state societies at Liangzhu.

It is within the context of this progressive enlargement of research south of the Yellow River that this masterly synthesis by Wu Chunming lies. For scholars without access to original Chinese sources, it comes as a most welcome and essential fount of knowledge, calling on an unrivaled command of archaeological, literary, and ethnographic sources. For my own interest, for example, in the spread of expertise in bronze casting that reached Southeast Asia in the late Second Millennium BC, it is academic oxygen to be able to read how technical know-how, not to mention the movement of practitioners, seeped through southeastern China. Yuanlongpo is just one site, in Guangxi, that is placed within this investigatory framework. The rise of new technology prior to Chu, Qin, and Han imperializing is seen very much in the context of local absorption, documented by the continuance of indigenous ceramic traditions.

The detailed examination of double canoes and their capability for oceanic exploration and settlement is a masterpiece in the genre that will surely be quoted by all those working in the wider Pacific. From the coast of Fujian, I had the opportunity recently to join Prof. Chunming Wu at Xiamen University to look out over toward the islands of Taiwan, and appreciate how the ocean was a transport hub rather than a barrier to movement. One is reminded of the travels south of Kang Dai in AD 235 at the best of the Wu Emperor to seek out a Maritime Silk Road in the years following the end of Eastern Han. Each chapter in this admirable new volume illuminates a vital aspect of Southeast China's past. It is high time for eastern China and Southeast Asia to be treated together like this. It will surely be the standard reference for years to come.

June 2021

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Introduction

This book presents multidisciplinary research on the cultural history, ethnic connectivity, and oceanic transportation of the ancient indigenous *Bai Yue* (百越) in the maritime region of southeast China and Southeast Asia. It is compiled with a number of different theses which have been successively published in Chinese journals in the last 20 years focusing on the indigenous *Bai Yue* culture during prehistory and early Chinese history.

In this maritime Frontier of China, Chinese historical documents demonstrate the development of the "barbarian" *Bai Yue* and *Island Yi* (岛夷) and their cultural interaction with the northern *Huaxia* (华夏) in early Chinese civilization within the geopolitical order of the "Central *Huaxia*- Peripheral Barbarians". Part I of this book "Historical Records of the Barbarian *Bai Yue* and *Island Yi* on the Southeast Frontier of Ancient Chinese Civilization" includes Chaps. 1 and 2, analyzing the cultural change of the indigenous ethnicities *Bai Yue* and *Island Yi* in the southeast in the vision and discourse of *Huaxia* and its successor *Han* (汉) nationality in Central Plains. Chapter 1 the "Central Nation-Peripheral Barbarians in Four Directions-Four Seas: The Geopolitical Order of Land-Sea Interactions of Early Chinese Civilization", focuses on the cultural interaction between the maritime region of southeastern China and the continental agricultural region of Central Plains in northern China. Chapter 2 the "Southeastern Peripheries of *Huaxia*: The Historical-Cultural Interaction and Assimilation from *Southern Man* and *Bai Yue* of Mainland to *Island Yi* and *Maritime Fan*", traces back the process of the "Huaxianization" (华夏化) and "sinicization" (汉化) of the southeastern indigenous ethnicities pushed forward by the Central Nation.

Part II "The Archaeological Exploration on the Prehistoric Cultures in the Maritime Region of Southeastern Asia" reveals a unique cultural tradition of southeast coast of China, mainly by the typological study on the prehistoric material cultural heritages. Chapter 3 "The Indigenous Paleolithic Cultural Inheritance in the Maritime Region of Southeastern Asia during the Early Neolithization around 10,000 Years Ago", discusses that the indigenous population of the "Maritime Region of Southeastern Asia", including Austronesian, dominantly originated from the local Paleolithic culture and continuing to early Neolithization across this

border region, rather than Neolithic farmers immigrating from north to south. Chapter 4 "The Spatial Variants and Temporal Sequence of the Indigenous Cultural System of Southeast China During Neolithic, Bronze and Early Iron Ages", further studies the material culture dating from the Neolithic to the Early Iron Age, proving the stability and resilience of the indigenous cultures even with the pressure of migratory expansion of *Huaxia* and *Han* from north to south.

Part III "The Ethnographical Investigation of the Maritime Cultural Heritages of the Indigenous *Bai Yue* in Southeast of China", carries out a series of ethnographical investigations of aboriginal heritage, highlighting the native maritime cultural features including maritime characteristics, seafaring technology, as well as their historical relationship with Austronesian and other foreign maritime ethnicities. Chapter 5 "The Inheritance of *Island Yi* and the Acculturation of *Maritime Fan* (诸番) in the *Han* People on Southeast Coast of China", discusses the origin of the unique maritime characteristics of *Han* nationality in southeastern coast of China who promoted the formation of the ancient Maritime Silk Road across the South China Sea and the Indian Ocean. This study confirms the importance of both the inheritance and assimilation of the indigenous barbarian *Island Yi* of *Bai Yue* culture in prehistory, and the acculturation of the series immigrated ethnicities of foreign *Maritime Fan* since the medieval China. Chapter 6 the "Ethno-archaeological Investigation to the 'Straw and Bark-Woven Clothing' of *Island Yi* and *Southern Man* in South of China and Southeast Asia", investigates the historical, ethnographical, and archaeological heritages of the distinctive non-woven bark cloth cultures distributing in the maritime region of Asia-Pacific, further depicting the prehistoric cultural interaction between *Bai Yue* and the *Austronesian*. Chapter 7 the "Searching for the Prehistoric Seafaring Craft between Southeast Coast of China and the Pacific Islands", compares a number of ethnographical and archaeological heritages of the double-hulled "Fang Zhou" (舫舟) and the outrigger "Mother-Son Boat" (子母船) discovered in southeast of China, with the seaworthy canoes of the Pacific, presenting a new clue for understanding the prehistoric seafaring craft of the *Bai Yue* and *Proto-Austronesian*. Chapter 8 "A Comparative Study of the Astronomical Navigation between Ancient China and Pacific Austronesian" is another comparative study on the astronomical navigation of "star-observation" and "star-measuring" used by both the local seamen in south China and the Austronesian navigators in the Pacific, revealing their close cultural connection over the Asia-Pacific oceans.

The last part makes a discussion on the academic history. Chapter 9 "A Brief Review on the Researches of Cultural Relationship between Indigenous *Bai Yue* in Southeast of China and Pacific Austronesian", respectively comments the multi-discipline researches of the ethno-history of *Bai Yue* in China and the origin of Austronesian in Euro-American academy, examining the awkward situation of different focuses of the East and West, arguing for macroscopic investigation on the history of "*Bai Yue-Proto Austronesian"* indigenous community in the cross-border region in southern China, Southeast Asia, and the Pacific Islands.

In short, this manuscript presents a new perspective on the unique cultural landscape of indigenous *Bai Yue* ethnicities in southeast China with thousands of years' stable tradition, a remarkable maritime orientation, and overseas cultural

hybridization in the coastal region of southeast China. It depicts a multidisciplinary image of the early cultural interaction between ancient "barbarians" *Bai Yue* and *Proto-Austronesian*, and reconstructs the maritime cultural essence of southern China originating from prehistoric seafaring of indigenous *Bai Yue* and their mixture with historical overseas ethnicities. I hope these strives will promote a deeper understanding on the prehistoric maritime history and early immigration cultures of Asia-Pacific regions.

Over the last 30 years since I studied indigenous history of southeast China, the Southeast Asia and the Pacific islands, I have been greatly in debt to many teachers and friends for their conscientious instructions, strongest inspiration and sincere supports. My teachers and supervisors in Xiamen University led my research work over a long period of time, in particular Neolithic archaeologist of southern China Wu Mianji (吴绵吉), indigenous ethno-historian, the late Jiang Bingzhao (蒋炳钊) and maritime social-economic historian Yang Guozhen (杨国桢). The well-known authoritative archaeologists of China, Professor Yan Wenming (严文明) and Li Boqian (李伯谦) of Beijing University, Liu Qingzhu (刘庆柱) and the late Huang Zhanyue (黄展岳) of Institute of Archaeology of CASS, instructed me a lot with academic ideologies and interests. Tang Chung (邓聪) of Chinese University of Hong Kong, Lien Chaomei (连照美) of Taiwan University, Chen Chungyu (陈仲玉), Tsang Chenghua (臧振华) and Kuo Suchiu (郭素秋) of Academia Sinica of Taiwan, always helped my investigation and research works. Many benefits have come from Eastern Asia Archaeologists and historians in Euro-American academy. Professor Lothar von Falkenhausen of the University of California at Los Angeles always gave me important advices and strong supports on my research projects. Barry V. Rolett of University of Hawaii at Manoa cooperated with me in last 20 years of time and comprehensively hosted me when I worked in Honolulu. Elizabeth J. Perry, Rowan K. Flad and Michael Szonyi of Harvard University, Robert E. Murowchick of Boston Universy, friendly hosted and strongly supported me when I studied in Harvard-Yenching Institute. Laura Lee Junker of University of Illinois at Chicago, Tsehuey Chiou-Peng (邱慈惠) of University of Illinois at Urbaba-Champaign, Roderick Campbell of New York University, Francis Allard of Indiana University of Pennsylvania, Diane Perushek of University of Hawaii at Manoa, LiuLi Lundin (刘俐) of Pacific Arts Link of Hawaii, Luo Hui (罗辉) of Victoria University of Wellington, Wen Chin Powles (陈雯) of Museum of New Zealand, greatly helped when I successively visited their institutes. In last a few months, Wu Yamin (吴亚敏) offered great effort to translate the whole manuscript from Chinese into English, Zoe Wu (吴子垣) proofread and modified the translation. Senior Professor Charles Higham of University of Otago of New Zealand read through the monograph and wrote earnestly the preface with overpraise and encouragements. I would like to express my deepest gratitude to all of them.

Chunming Wu

Contents

List of Figures

List of Tables

Part I
Historical Records of the "Barbarian" *Bai Yue* and *Island Yi* on the Southeast Frontier of Ancient Chinese Civilization

Chapter 1
"Central Nation-Peripheral Barbarians in Four Directions-Four Seas": The Geopolitical Order of Land-Sea Interactions of Early Chinese Civilization

Despite being a coastal country located to the west of the Pacific, ancient China essentially had a continental cultural pattern, with its vision turned toward the mainland, and a geopolitical order of land-sea interactions of ancient civilization centered on the Central Plains (Zhongyuan,中原) around the middle and lower reaches of the Yellow River and surrounded by "Peripheral Barbarians in Four Directions" (四方蛮夷) within "Four Seas" (四海). Nevertheless, these peripheral maritime "barbarian" *Yi* (夷) and *Yue* (越) and the oversea maritime *Fan* (番) had been active and developed along the southeast coast of China at the edge of these "Four Directions". Here they had objectively played an important and indispensable role in the ancient history of Chinese civilization, from the native seafaring tradition of "being good at using boats" in the prehistoric and early historical period to the medieval and late historical "Maritime Silk Road" from Han (汉) to Tang (唐) dynasties.

The peripheral maritime culture of southeast coast of China represented the main part of ancient East Asian maritime history, which evolved and developed along the "Gullied Boundary of Four Seas (四海为壑) in the geopolitical land-sea order of ancient Chinese civilization. Within the comparative history of the East and West of the world, the ancient oriental maritime culture that developed in this "Gullied Boundary of Four Seas" on the periphery of ancient Chinese civilization was generally different from the Western maritime culture which arose in the Mediterranean and developed into a center of multicultural diffusion of Western civilization.

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1.1 The Continental Cultural Pattern of a "Central Nation with Peripheries in Four Directions" and "Within Four Seas" in the History of East Asian Civilization

Both land masses and sea areas have acted as important spaces for human activities in the long history of the world. Archaeological discoveries in the East and West prove that human beings actively engaged in maritime practices for thousands of years from prehistoric time throughout early history, resulting in the two different social and economic activities on land and sea respectively. Both continental and oceanic properties are, therefore, the inherent dual connotations of human culture. However, land and sea played different roles in regional histories of humankind, especially in the origins of early civilizations of the East and the West.

Anyway, the regular pattern of human history shows that lands on the fertile plains of a few big rivers in the Old World were of key importance in the origins and developments of the earliest kingdoms and classical civilizations. The emergence and evolution of the earliest civilizations of kingdoms and states in both the East and West were closely related to big rivers, such as the Tigris, the Euphrates, the Nile, the Ganges, the Yellow River, and the Yangtze River. The essential terrestrial environmental and cultural elements, including large alluvial plains in the middle and lower reaches of these rivers, fertile and cultivated lands, developed agricultural cultivation, growth of settlements habitants, wealth accumulation by these societies, and so forth, all created a basis for the early kingdoms in these regions. Control of land territory, competition and conflict over water sources for irrigation, and stratification and centralization within agricultural societies, all raised social complexity in these temperate fertile lands of the Old World. It was on these fertile alluvial plains that the earliest kingdoms, such as ancient Babylon, ancient Egypt, ancient India and Xia (夏), and Shang (商) of early China, were conceived and born. "In these regions, extensive Kingdoms arose, and the foundation of great states began" (Hegel, G.W.F. 2001: 107).

The early Chinese civilization also originated in the largest alluvial plain centralizing on the middle and lower reaches of Yellow River in the hinterland of the East Asian continent, being famous as the "Center of the World" (天下之中), the "Central Plains" and the "Big Riverside "(大河之上) recorded in ancient Chinese historical documents, which had been the ideal tillage geographically and environmentally for the development of cereal cultivation. The East Asian continent centered on this "Central Plains" is a naturally shaped inland and semi-enclosed geographic environment, being not only surrounded by large deserts, plateaus, and mountains that act as natural barriers, but also separated from foreign countries by the vast ocean. "China itself is a huge geographic unit, which is relatively isolated or semi-isolated from the outside world." "The home of the Chinese nation is located in the vast continent in East Asia, stretching from the Pamir plateau in the west, great deserts in the north, and mountains in the southwest, to the great sea and oceanic islands in the east and southeast adjacent to the vast Pacific. These natural

barriers of mountains and oceans surrounding the continent create hinterland and relatively independent geographic unit with a well-structured system within" (Yan, W.M. 1987; Fei, X.T. 1989). This relatively independent hinterland with mountains, deserts, and ocean delineation was recorded as the "World", "Land Under the Heaven" (天下), "Within the Four Seas", "Within the Seas" (海内)" in the geographical vision of the early Chinese nation of the *Huaxia* (华夏) and *Han* (汉) people in their historical documents.

The "No War" (非攻) chapter in the *Book of the Master Mocius* (Mozi 墨子) states: "The sum of the world is totally within the four seas" (Mo, D. et al. 2001: 105).

The "No Lax" (不苟) chapter in the *Book of the Master Xuncius* (Xunzi 荀子) states: "It controls the center of the world to govern the people within the seas" (Xun, K. et al. 1995: 40).

The chapter of "Monarchy" (王制) in the *Record of Rites* (Liji礼记) says: "There are Nine States (九州) within the four seas, compensating their strong points and short points to each." The chapter of "Lanes Record" (坊记) in the same book states: "The king couldn't be the ruler within the four seas without courtesy" (Ruan, Y. 2009: 2916–2917, 3518).

The section of "Disciple Yanyuan" (颜渊) in the *Analects of the Master Confucius*) (Lunyu论语) states: "All the people within the four seas are brothers. Why should the king be distressed of being no brothers?" (Ruan, Y. 2009: 5436)

The chapter of "Topography Research" (地形训) in the *Book of the Prince of Huainan* (Huai'nanzi 淮南子) records that "The land of the empire within the four seas covers twenty-eight thousand *li* (里, a Chinese *li* equals 500 m) from east to west, and twenty-six thousand *li* from south to north." The chapter of "Dark World Research" (览冥训) of the same book says: "These days the red and green dragons are roaming around the Nine States…shaking the heaven and the earth, shocking the people within the seas" (Liu, A. et al. 2010: 65, 92).

There are also some classics referring to the "four seas", which do not explicitly refer to the "within" the seas or "over" the seas, but their semantic context can be understood as the meaning of the hinterland "within the four seas".

The section of "Black Bird" (玄鸟) in the *Book of Songs* (Shijing 诗经) states: "The capital and its vast territory extending for thousands of *li* are places for national people to live. The vast territory reaches the four seas and the barbarians in the four directions come to our sacrifices" (Ruan, Y. 2009: 1344).

The section of "Lilou" (离娄) of the *Book of the Master Mencius* (Meng Zhi 孟子) states: "If the son of heaven is not benevolent, he will lose the four seas. If the vassal kings are not benevolent, they will lose their states" (Ruan, Y. 2009: 5912).

The section of "Strategy of King Yu" (大禹谟) in the *Book of Early History* (Shangshu 尚书) states: "After great king Yu (禹) managed the four seas, he cautiously assisted emperor Shun (舜)." "The emperor's supreme monarch from heaven dominates the four seas." "If the national people of the four seas are poor and in difficulties, the emperor and kings will lose their prosperities from the heaven" (Ruan, Y. 2009: 282–283, 286).

The section of "Tribute of the Yu Period" (禹贡) in this *Book of Early History* states: "The territory land in all Nine States are unified and integrated, and all lands

of the country are suitable for living. The nine mountain systems are managed and roads are built. The nine water systems are dredged and the nine big lakes have dikes. The people of the four seas are subjected to the nation" (Ruan, Y. 2009: 320).

The section of "Ritual Vessels" (礼器) of the *Record of Rites* says: "The three sacrificial animals as cattle, sheep and pig, as well as fish and dried meat are the delicacies of the four seas and nine states" (Ruan, Y. 2009: 3122).

The chapter of "Beauty and True Research" (俶真训) in the *Book of the Prince of Huainan* records: "The king is enthroned in the southern territory and benefits people of the four seas." The chapter of "Dark World Research" of the same book says: "The ministers close to the king dedicate their wisdom to the nation and the vast masses of the people are grateful to the king. The king gives his good commands and the people of the four seas are allegiant" (Liu, A. et al. 2010: 52, 92).

The paragraph of the "Southern Area Overseas" (海外南经) in the *Classic of Mountains and Seas* (Shanhaiing 山海经) records: "What the earth loads, including all things between the heaven and earth with the four oceans. All directions in the world are illuminated by the sun and the moon, timed by stars and four seasons to reach a great chronology." Other paragraphs and chapters also take respectively within or over the east, west, south, or north of the "Four Seas" as the coordinates, distinguishing the geographic and cultural differences in territory land of early China (Yuan, K. 2014: 171).

In this relatively independent land space "within the Four Seas", archaeologists revealed that early Chinese civilization originated from the prehistoric "Assimilation and Integration of Pluralistic Cultures" (多元一体) and been converged to form a unified nation with differentiated geopolitical order of "Central Nation" (中国), "Nine States" and "Peripheries Barbarians in Four Directions" in Three Dynasties of Xia, Shang, and Zhou (周). This differentiated geopolitical order reflect the spatial structure and regional interaction of the Chinese civilization in the last thousands of years, characterized by the concentric circular pattern with the Central Nation established by *Huaxia* on Central Plains as its core and the Peripheral multi-cultures in Four Directions.

From the prehistoric origin to the formation of Three Dynasties, the early Chinese civilization with a unified pattern of "Assimilation and Integration of Pluralistic Cultures" and differentiated geopolitical order originated and grew on the base of agricultural society in the East Asian hinterland centered on the Central Plains in middle and lower reaches of Yellow River. Professor Yan Wenming (严文明) vividly portrayed the spatial layout of this Neolithic multiculturalism as a "Multi-Petaled Flower" (重瓣花朵), a pattern of cultural system with pluralistic spatial types, according to the differentiated interactions between center and periphery by way of the concentric circles pattern. The middle of flower petals was the alluvial plain centered on the basin at the middle and lower reaches of the Yellow River, forming the cultural region of Central Plains as the core in the geopolitical order of early Chinese civilization. The five cultural areas of Gansu (甘肃) and Qinghai (青海) in the northwest, Shandong (山东) in the east, *Yan* (燕) and *Liao* (辽) in the north, the middle reaches of the Yangtze River in the south, and Jiangsu (江苏) and Zhejiang (浙江) in the southeast were recognized as the first

circle of the petals surrounding the center. Other cultural areas such as Tanshishan (昙石山) in Fujian (福建), Dapenkeng (大坌坑) in Taiwan (台湾), Shixia (石峡) in Guangdong (广东), Baiyangchun (白羊村) in Yunnan (云南), Karuo(卡若) in Tibet (西藏), Ang'angxi (昂昂溪) in Heilongjiang (黑龙江), and others were taken as the second circle of the petals. The Neolithic multiculturalism in this "Multi-Petaled Flower" pattern also gave birth to a number of important tribal groups and ethnicities in early Chinese civilization. The cultural area of the Central Plains "was identified as the region of tribal groups led by the Huangdi (Yellow Emperor 黄帝) and Yandi Emperor (炎帝) as the ancestor of the *Huaxia*, the core ethnicity and early civilization's center of assimilation. The first circular petals were respectively identified as the origin of a series of important "barbarian" ethnic groups that closely interacted with the *Huaxia*, such as the *Qiang* (羌) and *Rong* (戎) prehistoric cultures in Ganshu and Qinghai, Neolithic *Eastern Yi* (东夷) in Shandong, Neolithic *Yan* culture in the Beijing (北京), Hebei (河北) and Liaoning (辽宁) region, the Neolithic "*Three Tribes of Miao* (三苗)" and *Chu* (楚) cultures in the middle reaches of the Yangtze River, and the prehistoric culture of *Yue* in the Jiangsu and Zhejiang region" (Yan, W.M. 1987). The bronze cultural evidences show that Neolithic "Assimilation and integration of Pluralistic Cultures" with differentially concentric circles pattern continued into the Three Dynasties. According to research by Professor Li Boqian (李伯谦), although the spatial-temporal structure of the bronze cultures changed to some degree during the Three Dynasties, multiculturalism with a differential geopolitical order and center-peripheries pattern of interactions had not changed greatly. For example, during the late Shang and Western Zhou dynasties when the bronze cultures of eastern Asia reached their peak, the bronze cultures at the core position of the Central Plains were further strengthened. Under the directly geopolitical control of the Zhou Dynasty, the various bronze cultures such as *Qi* (齐) and *Lu* (鲁), *Yan*, *Jin* (晋) and *Wei* (卫) closely surrounding the center of Zhou territories developed significantly and assimilated deeply by Zhou culture. The bronze cultures such as Xiajiadian (夏家店) in the northeast, Xindian (辛店) and Shiwa (寺洼) in Ganshu and Qinghai, *Ba* (巴) and *Shu* (蜀) in the Sichuan basin, *Jingchu* (荆楚) in the middle reaches of the Yangtze River, *Wu* (吴) and *Yue* in the lower reaches of the Yangtze River, developed as the second circle of the concentric pattern of bronze cultures and also integrated frequently and closely with Zhou culture. Other bronze cultures arose and developed in more remote regions such as the northeast, northwest, southwest, and southern and southeast coast of China, presenting the most peripheral part of bronze cultural interaction with the central Zhou culture (Li, B.Q. 1990). It is the assimilation of these pluralistic cultures in the prehistoric and early historical period, and the historical mixing, overlapping and integration of the diverse ethnicities over the last 2000 years, that formed the cultural system of multi-ethnic coexistence of modern China (Fei, X.T. 1989).

From the initial unity of prehistoric culture to the assimilation and integration of early civilization in the Three Dynasties, the Central Plains played an important core role. During the thousands of years' construction of the early civilization since

the Neolithic age, the regional and pluralistic cultures of the East Asian continent originated and developed generally facing in toward the Central Plains' hinterland as their cultural interaction center. These regional cultures preferred to "Compete for the Controlling the Central Plains" (逐鹿中原) and kept themselves away from the "barriers" such as the mountains, deserts, and the oceans, surrounding their geographically semi-closed space. Therefore, the spatial interaction between these prehistoric regional multi-cultures was not of a scattered and disordered pattern but, rather, a clear and strict cultural and geographic order with a differentiated and concentric structure summarized as "Multi-Petaled Flower" by Professor Yan. Within this Neolithic cultural and geographic "flower", or pattern of differentiated concentric circles, the hinterland of the Central Plains had always been at the center and core of the structure for thousands of years, while other regions located along different levels or circles of the petals of the flower presented differential interactions with center and with each other. In general, the closer a regional culture was to the core of the Central Plains, the closer its cultural interaction with Central Plains, the stronger the centripetal force and the higher level of social-cultural development it had. These Neolithic cultures in the core region of the Central Plains and those of adjacent areas in the first circle had played a leading role in the formation of early Chinese civilization. The core position of the prehistoric Central Plains laid the foundation for the formation of *Huaxia* and *Han* nationalities, which continued to be the core of Neolithic social-cultural assimilation and cohesion in the Three Dynasties and subsequent historical periods. The growth of the *Huaxia* and *Han* nationalities over the history of civilization coincided with the formation of early civilization of the "Central Nation" and the successive expansions of empires in ancient China. The formation and expansion of early civilization and successive dynasties also promoted and strengthened the multicultural assimilation with *Han* nationality as the core of this cohesion. As a typical classical civilization established on continental cultivation agriculture, there is no wonder that this multicultural assimilation was accompanied by the development and expansion of the agricultural society in ancient China. Professor Fei Xiaotong (费孝通) thus firstly emphasized the agricultural economy as key driver for the multicultural assimilation and stability and solidification of ancient Chinese civilization centered on the Central Plains. "If we consider a source of assimilation and cohesion for the *Han* nationality, I think the agricultural economy of the *Han* nationality is a key factor. It seems that as long as any nomadic groups from inner and north Asia entered the plain region of the Yellow River basin and sank into the intensive and meticulous agricultural society, sooner or later they took the initiative to integrate themselves into the *Han* nationality" (Fei, X.T. 1989). This functionalist opinion is in accord with the essence of pluralistic convergence and assimilation of Chinese civilization, and also implies the core role of continental agriculture in this process.

The concept of unity of the "Assimilation and Integration of Pluralistic Cultures" is the recalling of ethno-history based on the spatial pattern of the modern nation of "China". This is generally consistent with the cultural geography and geopolitical order of the "Land Under the Heaven" (天下) of early Chinese civilization as recorded in historical texts, that is, "the territories in four directions surrounding the

Central Nation" and "within the four seas" where included the Central Nation in Central Plains or Central Earth (中土), and the surrounding territories of "Nine States" and the various "barbarian states" (万国) of *Man* (蛮), *Yi*, *Rong* and *Di* (狄) in the "Four Directions". The ideal situation as recorded in historical books was that "all of the lands under heaven belong to the king and all the people on the land are subject to the king" (The section of "North Mount" in the *Book of Songs*, in Ruan, Y. 2009: 994), and the early China Central Nation as "the center of the land under heaven" was really admired and worshiped by the "Various States in Four Directions" (四方万国) and was their ambitious aim of "Competing for controlling the Central Plains". But actually, before "Qin unified all states under the heaven" (The Biography of Mengtian 蒙恬列传 in *Records of the Historian*, in Sima, Q. 1959: 3113), the "Central Nation" and "Various States in Four Directions" basically coexisted by way of inter-state relationship on the vast lands "Within the Four Seas".

In this historical geopolitical order of "Central Nation-Nine States—Various States in Four Directions", the center of the national territory was recognized since the Neolithic Age as the Central Plains and the Central Earth as the core of multiculturalism. The early Chinese *Huaxia* and *Han* proclaimed and flaunted themselves as the Central Nation to distinguish it from the "Nine States" and the "Various States in Four Directions", and proudly declared that the environmental condition and social civilization there were superior to the "barbarian" states of the *Rong*, *Di*, *Man*, and *Yi* in the "Four Directions".

The section of "Lucky Day" (吉日) in the *Book of Songs* states: "What a vast land the Central Plains is, with their thriving productivity." The section of "Hard Work of People" (民劳) in the same book states: "Benefiting the people in the Central Nation and pacifying the states and the people in four directions" (Ruan, Y. 2009: 920, 1180).

The chapter of "Monarchy" of the *Record of Rites* states: "Peoples on lands of the five directions include the Central Nation and other barbarian states as *Rong* and *Yi*…Specifically, People who live in the east is called *Yi*... who live in the south is called *Man*… who live in the west is called *Rong*…who live in the north is called *Di* …the people in Central Nation, and these *Yi*, *Man*, *Rong* and *Di* all have settled peacefully" (Ruan, Y. 2009: 2896–2897).

The chapter of "The Doctrine of Mean" (中庸) of the same book states: "Giving preferential treatment to the peoples in distant states of four directions, then they will surrender and pledge allegiance. Appeasing the princes under the heaven, then they will be overcome with awe…Therefore, your fame is widely spread beyond the Central Nation and far away to barbarian states of *Man* and *Mo* (貊)" (Ruan, Y. 2009: 3536, 3548).

The section of "Duke Wen of Teng" (滕文公) of the *Book of the Master Mencius* states: "King Yu dredged the nine rivers…then people in the Central Nation had enough cereal supply" (Ruan, Y. 2009: 5884).

The section of the "Timber of Nice Wood" (梓材) in the *Book of Early History* states: "Great Heaven bestowed the people and territories of the Central Nation to our first king" (Ruan, Y. 2009: 443).

The section of "Twenty-Third Year of Duke Xi" (僖公二十三年) in the *Master Zuo's Commentary on Springer and Autumn Annals* (Zuozhuan 左传) states: "There is a war between the states of Jin (晋) and Chu in the Central Plains." The section of the "Ninth Year of Duke Zhao" (昭公九年)of the same book states: "Who should be blamed for the barbarian *Rong*'s occupation of the Central Nation?" (Ruan 2009: 3941, 4467)

The chapter "Biography of Xifugong" (息夫躬传) in the *History of the Han Dynasty* (Hanshu 汉书) states: "The Central Nation has always been admired by the barbarian *Yi* and *Di* with prestige." "Prince Fangyan (方阳侯) and those he favored… committed crimes…alienated themselves from the emperor…and were exiled from the Central Earth to Hepu (合浦) Prefecture in the south" (Ban, G. 1962: 2183, 2187).

The chapter of "Biographies of the *Eastern Yi* Barbarians" (东夷列传) in the *History of the Later Han Dynasty* (Houhan Shu 后汉书) states: "The lost custom and rites of the Central Nation can be seen in barbarian states in Four Directions. These barbarian states are names the *Man*, *Yi*, *Rong* and *Di*" (Fan, Y. 1965: 2810).

The chapter of "Spirit Research" (精神训) of the *Book of the Prince of Huainan*" states: "*Yue* people consider the large serpents as delicious food, while people in the Central Nation dislike and discard them." The chapter of "Truth Regulation Research" (道应训) in the same book states: "Because the king of *Yue* state commanded the army by himself. Therefore, *Yue* became the overlord in the Central Nation." The chapter of "Customs of Qi State" (齐俗训) states: "The customs of hair accessories in Nine States varied greatly, such as *Three Tribes of Miao* bind their hair with hemp, barbarian *Qiang* have headbands, the people in the Central Nation wear hats and hairpins, and barbarian *Yue* cut their hair." The chapter of "Topography Research" states: "The center of Jizhou (冀州) state is called the Central Earth…with eight vast lands and eight remote places, the clouds over the eight great lakes supply the rainfall to Nine States and make the temperature mild in Central Earth." "The roads from the center can reach places in the four directions… the climate there is mild and suitable for crops, and there are many cattle, sheep, as well as six kinds of domestic animals" (Liu, A. et al. 2010: 65, 83, 106, 164, 181).

The paragraphs of "Areas within the Seas" (海内经) in the *Classic of Mountains and Seas* respectively list various communities in the east, west, south, and north "within the seas", such as "The Korea and Tiandu (天毒) states are located within the East Sea and at the corner of the North Sea." "The Heshi (壑市) state is located in the desert place next to the West Sea." "Within the South Sea there are mountains as Hengshan (衡山), Junshan (菌山), Guishan (桂山), and San Tianzi Du (三天子都)." "Within the North Sea there is a Snake Mountain" (Yuan 2014: 371). This book also records other "various states" within the east, west, south and north seas (Yuan, Ke 2014: 237, 251, 266, 282).

The *Classic of Mountains and Seas* also records some places as being "in the sea", "in the center of the sea" or "between the seas", which are actually the coastal

areas on the peripheries of the "Various States in Four Directions". The paragraph of "Areas within the South Sea" (海内南经) records that "The indigenous people of both *Ou* (瓯) and *Min* (闽) live in the sea. It is said that the mountain of *Min* state is located in the sea, or to the northwest of the sea." The paragraph of "Areas within the North Sea" (海内北经) records that "The state of Xiegu (射姑) is located in the sea belonging to Lieguxie (列姑射), and is surrounded by mountains in the south and west. There is the Daxie (大蟹) state in the sea. People there have human faces, hands, and feet, but the body of dace fish. There are other states such as Dabian (大鳊), Mingzu (明组), Penglai (蓬莱) Mountain and City of Giants (大人之市) being located in the sea." The paragraph of "Areas within the East Sea" (海内东经) records that "Duzhou (都州), or named Yuzhou (郁州), is located in the sea. Langya (琅琊) Terrace is located in the Bohai (渤海) Sea, on the east of Langya and with mountains in the north between the seas. Hanyan (韩鴈) is located in the sea, to the south of Duzhou. Shijiu (始鸠) is located in the sea, to the south of Yuanli (辕厉)." The paragraph of "East of Great Desolate Land" (大荒东经) says that "The Liupo (流波) Mountain is located in the East Sea, seven thousand *li* from the coast, and there is the big beast Kui (夔)." The paragraph of "South of Great Desolate Land" (大荒南经) also records that "The Sitian (汜天) Mountain is located in the South Sea, next to the estuary of Chishui (赤水)." "On the small island in the South Sea there is a god named Butinghuyu (不庭胡余) with a human face, with earrings of two green snakes and trampling on two red snakes" (Yuan, Ke 2014: 237–238, 279–281, 284–285, 298, 307, 310, 315).

Clearly, the "Nine States" and the "Various Barbarian States in Four Directions" surrounding the "Central Nation" is a generalization of the cultural geography and geopolitical order during the origin and early stage of ancient Chinese civilization. This is the vision of *Huaxia* and *Han* ethnicities of the Central Nation. It presents the social-cultural image of interaction and integration between the "Center" in the hinterland of the alluvial plain in the middle and lower reaches of Yellow River and the "peripheries" in Four Directions and the spatiotemporal process of "pluralistic assimilation" on Eastern Asian continent. Essentially, this is an inland spatial order "Within the Four Seas" evealing the land-centric focus of traditional China's worldview of the geopolitical order of the land-sea interactions (Fig. 1.1).

1.2 The Geopolitical Order of Land-Sea Interactions of the "Gullied Boundary of the Four Seas" in Ancient Chinese Civilization

Located on the East Asian continent, China is oriented to the east and southeast toward the vast Pacific Ocean, with a coastline of 18,000 km successively adjacent to the Bohai Sea, the Yellow Sea, the East China Sea, and the South China Sea. Given the absence of clear knowledge of the geography of the land in "four

Fig. 1.1 A sketch showing the land-sea relationship with geopolitical order of "Central Nation-Peripheral Barbarians in Four Directions-Four Seas" of early Chinese civilization

directions" of early China, the inland area of the ancient "Nine States" and "Various States in Four Directions" surrounding the "Central Nation" were identified as being "Within the Four Seas". Although the geographical knowledge of early China regarding the distribution of these "four seas" was not accurate and the description of Chinese nation as being surrounded by the "four seas" was an ideal and amended picture in the minds of *Huaxia* and *Han* people in the Central Nation, both in reality and geographically, China had been seen as a coastal country since the prehistoric age.

Nevertheless, archaeological investigations have revealed that an agriculturally dominant tradition of continental culture centered on the middle and lower reaches of Yellow and Yangtze rivers had been established since the Neolithic age. Although the maritime cultures characterized by the archaeological shell middens and dunes along the eastern and southeast coast had developed over thousands of years in prehistory, the maritime area was generally isolated geopolitically from the early Chinese civilization, especially within the inward-looking bias of the *Huaxia*

and *Han* worldview. The historical documents recorded this continental cultural outlook of early "China" with a geopolitical prejudice using such expressions as "Within the Four Seas", the "Gullied Boundary of the Four Seas", "Reaching to the Four Seas", and "Terminating at the Four Seas", reflecting the basic pattern of the "ocean encounter" and the geopolitical order of land-sea interaction in early Chinese civilization.

The section of "Disciple Gaozi" (告子) of the *Book of the Master Mencius* says: "The four seas had been the gullied boundary of the Xia kingdom during the Yu period, but you take the neighboring states as the gullied boundary" (Ruan, Y. 2009: 6008). The section of "Ministers Yi and Ji" (益稷) in the *Book of Early History* states: "I dredged the nine big rivers and made them flow toward the four seas, dug the field canals and let them flow into the great rivers." The section of "Tribute of the *Yu* Period" in the *Book of Early History* states: "From the east in the sea to the west in the desert, from the north to the south, all people within the four seas were enlightened by the king's prestige." The section of "Admonition of King Yi" (伊训) in this *Book of Early History* records that "The love and respect should exist in all families from our motherland in Central Nation and extend to the territorial boundary within the four seas" (Ruan, Y. 2009: 323, 344).

With regard to the geography of "Within the Four Seas" and "Within the Sea", the social humanities of the boundary areas of the land and sea, such as the islands and adjacent coastal regions, were regarded as "overseas", "outside the seas", "oceanic states", "sea corners", "sea surface" and so forth, in the *Huaxia* perspective of early China. These identifications implied a bias that they were also isolated beyond the mother land of the Central Nation and the states in Four Directions surrounding it.

The term "overseas" is recorded in the section of "Long Flourishing" (长发) in the *Book of Songs*: "King Xiangtu (相土) is majestic and brave, he conquered the land to the sea, and the people overseas submitted to him" (Ruan, Y. 2009: 1351). The *Classic of Mountains and Seas* lists the ethnic groups in the south, west, north, and east of "overseas": "The south of overseas is located from the southwest corner to the southeast corner of the nation" (Yuan, Ke 2014: 171), "the west of overseas is located from the southwest corner to the northwest corner of the nation" (Yuan, Ke 2014: 191), "the north of overseas is located from the northeast corner to northwest corner of the nation" (Yuan, Ke 2014: 208) and "the east of overseas is located from the southeast corner to the northeast corner" (Yuan, Ke 2014: 224).

"Oceanic states" are similarly recorded in the section of "Temple" (閟宫) in the *Book of Songs*: "The territory of Lu state covers the two mountains of Gui (龟) and Meng (蒙) and extends to the eastern edge of the continent next to the Oceanic states. The barbarian *Huai-Yi* (淮夷) there come to pay their tributes" (Ruan, Y. 2009: 1332).

"Sea corners" are recorded in the section of "Ministers Yi and Ji" (益稷) in the *Book of Early History*: "The people in the sea corners and the people of the various states of the Nation are your subjects… the king's prestige spread to the borders of the Four Seas, and established junior office of head of five-person group (五长) to execute the public affairs." In the section of "Notice of the Lord Shi" (君奭) in the

"Zhou Dynasty" (周书) of the same book also records: "All places including the sea corners where the sun rises are subjected" (Ruan, Y. 2009: 300–301, 479). Also, as noted above, the paragraph of "Areas Within Seas" in the *Classic of Mountains and Seas* says that "The Korea and Tiandu states are located within the East Sea at the corner of the North Sea" (Yuan, Ke 2014: 371).

"Sea surface" is recorded in the section of "Establishment of Regime" (立政) in the *Book of Early History*: "Following the footprints of the empire Yu and inspecting the world as far as the sea surface, in which all people are subjected" (Ruan, Y. 2009: 495).

Strictly speaking, the descriptions of Central Nation being surrounded by the "Four Seas" merely represented an ideal vision of *Huaxia's* worldview. In fact, mainland China is geographically adjacent to the ocean on its eastern and southern coasts, rather than being surrounded by the seas in four directions. Nevertheless, as professor Wang Zijin (王子今) believes, ancient people of the Central Nation regarded relatively large inland lakes as "seas" and thus conceived the concept of the "Four Seas". Then, Wang also analyses the geographic locations of the "West Sea" and "North Sea" (Wang, Z.J. 2015a). There are clear clues about the locations of the East Sea and the South Sea in the pre-Qin classics in detail on the "Four Seas", which are roughly consistent with the contemporary situation. As cited previously in this chapter, in the record of the "Tribute of the Yu Period" of the *Book of Early History*, the territory of the "Nine States" mainly included the river basins of the Yangtze and the Yellow rivers. In the "Monarchy" chapter of the *Record of Rites*, a similar geographic reach of "Within the Four Seas" was depicted as "west to Liusha (流沙) desert, south to Hengshan, east to the East Sea and north to Hengshan (恒山)" (Ruan, Y. 2009: 2916–2917). Therefore, the "Four Seas" as territory bounding of the "Nine States" should not vary much from the scope of this range. According to the "Tribute of the Yu Period", "The Black Water (黑水) was dredged to Shanwei (三危) and flowed into the South Sea." The locations of Black Water and Shanwei would have been roughly those of the west mountainous areas in present Sichuan (四川) and Yunnan (云南), while the Black Water flowing to the South Sea would correspond with today's Nujiang (怒江) and Lancang (澜沧江) rivers similarly flowing to the South China Sea. "Tribute of the Yu Period" also records that "King Yu dredged the Yon (沇) River to flow eastward into the Ji (济) River, and then into Yellow River, with its overflow forming Lake Xing (荥), then flowing out eastward to the north of Taoqiu (陶丘), then east to the He (菏) River, then to the northeast to confluence with the Wen (汶) River, then to the north and flowing eastward into the sea. He also dredged Huai (淮) River from Tongbai (桐柏) eastward to its confluence with the Si (泗) and Yi (沂) rivers in the east, from where it flows eastward into the sea." These rivers as Ji, He, Wen, Huai, Si, and Yi were located in the states of Yan (兗), Qing (青), Xu (徐) and Yang (扬) in the pre-Qin period. To their east are today's Yellow Sea and the East Sea, which together was the "East Sea" of Yu period as mentioned previously as "flows eastward into the sea" (Ruan, Y. 2009: 318, 320).

There are a number of chapters in the *Classic of Mountains and Seas* respectively reveal the locations of the "Four Seas". On the "East Sea" and the "North

Sea", the chapter of "Areas within the East Sea" records that "The Si (泗) river originates from the northeast of Lu (鲁), flows to the south and southwest to the west of Huling (湖陵), then flows southeastward into the East Sea and the north of Huaiyin (淮阴)." The chapter of "East of Great Desolate Land" records that "The state of Shaohao (少昊) is located in the great gully beyond the East Sea." The chapter of "Areas within Sea" states that "The Korea and Tiandu states are located within in the East Sea at the corner of the North Sea, where people such as the barbarian Wei (偎) live on the water" (Yuan, Ke 2014: 224, 287, 307, 371). These places such as Sishui, Huaiyin, and Shaohao were located along the coast of modern Jiangsu and Shandong provinces, and Korea was the same place as it is today, Wei was the ancient ethnicity of Japan. Therefore "East Sea" of Yu period is roughly consistent with the present East Sea and Yellow Sea, with the same situation based on these clues recorded in "Tribute of the Yu Period". The "North Sea" that connecting to the East Sea and Korea might be the present Bohai Sea or the Sea of Japan.

Concerning the "South Sea", the chapter of "Areas within the East Sea" states that "The Yu (郁) River originates from the prefecture of Xiang (象郡) and flows southwest into the South Sea." The chapter of "Areas within the Seas" states that "Within the South Sea there are mountains as Hengshan, Junshan, Guishan, and San Tianzi Du. There are the mound of Changwu (苍梧), the gulf of Changwu and Jiuyi (九嶷) mountain in the south area, and Shun was buried in Lingling (零陵) territory of Changsha (长沙) (Yuan, Ke 2014: 287, 298, 309, 385). The Yu(郁) River is today's upper reaches of the Xijiang (西江) River, while Hengshan, Guishan, Cangwu, Jiuyi mountains are all near to present Nanling (南岭) Mountain, so the location of the "South Sea" of early China is also consistent with today's geography.

With regard to the "West Sea", it is recorded in the chapter of "West of Great Desolate" (大荒西经) that "There is a great mountain Kunlun (昆仑) hill located in the south of the West Sea, on the edge of Liusha (流沙) desert, behind Red Water and in front of the Black Water." Similarly, the chapter of "Areas Within the Seas" states: "The Heshi state is located in the desert place next to the West Sea, and another state called Siye (汜叶) within the West Sea and to the west of Liusha Desert" (Yuan, Ke 2014: 331–333, 339, 344, 349, 372). These places as Red Water, Liusha Desert, the north of the Kunlun Mountain, undoubtedly were the part of present Gansu, Qinghai, Xingjian (新疆) and Inner Mongolia (内蒙古) in the northwest of China, and the "West Sea" was probably today's Qinghai Lake (青海湖) or the more distant Aral Sea or the Caspian Sea, or even to the Persian Gulf (Wang, Z.J. 2015a).

Although the locations of the "Four Seas" in the pre-Qin period is still in dispute, relatively historical records still reveal the early *Huaxia* ethnicities' ideal worldview of a geopolitical order of the land-sea interaction in eastern Asia. This is "the Central Nation" surrounding the "Nine States" and "Various Barbarian States in the Four Directions", and then *"*Four Seas*"*, arranged in a pattern of roughly concentric circles and a center-periphery social-cultural spatial model of early Chinese civilization. This ideal spatial figure of concentric circles of land-sea has been vividly

described by Zouyan (邹衍) in the Warring States Period. The chapter of "Biographies of Mencius and Xuncius" (孟子荀卿列传) in *Records of the Historian* (Shiji 史记) quotes Zouyan's statement: "The outer states beyond the boundary of the Central Nation are called the Nine States. They are surrounded and separated by the great sea. Therefore, people in the Nine States and barbarians over the seas cannot communicate. In the middle of a region is a state, and there are nine states which were surrounded by the great sea in the outer circle which is the boundary of the land under heaven" (Sima, Q. 1959: 2848–2849). These references to "Central Nation", "Nine States", "surrounded by the great sea" and "the great sea surrounds the nation in the outer circle" reflect the ideal worldview of geopolitical order on the land-sea interaction of *Huaxia* and the *Han* nationality. The Section of the "Explanation of the Waters" (释水) of the "*Explanation of Names* (Shiming 释名) written in the Han Dynasty states: "The 'sea' means 'obscure area', where is dirty, turbid and the water is dark as obscure." So the word "sea" in ancient times originated from the word "obscurity", referring to the obscurity of the vast sea and the dark land of the wild periphery. In fact, the "Four Seas" or "beyond the Four Seas" was the imagination of the *Huaxia* people in Central Nation when they explored the unknown universe, and their symbol for the ideal extent of their seeking to expend their political influence and conquests (Wang, Z.J. 2014).

That is to say, on the worldview and outlook of early Chinese civilization centered on the *Huaxia* ethnicity in the Central Plains, the ocean was ruled beyond of the space of the direct control of this early China, the Central Nation, even generally beyond of the areas of the Nine States and the "Various States of the Four Directions" which were under the Central Nation's effective control and influence. The land boundary surrounded by the "Four Seas", that is, the world described as "overseas" and as the "Gullied Boundary of the Four Seas", were the reflection of the geopolitical order of land-sea interaction and the strong characteristics of the continental agriculture in early Chinese civilization, also revealing the self-centered worldview of the *Huaxia* nationality in the Central Plains.

However, the maritime archaeological cultures representing these areas referred to as "overseas", "in the seas", "in the sea corners", have been found in large quantities in the eastern and southern coasts and islands of China, with unique characteristics. Although these cultures may be termed "peripheral" and "underprivileged" in comparison with the continental cultures centered on both the basins of the Yellow and Yangtze rivers, they actually and objectively added an indispensable special dimension to the diverse and pluralistic cultures of East Asia. During the 1930s, while most archaeologists in China primarily focused on Yangshao (仰韶) Culture characterized by painted pottery, and Longshan (龙山) Culture characterized by black pottery, tending to emphasize the evolution of China's prehistoric (Neolithic) culture centered on the Yellow River basin as their main academic subject matter, Professor Lin Huixiang (林惠祥) focused on the "Southeastern Region" (东南区) of China centered on the coastal areas of Guangdong, Fujian, and Taiwan, and neighboring Southeast Asia. He suggested that the culture of "Maritime Region of Southeastern Asia" (亚洲东南海洋地带) being characterized by the stone stepped adzes and stamp-patterned pottery

remains, has been distinct from the continental cultures of northern and inland China (Lin, H.X. 1937, 1958a, b). In the 1950s, Professor Ling Chunsheng (凌纯声) similarly put forward the theory of an "Asian Mediterranean" cultural sphere centered on the waters between the East China Sea and South China Sea, distinguishing the "barbarian" maritime culture along the eastern coast of China which is characterized by "shell beads, boats, and tattoos", from the *Huaxia* continental cultivation culture of inland areas centered on both the Yellow and Yangtze rivers' basins and characterized by "gold and jade, chariot and horse, clothing and dresses" (Ling, C.S. 1954a). These discourses initiated a preliminary outline for the archaeological and ethnological lineament of the maritime cultures in prehistoric and early civilizations of China.

Archaeological investigations and researches in the past century have revealed that the maritime cultures in the eastern and southern coastal regions of China have a long history of continuous development and inheritance lasting nearly 10,000 years. A large number of Neolithic and Bronze Age shell mounds, dunes, and other sites along the coast are located in the continental drowned valleys, river estuaries and downstream river banks, coastal islands, and other marine ecological environments characterized by the accumulations and depositions of marine shellfish, reflecting the early subsistence patterns of the ancient maritime "barbarian" *Yi* and *Yue* (Yuan, J. 1995; Jiao, T.L. 2012). Among them, around Bohai Strait, hundreds of shell mound sites dating back to 7000–3500 years ago have been found along the coast of Jiaodong (胶东) peninsula on the southern side, while dozens of synchronous Neolithic sites with the same or very similar cultural contents were also found in the Miaodao (庙岛) islands in the strait and the Liaodong (辽东) peninsula on its northern side, suggesting a capacity of cross-strait navigation of the prehistoric *Eastern Yi* people (Yan, W.M. 1986; Han, R. 1986; Tong, W.H. 1989; Wang, X.P. et al. 1990). On the coast of the East China Sea, the Neolithic maritime settlements developed and expanded along the estuary of Qiantangjiang (钱塘江) River and coast of Taiwan Strait. For example, almost 100 settlement sites in the period of Hemudu (河姆渡) and Liangzhu (良渚) cultures have been investigated on the southern coast of Hangzhou Bay and adjacent islands dating back to 7000–000 years ago, representing the early history of maritime practices of the ancient native *Yu Yue* (于越) people (Cao, J. 2012). Along the west coast of the Taiwan Strait, centered on the downstream reaches and estuary of the Minjiang (闽江) River, more than 100 shell mound sites have been found, highlighting the early establishment of maritime settlements of the aboriginal *Seven Min* (七闽) ethnicities as the record "The *Min* Lives in the Sea (闽在海中)" in the *Classic of Mountains and Seas* (Wu, C.M. 1995). Similarly along the north coast of the South China Sea, centered on the estuary of the Pearl River, more than 100 shell mound sites and dune sites dating back to 6000–3000 years ago have been found. The shell mound sites are generally located on the river banks of the Pearl River Delta and estuary, while the dune sites are often found along the coast or on the islands of the Pearl River estuary, with abundant remains of marine resources such as shellfish and fish and shrimp (Zhu, F.S. 1994; Yuan, J. 1999). Dozens of Neolithic coastal dunes and shell mound sites dating back to 5000–2500 years ago have also been investigated

on the coasts of Hainan island (He, G.J. 2012; FSCAT-IA-CASS et al. 2016). These spatially and temporally diverse remain of Neolithic and Bronze ages are characterized by coastal settlements, marine fishing, and early seafaring between mainland and islands, reflecting the early maritime landscape of indigenous *Yi* and *Yue* along the coastal region of ancient China. This maritime landscape coincides with the historical records, such as "The barbarian *Island Yi* make and use the bark -straw woven cloth, weave bamboo, use marine shells as decorations, and generally pay a tribute of tin artifacts to the Center Nation, being located near the river and the sea and next to the *Huai* (淮) and *Si* (泗) rivers ("Tribute of the Yu Period" of the *Book of Early History*)." "The *Eastern Yue* (东越) people enjoy marine clams, *Ou* people like to eat snakes ("Record the Kings Meeting (王会解)" of the *Lost Historical Literature of Zhou Dynasty* (逸周书)." "The character of the aboriginal *Yue* is crude and rash. They live along mountainous coast and travel by water, taking boats with oar as their main transportation tool. They skillfully sail the boat as fast as the howling wind ("Biography of the *Yue* Territory (越绝外传记地传)" of the *History of the Lost Yue Ethnicity* 越绝书)." "The aboriginal people of both *Ou* and *Min*, live in the sea ("Areas within the South Sea" of the *Classic of Mountains and Seas*)" (Ruan, Y. 2009: 312–314; Huang, H.X. et al. 2007: 833–844; Yuan, Kang 1985: 57–58; Yuan, Ke 2014: 237). These coastal cultural remains reflect the early maritime practices of the ancient indigenous inhabitants in the zone of the "Gullied Boundary of the Four Seas" at the time of the origin and early stage of Chinese civilization, which laid the foundation for the sustainable development of the maritime culture in the ancient history of China.

Since the Han and Tang dynasties, with the development and expansion of "Assimilation and Integration of Pluralistic Cultures" of the Chinese civilization centered on the *Han* nationality, most of the indigenous inhabitants of *Yi* and *Yue* ethnicities have been assimilated into the Han- Chinese society along the coast of southeast China. Nevertheless, the indigenous maritime cultural essences, such as the skills of "developing the sea like cultivating the fields of a farm" and being familiar with waterways, good at using boats, and venturing navigation, have been inherited. This maritime cultural inheritance from the "Asian Mediterranean" cultural sphere of the indigenous people in *Yi* and *Yue* people, to the "Maritime Silk Road" of the *Han* people in south China was manifested in many aspects such as the nautical route system, the spatial layouts of traditional seaports, the ethnic groups of seaman societies, and the other maritime cultural connotations (Wu, C.M. 2004, 2007, 2011b). Moreover, following the Open Seas policy of the Han, Tang, Song, and Yuan dynasties, series of foreign maritime cultures such as the *Hu* (胡) and *Fan* (番) from the South China Sea and the Indian Ocean landed and immigrated to China one after another, and to varying degrees were assimilated into the coastal societies, further enriching the connotation of the maritime culture within China's integrated pluralistic assimilation (Wu, C.M. et al. 2011, 2017). This Open Seas policy of encouraging the development of overseas trade during the Han, Tang, Song, and Yuan dynasties led, to a considerable extent, to a reversal of the geopolitical order of land-sea interaction of the "Gullied Boundary of the Four Seas" of Chinese early civilization, adding pluralistic maritime and foreign cultural

elements to the Chinese civilization in the Middle Ages. Both the inheritance of the maritime culture essences of the indigenous inhabitants of *Yi* and *Yue*, and the assimilation of the foreign maritime ethnic groups of the *Hu* and *Fan* in the seas around China, greatly promoted the development of maritime transportation and Maritime Silk Road in China's history. With their mature and advanced technologies of shipbuilding and navigation, the new ethnic group of *Han* people who had assimilated the indigenous *Yi* and *Yue*, as well as the foreign *Hu* and *Fan* who carried out the oceanic navigation across the "Four Seas" and the "Four Oceans" between the western Pacific Ocean and Indian Ocean, initiated the heyday of ancient Chinese maritime culture. The Open Seas policy and the combination of both Chinese and foreign cultural elements in the Han, Tang, Song, and Yuan dynasties, enriched the pluralistic connotation and maritime spirit of Chinese culture and left colorful oriental records in the history of maritime culture.

However, throughout the 2000 years of navigation history since the Han Dynasty, the successive empires still generally regarded the various "Oversea Maritime Barbarian *Fan*" (海外诸番) as "hetero-cultures" or "different ethnicities from ours". The prominence of inland culture and dynastic politics based on continental agriculture restricted the free development of maritime culture, even in the "Open Sea" period. In particular, the Ming and Qing dynasties enacted strict maritime bans, forbidding any seafaring activities that were independent of the government, developed the tributary trade controlled by officials, and restricted the maritime trade to a few of limited seaports. During this period, a series of prohibition policies were put into practice, such as "forbidding any boat, even a piece of wooden board floating on the sea", and "destroying all offshore residencies and migrating all people there to inland regions". All these high-handed measures of seafaring banning have actually represented a restoration of the maritime dilemma of the "Gullied Boundary of Four Seas" of early civilization, in which the civil maritime society along the southeast coast of China had once again suffered a major setback. Since then, as the historian concluded, "The pirates turned to be legal maritime merchants when sea trade was allowed, and the maritime merchants turned to be illegal pirates when the sea trade was forbidden" (Deng, R.Z. 2007: 673). The maritime merchants of southeast coast of China had little choice but to "illegally communicate with foreign countries" and "smuggle onto the sea to trade overseas", forming dozens of illegally armed seafaring merchant groups that were encircled, pursued, obstructed, and intercepted by the government during the sea ban periods (Lin, R.C. 1987: 85–130). This retreat from the sea in the Ming and Qing dynasties came at the time of European global navigation, the geographic discovery of the New World, and domination of the global order in economy and culture for several hundreds of years, and resulted in the receding of China's maritime culture in world history.

In summary, maritime culture had been an inherent connotation of the unity of Chinese civilization through the "Assimilation and Integration of Pluralistic Cultures". However, in the geopolitical order of Chinese early civilization, indigenous inhabitants of *Yi* and *Yue* in "Maritime Region of Southeastern Asia" encountered the dominating continental cultures of the Central Nation and the surrounding inland cultures of the "Nine States" and "Various States in the Four

Directions", and the order of land-sea interactions of the "Gullied Boundary of the Four Seas". Despite the Open Sea*s* policy in the Han, Tang, Song, and Yuan dynasties, when the assimilation of foreign maritime cultures revitalized the Chinese civilization in the Middle Ages, this positive process came to an abrupt end with the restoration of the ocean retreat of the "Gullied Boundary of the Four Seas" in the Ming and Qing dynasties, and the development of maritime culture of ancient China was again thwarted.

1.3 Discussion: Comparison of Maritime Cultures Between the "Gullied Boundary of Four Seas" in East Asia and the Mediterranean of the West

The difference in the geographical layouts, geopolitical orders of the land and sea, and cultural essences between the East and West led to great differences in the development of the maritime cultures. The macro-geographic background of the Mediterranean being surrounded by Old World continents of Europe, Asia, and Africa, presented a sea-centered layout in which a number of important early civilizations, such as the Babylon, Egyptian, Minoan and Mycenaean, arose in these bordering regions and converged one after another to reach ancient Greece and then Rome to become the basis of Western civilization centered on the Mediterranean. On contrary, the East Asian continent presents an inland-centered layout surrounded by its "Gullied Boundary of Four Seas", where the early Chinese civilization originated pluralistically in "Nine States and Various States in Four Directions" and converged to form the Central Nation in the hinterland of the Central Plains.

Firstly, the macro-geographic background of independent hinterland units "within the four seas" of ancient Chinese civilization, differed greatly from the layout of the Mediterranean maritime civilizations surrounded by lands converging at a central ocean.

The maritime cultures of East Asia originated along the coastal region of the "Gullied Boundary" of ancient Chinese civilization that lay "within the Four Seas", and developed over thousands of years. One of the important reason for the difficult development of ancient China maritime culture had been the macro-geographical background of the East Asia continent, the independent hinterland units being relatively isolated from the outside world by the surrounding obstacles as mountains, deserts, and ocean delineation.

The Mediterranean is the world's largest sea surrounded by lands—actually composed of three huge continents linked together—thus creating a relatively independent oceanic geographic unit centered on the Mediterranean Basin. These three continents, Western Asia, North Africa, and Europe, are located around the Mediterranean and converge at the Mediterranean each bringing its specific geographic and cultural connections. In North Africa, the Nile flows from south to north into the Mediterranean, linking the ancient Egyptian civilization to the

Mediterranean world. In West Asia, a crescent-shaped zone was home to the civilizations of the oldest kingdoms in the river basin of Euphrates and Tigris in Mesopotamia and connected the Mediterranean coast of Lebanon by its western end in Syria. This region of the oldest civilizations is also connected to the sea where the estuary of the Euphrates and Tigris rivers discharges at their southeastern end into the Persian Gulf, acting as the geographic and cultural corridor linking the Mediterranean Sea and the European civilizations with the Indian Ocean. Another series of peninsulas comprising the Balkans, Apennine Peninsula, Iberia in the south of European continent also project from the north to south into the Mediterranean Sea, while a series of north-south lowlands connects through the Alps to the Mediterranean Sea well.

A series of north-south peninsulas arranged from east to west divide the Mediterranean Sea into many relatively independent water areas including the Black Sea, Aegean Sea, Adriatic Sea, Ionian Sea, Tyrrhenian Sea, the Western Mediterranean Sea, as well as a series of islands both big and small, which together made convenient the primitive step by step navigation in this vast water. In short, the temperate Mediterranean has been naturally an excellent seafaring area for early human beings, becoming a paradise for navigators.

Secondly, the model of the continental cultures of various states in "the Four Directions" surrounding, converging and integrating with, and being assimilated by the Central Nation, is wholly different from that of the Mediterranean civilization with oceanic convergence and combination of diverse cultures from the surrounding continents.

Although the early Chinese civilization developed and assimilated pluralistic cultures from various states in "Four Directions", all of these cultures had, in fact, originated from the same independent continent, converged and integrated inward on land in a concentric circles pattern centered on the agricultural system of Central Nation of the *Huaxia*.

At the heart of early western civilization were ancient Greece and Rome of the Mediterranean region, where multicultural civilizations of the Old World had converged and mixed in the sea region. The Mediterranean civilization began with classical Greece, which itself was based on the Minoan culture of Crete in 2000 BC, the Peloponnesian Peninsula, and the Aegean Islands, which was eventually replaced by the Roman Empire in 323 BC. The geographic background of Greek civilization were the various islands, peninsulas, sea bays, and coastal environments connected by the ocean, while the free spirit based on the maritime tradition grew to be the core element of the Greek civilization. The marine environment created the navigation traditions of Greek civilization, and their life style on islands and the sea, the open oceanic transportation, maritime trade with and traveling between various coastal city-states, as well the sea warfare, all represent the explicit characteristics of Greek culture. The Greeks excelled at the maritime trade of bronze, pottery, wine, olive oil, and grain, and established the maritime colonies in the Aegean Sea, ultimately dominating the trade in the eastern Mediterranean.

The Mediterranean civilization also had its foundation of the pluralistic ancient cultures of the Old World of Asia, Africa, and Europe. The Mediterranean Basin played a central role both in the convergence of diverse cultures from three continents and the diffusion of the classical civilizations of Greece and Rome. From the very beginning, the early civilization of Mesopotamia spread along the Fertile Crescent land to the Mediterranean coast including Egypt, so that the Sumerian art elements were included and have been identified in the early civilization of Egypt. From about the fifteenth to tenth centuries BC, with extraordinary commercial genius and nautical skills, the Syrian-Palestinian Canaanites (known to Greeks and Romans as Phoenician) on the eastern coast of the Mediterranean, established a series of maritime trading bases on various Mediterranean islands and coasts from Palestine in the east to the Strait of Gibraltar in the west and shared the profits of maritime trade with Greeks in the Aegean Sea. Particularly important was the arrival of Cadmus of Phoenician origin, by whom phonetic writing is said to have been introduced into Greece (Hegel, G.W.F. 2001: 246). In the eleventh century BC, the Israelites briefly established a powerful kingdom on the eastern coast of the Mediterranean Sea. The Hebrew Bible they created and which contains many Mesopotamian cultural genes became the origin of Judaism, Christianity, and Islam, three of the most important heritages of world culture. The Empire of Assyria of the eighth to sixth century BC, the Persian Empire of the sixth to fourth century BC unified the vast Fertile Crescent land and further promoted the return of the Near East civilization to the Mediterranean area in general and Greece in particular. Even at the time when Alexander defeated Persia and established a greater "Hellenistic" Empire that included the Mediterranean Sea in the west and the Indus River Basin in the east, the Near East culture still represented an important part of the Hellenistic culture. "The so-called Hellenistic culture is a culture in which the histories of the East and the West converged with each other in this era." The region of Greece is the sucker and melting pot of multiculturalism, accompanied by the whole process of evolution of Greek civilization, "The peoples and empires of the ancient Near East had already deeply influenced Greek culture. Ancient Greece was indebted to the Near East for its alphabet, mythology, and architecture, and the beginning of its technology and science…Behind Greece and Rome lies the rich experience of the ancient Near East, without which those later civilizations would be inconceivable" (Ollister, C.W. et al. 2005: 135). "Small wonder, then, that the Middle Sea should not only have nurtured three of the most dazzling civilizations of antiquity, and witnessed the birth or blossoming of three of our greatest religions; it also provided the principal means of communication" (Norwich, J.J. 2011: 1). Therefore, in the assessing of the development of several early civilizations in the history of the world, traditional scholars often claim that the ancient civilization of China is the only one that developed uninterruptedly and continuously, while ancient Egypt, Mesopotamia, and others represent "interrupted" or the "extinct" civilizations. However, needless to say, the genes of the early civilization of the Near East flowed completely through the body of Greece and then Rome in the process of the change, the inheritance, and the development in the spread of civilizations with oceanic convergence in Mdeiterranean.

Finally, the prominent essence of inland agriculture, and the estranging situation of land-sea geopolitical order represented by the "Gullied Boundary of the Four Seas" in ancient Chinese civilization, was also very different from the tradition of maritime expansion and communication of Mediterranean civilization centered on Greece and Rome.

From Babylon, Assyria to Persia, the powerful empires that unified the Fertile Crescent land continuously imported the achievements of Near East civilization into the Mediterranean, and in the meantime undoubtedly opened up an important gateway for the spread of the Mediterranean maritime culture to the outside world. From the Trojan War to Greco-Persian Wars in the fifth century BC, and to Alexander, the Macedonian king conquest of the Persian Empire in the fourth century BC, the Greeks established the largest empire in the world at that time, extending from the India and Arabian Sea in the east to Egypt in the south, initiating the heyday of the spreading of the Greek culture in the Middle East. A great number of Greeks migrated to Syria, Asia Minor, the Nile Basin, and even to the Indus Basin, thus forming a great Greek cultural sphere. This expansion of Hellenistic culture laid the foundation for the political and spiritual unity of Christianity in the Mediterranean world under Roman rule. The scientific spirit, cosmopolitanism, materialism, religious diversity, increased industrial specialization, and large-scale business activities brought about by Hellenization had fundamental influence on Roman, Byzantine, and Muslim civilizations, as well as on the medieval West (Ollister, C.W. et al. 2005: 148–149).

Both Rome and Greece are located in the maritime areas of the central Mediterranean, so the ancient Greek and Roman cultures once greatly influenced each other, though Greek culture had more profound influence on Rome. The Greek history did not end in the vast territory of the Roman Empire, however, rather a new chapter of the history of ancient Greece began under the domination of Rome (Ollister, C.W. et al. 2005: 67). While ostensible it was the Roman Empire that conquered Greek land and the vast Hellenized areas, in reality to a large extent it was Greek culture that conquered the Romans, as "The Romans assumed the mission of popularizing Greek culture to the West" (Li, Y.N. 2013: 994, 1061). Christianity, which appeared fairly early in the Roman Empire, was the product of a combination of the Jewish Bible with the Greek philosophy and became the most enduring legacy of Rome for Western civilization. Even after the Roman Empire collapsed in the sixth century, Greek and Roman culture never truly died out in the West. "The West was nourished by the Greco-Roman culture and is haunted by the memory of Rome" (Ollister, C.W. et al. 2005: 246).

At the end of the fifteenth century, with the opening of the new geographic routes, the western civilization which had been founded in ancient Greece and Rome quickly came to dominate the first true globalization based on Mediterranean civilization. In 1492, Christopher Columbus sailed across the Atlantic and started the era of European colonization in the American continents. In 1498, by passing the Cape of Good Hope and entering the Indian Ocean, Vasco Da Gama started the European maritime trade history in the Far East that lasted for nearly five hundred years. From 1519 to 1522, Ferdinand Magellans' fleet completed its first global

voyage across the Atlantic, Pacific, and Indian oceans. The geographic discoveries and global maritime trade moved the center of western maritime civilization from the Mediterranean Sea to the North Atlantic coast. Portugal, Spain, the Netherlands, Great Britain, France, the United States, and others became respectively the sea powers in the different periods through their control of the sea. Thus, once again the world history was forged through its oceans, this time with a profound Western imprint, again highlighting the strong driving force of maritime civilization. "The Mediterranean Sea, the three continents that compose it have an essential relation to each other and constitute a totality…Greece lies here, the focus of light in history… The Mediterranean is thus the heart of the Old World, for it is that which conditioned and vitalized it. Without it, the history of the world could not be conceived" (Hegel, G.W.F. 2001: 104). The comments by Hegel are not so much an assessment of the status of the Mediterranean in the history of the world, but rather an emphasis on the great role of the ocean in human history.

Chapter 2
Southeastern Peripheries of *Huaxia*: The Historical-Cultural Interaction and Assimilation from *Southern Man* and *Bai Yue* of Mainland to *Island Yi* and *Maritime Fan*

In the macroscopic situation of ethno-history in the East Asia, the mainstream of ethnic relationships in diverse regions has generally come along with the expansion of the *Huaxia* and *Han* nationality, as well as its interaction, conflicts, and assimilation with the neighboring cultures in "Four Directions". The process of the so-called "Huaxianization" (华夏化) and "sinicization" (汉化) pushed forward step by step from the "Central Plains" and "Central Nation" in the middle and lower reaches of the Yellow River, outward to the peripheries of its "Four Directions", and from the mainland to the oceanic areas. In this process, the main pattern of ethnic interaction presented in a differentiated concentric geopolitical order of the "Central Nation (中国)"—peripheral "Four Directions" (四方) with "Nine States" (九州) and "Various States" (万国)—"Four Seas" as the "Gullied Boundary of China Nation" (四海为壑), finally resulting in the unity of China Nation of "Assimilation and Integration of Pluralistic Cultures" (多元一体) with the *Han* ethnicity as its core.

Within this Center-Periphery interaction, most frontier and peripheral ethnic groups did not have their own written texts recording the indigenous history. Nevertheless, the histories of these non-*Han* peoples, such as the "barbarians" in various states in "Four Directions" within the "Four Seas", and the oceanic "barbarians" of *Island Yi* (岛夷) and *Maritime Fan* (诸番), had been gradually identified and depicted in the Chinese historical literatures in the vision of *Huaxia* and *Han* ethnicities. Therefore, the reconstruction of social and cultural history of these frontier and peripheral ethnicities relies not only on *Huaxia* and *Han*'s observation and cognition, but also on the cultural and territorial expansion process of the *Huaxia* and *Han* people from the Central Plains to the "barbarian" regions in "Four Directions" and "Four Seas".

In the southeastern direction of this differentiated concentric circular pattern of geopolitic order of Ancient China, with the diachronic expansion of the *Huaxia* and *Han* nationality from center to peripheries, the indigenous societies of "Hundred Tribes of *Yue*" (*Bai Yue* 百越) and foreign *Island Yi* were continuously and successively cognized and assimilated by the *Huaxia* and *Han* people step by step from

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the north to south, from mainland to the sea, which were recorded and depicted in Chinese historical documents. This process of cultural cognition and sinicization had roughly gone through three major stages: (1) The indigenous "Southern Barbarian *Miao* and *Man*" during the early Chinese civilization of Xia, Shang and Zhou dynasties; (2) the sinicized *Bai Yue* indigenes in the southeast coast of China during the Eastern Zhou, Qin, and Han dynasties; and (3) the maritime inhabitants of the foreign *Island Yi* and *Maritime Fan* in the "Maritime Region of Southeastern Asia" from the Han and Tang dynasties to the Ming and Qing dynasties.

The identifications of the mainland *Miao* and *Man*, *Bai Yue*, *Island Yi* and *Maritime Fan*, were the results of ethincal interaction and cross-cultural cognition of the *Huaxia* and the *Han* people along their continuous expansion from Center southward to the mainland southeast coast of China and islands of southeast Asia. These terms were names of "the others" and "hetero culture" of the indigenous people in national discourse of *Huaxia* and *Han*, reflecting the historical process of the ethnical interaction, conflicts and assimilation between the *Huaxi*a and *Han* nationalities and the indigenous societies of *Miao* and *Man, Bai Yue* and *Island Yi* in the maritime regions of Southeastern Direction of Center Nation.

2.1 The "Barbarian" *Miao* and *Man* in the "Southeastern Direction" of *Huaxia* During Xia, Shang and Zhou Dynasties

As the core of national cultures of "Assimilation and Integration of Pluralistic Cultures" in ancient East Asia, *Huaxia* had always retained the strong dynamic power of the expansion from Center Nation outward to the periphrial territory of "Nine States" and "Various States" in the "Four Directions" and "Under the Heaven" (天下). Alongwith the foundation of the early kingdoms of the Xia, Shang and Zhou dynasties, the *Huaxia* nationality launched powerful cultural dissemination and assimilation to the neighboring ethnicities in the "Four Directions", in which the indigenous *Miao* and *Man* within the mainland southeast coastline firstly appeared and were recognized in the vision of the early *Huaxia* nationality.

2.1.1 Three Tribes of Miao and Ten Tribes of Man During the Xia and Shang Dynasties

The territory under the direct rule of the Xia and Shang kingdoms was limited to the Central Plains in the middle reaches of the Yellow River, but the national territory of "Nine States" as recorded in the section of "Tribute of the Yu Period" (禹贡) in the *Book of Early History* (Shangshu 尚书) was much broader and actually covered the mainland regions of the "Various States" of "Barbarian" in "Four Directions" as

its periphery. These "barbarian" ethnicities admired and interacted with central *Huaxia* nationality by the way of paying tribute.

The territory of Yangzhou (扬州) State in the "Southeastern Direction" (东南方) of Central Plains was limited to the north part of the southeast coast of nowaday's China during Xia and Shang dynasties. The geographical landscape depicted as the "River and Sea" region next to the "Huaihe (淮河) and Sishui (泗水) rivers" of Yangzhou State in this book could be identified as the lower reaches of Yangtze River covering today's southern Jiangsu (江苏) and Anhui (安徽), eastern Hubei (湖北) and Jiangxi (江西) provinces. In their early vague vision on Yangzhou State, *Huaxia* noticed the special landscape and seascape of this region located to their "Southeastern Direction", such as "barbarian on the islands wearing bark and straw woven cloth" and "living along the rivers and seas" (Shao, W.P. 1989).

The section of the "Official in Charge of Various States" (Zhifang Shi 职方氏) in the *Rites of the Zhou Dynasty* (Zhouli 周礼) records that "The state in southeastern direction is Yangzhou, its mountain town is called Kuaiji (会稽), the biggest lake there is called Ju Ou (具区), where three rivers flow into five lakes" (Ruan, Y. 2009: 1861).

The section of "Tribute of the Yu Period" in the *Book of Early History* records that "The Yangzhou region is located near Huaihai (淮海) sea, Pengli (彭蠡) lake in which the migrating birds stay, and the Zhenze (震泽) lake where three rivers flow into…The barbarians on the islands pay tribute of gold, silver, copper, jade stones, ivories, skin, feather and alike to empire of Central Nation. They wear straw clothes, make use of bark weavings, weave bamboo, use marine shells as decorations, live along the rivers and seas, and reach as far as Huaihe and Sishui rivers" (Ruan, Y. 2009: 312–313).

During this period, "Three Tribes of *Miao*" (三苗) was a famous indigenous group living in the southeast mountainous area in *Huaxia*'s vision. The chapter of the "The Biographic of Five Emperors" (五帝本纪) of the *Records of the Historian* (Shiji 史记) states that during the time of emperor Yao (尧),"Three Tribes of *Miao* rebelled in the areas of Jiang Huai (江淮) and Jingzhou (荆州), therefore Shun (舜) returned to Central Nation and advised the emperor…then exiled *Huandou* (驩兜) to Chongshan (崇山) to change the barbarian culture of the *Southern Man* (南蛮), and relocated Three Tribes of *Miao* to Shanwei (三危), enlightening the western barbarians *Rong* (戎)." During the emperor Shun period, "the empire suppressed barbarians of Jiaozhi (交趾) in the south…and the people within the four seas were grateful to emperor Shun's meritorious service… Emperor Shun reigned for thirty-nine years. He died in wildness of Cangwu (苍梧) while inspecting around the south. He was buried in the Mountain Jiuyi (九疑) in the south of the Yangtze River where was called mausoleum of Lingling (零陵)" (Sima, Q. 1959: 34, 50–52).

The chapter of "Wei Kingdom" (魏策) in the *Records of Warring States* (Zhanguo Ce战国策) records that "The state of Three Tribes of *Miao* is located between the left of Pengli Lake and the right of Dongting (洞庭) Lake, with the Wenshan (文山) mountain to its south and Hengshan (衡山) mountain to its north. The chieftain of this barbarian group behaved badly and entrenched in unaccessible lair, so emperor Yu (禹) banished him" (Liu, Xian 2005: 244).

Here the *Miao* was clearly depicted with the location between the lakesides of Pengli, namely the Poyang (鄱阳) Lake, and Dongting Lake. According to the research of Xu Xusheng (徐旭生), the ancient Chinese character of 苗 (Miao) is the same as "barbarian" *Man* in similar pronunciation (Xu, X.S. 1985: 58). So the Three Tribes of *Miao* were the important indigenous *Southern Man* in the territory of southeastern direction of the Xia Dynasty on perspective of early *Huanxia*.

During the Shang Dynasty, *Huaxia*'s influence upon the "Various States" in "Four Directions" exceeded that of the Xia Dynasty to the farther eastern and southern coasts and interacted with them closer in frequent tribute. The chapter of "Records of the Kings Meeting (王会解)" in the *Lost Historical Literature of Zhou Dynasty* (Yi Zhoushu 逸周书) records that during the Tang (汤) reign of Shang Dynasty, "Yi Yin (伊尹) was committed to be in charge of tribute of states in four directions. The official asked the barbarian states in the east such as *Fulou* (符娄), *Qiuzhou* (仇州), *Yilv* (伊虑), *Oushen* (沤深), the Nine Tribes of *Yi* (九夷), the Ten Tribes of *Man*, and *Yue Ou* (越沤) who had the custom of cutting hair and tattoo body, to pay tributes of sheath made of fish skin, sauce made of fish and sharp swords. Asked the states in the south such as *Ou* (瓯), *Deng* (邓), *Gui* (桂) state, *Chanli* (产里), *Bai Pu* (百濮) and *Jiujun* (九菌) to pay tributes of marine pearls, tortoise shells, ivory, rhinoceros horns, peacock feathers, cranes and dogs" (Huang, H.X. et al. 2007: 910–915).

In brief, the local inhabitants of *Miao* and *Man* were the earliest indigenous ethnics in the territory of Southeastern Direction of the Xia and Shang dynasties, being interacted and assimilated with *Huaxia* by the way of early tributary network of the "Various States in Four Directions of Central Nation". This cultural assimilation process promoted the spread and influence of the social civilization of Central Nation to its southeastern direction. The section of "Searching Analogy" (召类) of the *Analects of the Political Opinion of Master Lv* (Lvshi Chunqiu 吕氏春秋) records that "Emperor Shun defeated barbarian *Miao* and changed their customs" (Lv, B.W. et al. 2002: 1369). The "Biographic of Five Emperors" of the *Records of the Historian* records that "Exiled *Huandou* to Chongshan to change the barbarian culture of the *Southern Man*" (Sima, Q. 1959: 34). These cultural changes of *Miao* and *Man* were just the demonstration of the Huaxianization of the southeast indigenous in the early Chinese civilization.

2.1.2 *Seven Tribes of Min and Eight Tribes of Man in the Zhou Dynasty*

During the Zhou Dynasty, with the growth and evolution of the civilization of Central Nation, the core role of *Huaxia* in its interaction with the Pluralistic cultures in Nine States and Various States of ancient China strengthened, and the territory directly ruled by *Huaxia* was further expanded outward in the "Four Directions". The Zhou Dynasty was broadly endorsed and accepted by people in Nine States and

Various States, dreaming for a blueprint of "all of the lands under the heaven belong to the king and all the people on the land subject to the king", as recorded in the section of "North Mountain" (北山) in the *Book of Songs* (Shijing 诗经) (Ruan, Y. 2009: 994). In this Southeastern Direction, the more profoundly cultural assimilation happened too, and the indigenous inhabitants more widely distributed on southeast coast had contacted with Central Nation and been depicted in more detail in the Chinese historical literatures.

The section of the "Official in Charge of Foreign Affairs" (Xiang Xu 象胥) of the *Rites of the Zhou Dynasty* records: "Official Xiangxu is in charge of managing the states of *Man*, *Yi*, *Min* (闽), *He* (貉), *Rong* and *Di* (狄)" (Ruan, Y. 2009: 1944).

The section of the "Official in Charge of Various States" in the *Rites of the Zhou Dynasty* records: "Zhifang Shi (职方氏) is in charge of managing all states under the heaven and controlling all lands in the world, identifying the various states and their capitals and cities, as well as the people of Four Tribes of *Yi* (Si Yi 四夷), Eight Tribes of *Man* (Ba Man 八蛮), Seven Tribes of *Min* (Qi Min 七闽), Nine Tribes of *He* (Jiu He 九貉), Five Tribes of *Rong* (Wu Rong 五戎), and Six Tribes of *Di* (Liu Di 六狄)" (Ruan, Y. 2009: 1861).

The section of the "Winter Official in Charge of Craftworks" (Dongguan Kaogong Ji 冬官考工记) in the *Rites of the Zhou Dynasty* records: "There is no craftwork of casting bronze axe in *Yue* (粤), no craftwork of making leather armors in *Yan* (燕), no craftwork of making the long weapons as spear in *Qin* (秦), and no craftwork of making bows and carts in *Hu* (胡)." "The bronze and xin implements in *Wu* (吴) and *Yue* (粤) states are high quality artifacts of metal" (Ruan, Y. 2009: 1957–1958).

The "Record the Kings Meeting" of the *Lost Historical Literature of Zhou Dynasty* states: "The *Eastern Yue* (东越) people enjoy marine clams, *Ou* people like to eat snakes. The *Yu Yue* (于越), *Gumei* (姑妹), and *Gong* (共) people like to eat marine shellfish and crab" (Huang, H.X. et al. 2007: 833–844).

The paragraph of "Areas within the South Sea" (海内南经) in the *Classic of Mountains and Seas* (Shanhaijing 山海经) records: "The aboriginal people of both *Ou* and *Min* live in the sea. It is said that the mountain of *Min* state is located in the sea, or next to the northwest of the sea" (Yuan, K. 2014: 237).

From these records we can see that "*Yue* (粤)", "*Wu*", "*Yue* (越)", "*Ou*", "*Min*" and other non-*Huaxia* ethnicities on the southeast coastal regions all entered into *Huaxia*'s vision during the Zhou Dynasty, which was the result of the broader expansion and the deeper assimilation of the *Huaxia* culture outward southeastern direction in the geopolitical order of "Central Nation-Various States in Four Directions". The founding and early developing of *Wu* state was a typical case of the cultural assimilation of indigenous ethnicity in the southeast in this period.

The chapter of the "History of Aristocratic Family of *Wu* Taibo" (吴太伯世家) in the *Records of the Historian* states: "*Wu* Taibo and his younger brother Zhongyong (仲雍) are the sons of King of Zhou Dynasty, and the brothers of King Jili (季历)…then Taibo and Zhongyong went to the barbarian region of *Man* in Jing (荆)." "Taibo went to *Man* region and set residence there, took himself the barbarian's title of *Gou Wu* (句吴). The barbarians of *Jing Man* (荆蛮) supported him

and about one thousand indigenous families followed and subjected to him, enthroning him as *Wu* Taibo, the first generation of monarchs of the *Wu* state" (Sima, Q. 1959: 1747).

The "barbarian" people of *Jing Man* was the indigenous inhabitants living in the lower reaches of the Yangtze River, the immigration of Taibo and Zhongyong to the barbarian *Jing Man* reflects the spreading of *Huaxia* population from the central area of the Zhou Dynasty to the north part of the southeast. The inscription on the "*Yi* Hou Ce Kui" (宜侯矢簋) bronze bowl unearthed in Dantu (丹徒) county of Jiangsu province also records the historical facts of King Kang (康) reign of Zhou Dynasty conferring Ce (矢) as the title of king at *Yi* (宜) area, which is another evidence of the spreading of *Huaxia* people from the Central Plains to the barbarian region in the Southeastern Direction of Zhou Dynasty. After the Spring and Autumn Period, there were more frequent warring conflicts and interaction between the *Huaxia* and the indigenous people in southeast states of *Wu* and *Yue*, such as the events of "*Wu* aggressed *Chu* states every year". "The army of *Yue* aggressed the regions in the east basins of Yangtze and Huaihe rivers and was admitted and worshiped by various local states, being the overlord at the time." "The army of *Yue* attacked the *Qi* state in the north, and the *Chu* state in the west, competing for the supremacy in Central Nation" (Sima, Q. 1959: 2099). Obviously, the direct cultural expansion and assimilation of *Huaxi*a outward to the southeast promoted the Huaxianization and sinicization, accelerated the social evolution of the indigenous *Wu* and *Yue* states in the Spring and Autumn Period.

In short, during the Three Dynasties, with the expansion and immigration of *Huaxia* nationality from Center Plains outward to region of barbarian *Miao* and *Man* in their "Southeastern Direction", the cultural influence and assimilation of *Huaxia* on the indigenous society extended from the plain regions with rivers and lakes in the lower reaches of Yangtze River to the further east and south regions over the Wuyi-Nanling (武夷-南岭) mountainous watershed, reaching the coastal regions along the East and South China Sea. The indigenous groups such as "Three Tribes of *Miao*", "Ten Tribes of *Man*" (Shi Man 十蛮), "Eight Tribes of *Man*" and "Seven Tribes of *Min*" in this coastal regions were the direct ancestors of *Bai Yue* of the southeast China during the late Eastern Zhou to early Han dynasties.

2.2 The "Territory of *Bai Yue*" Along the Coast from Jiaozhi to Kuaiji During Eastern Zhou and Han Dynasties

Since the late Eastern Zhou Dynasty, a series of powerful states rose in the mainland of East Asia, competing for controlling the Central Plains, further promoted the cultural interaction and assimilation between the *Huaxia* Nation and the Nine States, Various States in Four Directions, and eventually led to the geopolitical and cultural unification in the Qin and Han dynasties. This national

unification of early China promoted the formation of the *Han* on the base of *Huaxia* nationality of Three Dynasties, which continued to play the core role in the traditional geopolitical order of the "Central Nation-Various States in Four Directions" when it expanded outward and assimilated the other ethnic cultures in the past two thousand years.

In the southeastern direction of *Huaxia* and *Han*, along with the acceleration of cultural assimilation, military and political unification of Central Nation from the Eastern Zhou to Han dynasties, represented by the development and sinicization of *Bai Yue* ethnicities, the indigenous inhabitants in the southeast coast of China and north region of the Southeast Asian Peninsula experienced the deep cultural changes of sinicization, and eventually developed into a component of the broad unification of *Han* nationality.

2.2.1 *The "Territory of* Bai Yue*" Locating to the South of Yangtze and Hanjiang Rivers*

From the late Eastern Zhou to the Qin and Han dynasties, *Bai Yue* as a regionally unified cultural group with diverse branches appeared in the coastal region of the Southeastern Direction of *Huaxia*.

The section of "Principle of King Serving" (恃君览篇) of the *Analects of the Political Opinion of Master Lv* records that "Various branches of *Bai Yue* indigenous people are distributed in the region to the south of Yangtze and Hanjiang (汉水) rivers, forming the territory of *Bai Yue* (百越之际). The *Bai Yue* indigenous groups such as *Bikaizhu* (敝凯诸), *Fufeng* (夫风), *Yumi* (馀靡), *Fulou* (缚娄), *Yangyu* (阳禺), *Huandou*, are all states without chieftain" (Lv, B.W. et al. 2002: 1331).

The annotation of the "Annals of Geography" (地理志) of the *History of the Han Dynasty* (Hanshu 汉书) quotes the words of Chen Zan (臣瓒): "It is seven or eight thousands *li* from Jiaozhi to Kuaiji (会稽), where the indigenous groups of *Bai Yue* with different ethnicities live. They are not all so-called the descendants King Shaokang (少康) of *Huaxia* nationality" (Ban, G. 1962: 1669).

The chapter of the "Biography of Southern Barbarian *Man*" (南蛮传) of the *History of Sui Dynasty* (Suishu 隋书) records: "The southern barbarians *Man* with diverse ethnicities live together with *Huaxia* people in south of China, such as the tribes of *Dan* (蜑), *Rang* (獽), *Li* (俚), *Liao* (僚) and *Yi* (狶) who are without a chieftain. They live in the caverns of the mountain, and their ancestors are the so-called *Bai Yue* ethnicities" (Wei, Z. et al. 1982: 1831).

Synthesizing the Chinese historical records on the indigenous groups in southeastern China, various ethnicities of *Bai Yue* had been active to the south of middle and lower reaches of the Yangtze River, mainly including the "*Gou Wu*" (句吴), "*Yu Yue*"(于越), "*Min Yue*" (闽越), "*Eastern Ou* or *Yue*" (东瓯,东越), "*Southern Yue*" (南越), "*Western Ou"* (西瓯) and "*Luo Yue*" (骆越), "*Gan Yue*" (干越), "*Yang Yue*" (扬越) and so on (Fig. 2.1). They were the descendants of *Miao, Man* and *Southern Man* of Three Dynasties, and successively established a series of the

Fig. 2.1 The distribution of Southeastern ethnic branches of "barbarians" *Bai Yue*

regional states, being independent from the Central Nation on the southeast coast of China.

2.2.1.1 *Gou Wu* and *Yu Yue*

Gou Wu (句吴) and *Yu Yue* (于越) lived in the plains with rivers and lakes in the lower reaches of Yangtze River between Jiangsu, Anhui, and the north of Zhejiang (浙江). They were the two branches of *Bai Yue* in the northern most of Yangzhou as one of "Nine States" and the core area in the Southeastern Direction of the Three Dynasties.

Gou Wu ethnicity lived in the lower reaches of the Yangtze River centered on the basin of Taihu Lake (太湖) where originally was the homeland of indigenous *Jing Man* in the southeast during the Shang and Zhou dynasties. During the Spring and Autumn Period, *Wu* state competed for hegemony with the other great powers, aggressed the states of *Chu* and *Yue* fighting for controlling the Central Plains, and was annexed into the *Yue* state in the early Warring States Period. The chapter of the "History of Aristocratic Family of *Wu* Taibo" of the *Records of the Historian* records its history in this stage: "*Wu* Taibo and his younger brother Zhongyong are the sons of king of Zhou Dynasty, and the brothers of King Jili…The royal linage of *Wu* state lasted for eighteen generations from Taibo to Mengshou (梦寿)." "In the twentieth year of king Fuchai (夫差 476 BC), the king Goujian (句践) of *Yue*

state attacked the *Wu* state again and defeated *Wu* in twenty-third year of king Fuchai (473 BC)" (Sima, Q. 1959: 1747–1781).

Yu Yue, or *Yue* (越), was the descendant of *Yue Ou* of the Shang Dynasty, and was active in the south riparian plain of lower reaches of Qiantangjiang (钱塘江) River. The chapter of the "History of Aristocratic Family of Goujian, the King of *Yue*" (越王句践世家) of the *Records of the Historian* records its history: "The ancestor of Goujian, the king of the *Yue* state, was the descendant of Yu and was the concubine's son of emperor Shaokang of Xia Dynasty. His ancestor was conferred to Kuaiji to guard the temple of Yu, where the local indigenous having the custom of cutting hair without hairpin, tattoo body and wearing straw clothes in the capital. The royal linage of *Yue* lasted more than twenty generations to King Yunchang (允常), who fought with King Helu (阖庐) of the *Wu* state. After Yunchang died his son Goujian was enthroned as the king of the *Yue* state." "During the time of King Wuqiang (无彊), the army of *Yue* attacked the *Qi* (齐) state in the north, and the *Chu* state in the west, competing the supremacy with Central Nation…Then King Weiwang (威王) of *Chu* attacked the *Yue* state, defeated it and killed King Wuqiang, occupied all the lands from Zhejiang in south to Xuzhou (徐州) in north, including the original lands of *Yue*, *Qi* and *Wu* states. Since then the *Yue* state was subjugated, the descendants of the royal family of *Yue* dispersed and lived along the coast to the south of the Yangtze River, subjecting to the *Chu* state" (Sima, Q. 1959: 2099–2112).

2.2.1.2 *Min Yue* and *Eastern Ou*

Eastern Ou (东瓯) or *Eastern Sea* (东海) was active in the south of Zhejiang centered on the Oujiang (瓯江) River basin, and the central part of *Min Yue* (闽越) was located in the *Minjiang* River Basin, during the late East Zhou, Qin, and early Han dynasties. The *Eastern Ou* and *Min Yue* were collectively called *Eastern Yue*, and were respectively the descendants of indigenous *Min* and *Ou* (沤) in Zhou Dynasty.

Their stories are recorded in the chapter of "Biography of *Eastern Yue* Ethnic" (东越列传) of the *Records of the Historian*, "Both the King Wuzhu (无诸) of *Min Yue* state and the King Yao (摇) of the *Eastern Sea* state were the descendants of King Guojian with surname Zou (驺)…After *Qin* conquered the whole China, their states were abolished, but they were respectively conferred as chiefs ruling their original lands under the of Minzhong Prefecture (闽中郡)…In the fifth year of Han Dynasty (202 BC), Wuzhu was restored as the King of *Min Yue* state in the original land of Minzhong Prefecture, establishing its capital in East Ye (东冶)…In the third year of Xiaohui (孝惠) reign (192 BC) of Han Dynasty…Yao was enthroned again as the king of the *Eastern Sea* state for his merits, establishing its capital at Eastern Ou with the regal title of king of *Eastern Ou*." "In the third year of Jianyuan (建元) reign (138 BC) of Han Dynasty, *Eastern Ou* was attacked by *Min Yue* state, therefore it asked the emperor of Han for the permission of emigrating all of its people northward to the region between Yangtze and Huaihe rivers. In the sixth year

of Yuanding (元鼎) reign (111 BC), emperor Wudi (武帝) sent an army to suppress *Eastern Yue* state and perished it in the first year of Yuanfeng (元封) reign (110 BC).” “Emperor Wudi considered that the land of *Eastern Yue* was unsuited for agriculture and with obstructions and uneasy to access, and the indigenous people were ferocious and rebellious and ordered relocating *Eastern Yue* people by force to the region between the Yangtze and Huaihe rivers. The original land of the *Eastern Yue* state was sparsely populated since then” (Sima, Q. 1959: 3609–3614).

2.2.1.3 *Southern Yue*

Southern Yue (*Nan Yue* 南越) was active in the coastal region to the south of Wuling (五岭) or Nanling (southern mountain, 南岭) in the original land of Nanhai Prefecture (南海郡) centered on the Pearl River Delta in Qin Dynasty. The local people of the *Southern Yue* state were the descendants of the indigenous people of *Yue* (粤), *Ou*, *Deng*, *Gui*, *Chanli* and *Jiujun* of pre-Qin period, and the *Southern Yue* state was perished by emperor Wudi of the Han Dynasty.

According to “Biography of *Southern Yue* Ethnic” (南越列传) of the *Records of the Historian*, “King Zhao Tuo (赵佗) of the *Southern Yue* state was from Zhending (真定) of north China. Being senior captain of Qin army, he was ordered to conquer *Yang Yue* region and set up the prefectures of Guilin (桂林郡), Nanhai and Xiangjun (象郡). He relocated the relegated people and offenders from inland areas to these periphrial prefectures, living and mixing with indigenous people of *Yue* for thirteen years…After the perishing of the Qin Dynasty, Zhao Tuo attacked and occupied the lands of Guilin and Xiangjun prefectures, making himself the king of *Southern Yue* state.” “In the eleventh year of Han Dynasty (196 BC), the emperor of the Han conferred ZhaoTuo the king of *Southern Yue* state, making him peacefully interact with others *Bai Yue* indigenous groups in southeast coast such as *Min Yue* state locating to its east and the *Western Ou*, *Luo Yue* locating to its west.” “In the sixth year of Yuanding reign (111 BC), Han Dynasty perished *Southern Yue* state. *Ou Luo* (瓯骆) ethnicity also subjected to the Han sovereignty…the *Southern Yue* was conquered by Han, and nine prefectures were established there” (Sima, Q. 1959: 3593–3604).

2.2.1.4 *Western Ou* and *Luo Yue*

Western Ou (*Xi Ou* 西瓯) and *Lou Yue* (骆越) were active to the west of *Southern Yue*. It is generally believed that *Western Ou* was active in the main stream of Xijiang (西江) and Guijiang (桂江) rivers basin in the north of Guangxi (广西), and *Luo Yue* was active in the land of ancient Jiaozhi between the south of Guangxi and the north of Vietnam. According to “Biography of *Southern Yue* Ethnic” in the *Records of the Historian*, “*Western Ou* and *Lou Yue* also established their own kingdoms”, “*Ou Luo* subjected to the Han Dynasty…After the *Southern Yue* was

conquered by Han and nine prefectures were established there" (Sima, Q. 1959: 3596–3604).

In the section of "Yeyu River" (叶榆河) in volume thirty-seven of *Commentary on the Waterways Classic* (Shuijing Zhu 水经注), and the annotation of Hu Sanxing (胡三省) on the "History Thirty-Five of Han Dynasty" (汉纪三十五) in the *General Reflection for Political Administration* (Zizhi Tongjian 资治通鉴), a paragraph cited from the lost book *Records of Foreign Places in Jiaozhou* (Jiaozhou Waiyu Ji 交州外域记) written in third to fourth century records: "Before Jiaozhi Prefecture of Qin Dynasty was established, the paddy fields of indigenous *Luo* (骆) ethnicity had been opened with water rising and falling following the sea tides. Indigenous people cultivated the fields and made for living thence had the name of *Luo* People. They made the King Anyang (安阳) and nobles of *Luo* state to govern the land…Later captain Zhao Tuo of Qin Dynasty led an expedition attacking King Anyang" (Li, D.Y. et al. 1984: 1156; Sima, G. 1956: 1387).

Since the Five Dynasties, the ancient Vietnam literature in Chinese confused the Chinese characters "Luo (雒, 骆)" with "Powerful (雄)" for their similarity in hand writing. Thus the "Period of King *Luo Yue*" in the history of Jiaozhi had been mistaken as the "Period of Powerful King (Xiong Wang, 雄王"). For example, the ancient Vietnam book *Biography of South Yue* (Nanyue Zhi 南越志) collected in the Chinese *Geographical Record of the World in Taiping Reign* (Taiping Huanyu Ji 太平寰宇记) in the Song Dynasty records that "People called the land there 'Powerful Land' (Xiongdi 雄地), the paddy field there 'Powerful Crop Land (Xiongtian 雄田)', the people there 'Powerful People (Xiongmin雄民)', and its ancient chief the 'Powerful King (Xiongwang 雄王)', king's assistants' marquis the 'Powerful Marquis (Xionghou, 雄侯)', and the land was divided and separately ruled by the 'Powerful Generals (Xiongjiang 雄将)'" (Yue, S. 2007: 3256). Another Vietnam ancient book of fifteenth century, the *Record Book of the Historian of the Great Vietnam* (Dayue Shiji Quansh 大越史记全书) continued the descriptions of the history of "Powerful King" (Xiongwang, 雄王) (Sun, X. 2015: 41). All of these misunderstandings of the early ethnicity of Jiaozhi reflects the real history of *Luo Yue* culture.

2.2.1.5 *Dan Er*

The indigenous *Bai Yue* people on Hainan (海南) Island was called *Dan Er* (儋耳) who wore the big earring pendants, and *Diao Ti* (雕题) people painted tatoo. After the kingdom of *Southern Yue* was perished by emperor Wudi of the Han Dynasty, two prefectures of *Dan Er* and *Zhu Ya* (珠崖) were established, being included in the "Nine Prefectures" in the original land of *Southern Yue*.

The paragraph of "Areas within the South Sea" in the "*Classic of Mountains and Seas*" records: "The indigenous states of *Li Er* (离耳), *Diao Ti* and *Bei Xiong* (北胸) were all in the south of Yushui (郁水) River which flows to the South Sea at Xiang Ling (湘陵)." Guo Pu (郭璞) in the Jing Dynasty noted that "*Li Er* is the same as *Dan Er*, which is located in the sea of Zhu Ya" (Yuan, K. 2014: 237).

The chapter of the "Annals of Geography" of the *History of the Han Dynasty* records: "The boat enters the sea from the south of Xuwen (徐闻) and Hepu (合浦) and gets to a large island extending one thousand *li* respectively in length and width. In the first year of Yuanfeng reign (110 BC) of emperor Wudi, the indigenous state was perished and two prefectures of *Dan Er* and *Zhu Ya* were established" (Ban, G. 1962: 1670).

Some other records state that there were also indigenous *Luo Yue* people living in Hainan Island. The chapter of the "Biography of Jia Juanzhi" (贾捐之传) of the *History of the Han Dynasty* records: "Emperor Wudi conquered *Southern Yue* and established two prefectures of *Dan Er* and *Zhu Ya* on the island in the south sea… The barbarian *Luo Yue* people on the island have peculiar customs such as the father and son bathering together in the river and drinking by nose as the beast" (Ban, G. 1962: 2830, 2834).

2.2.1.6 *Gan Yue* and *Yang Yue*

According to the *Records of the Historian* and *Records of Warring States, Gan Yue* (干越) and *Yang Yue* (扬越) were active in the region between Dongting and Poyang lakes. *Gan Yue* was a branch of *Bai Yue* living in Ganpo (贛鄱) River basin. The chapter of "Encouraging Studying" (劝学篇) of the *Book of Master Xun* (Xu Zi 荀子) records: "The barbarian *Gan Yue* was the descendant of *Yi He* (夷貉). They share the same language but with different behaviors and customs" (Xun, K. et al. 1995: 2). The chapter of "Annals of Economy and Finance (货殖列传)" of the *Records of the Historian* says that "Hefei (合肥) city gathered different products from north and south, being a collecting hub of leatherwear, abalone and wood, mixes with the mores and customs of Minzhong and *Gan Yue*" (Sima, Q. 1959: 3965). The chapter of "States and Prefectures" (州郡部) of Vol. one hundred and seventy in the *Emperial Encyclopaedia in Taiping Reign* (Taiping Yulang 太平御览) cited Wei Zhao's (韦昭) annotation to *History of Han Dynasty*, "*Gan Yue* was another name of today's Yugan (余干) county" (Li, F. et al. 2008: book 894–646). Therefore, some scholars hold that *Gan Yue* was a branch of *Yue* ethnicity centered in Yugan of Jiangxi province (Liu, M.S. 1982).

Yang Yue was active in the eastern part of Hunan and Hubei where ethnics of *Chu* and *Yue* mixed. The chapter "The History of Aristocratic Family of *Chu*" (楚世家) of the *Records of the Historian* records: "King Xiong Qu (熊渠) of *Chu* state was respected and supported by the people in the basin of middle Yangtze and Hangjiang rivers, so he commanded an army to attack *Yong* (庸), *Yang Yue*, and then *Er* (鄂) states" (Sima, Q. 1959: 2043). The chapter of "Records of Qin State" (秦策) of the *Records of Warring States* states: "Wu Qi (吴起)…attacked *Yang Yue* in the south and annexed the states of Chen (陈) and Cai (蔡)" (Liu, Xian 2005: 63). According to these records, some researchers hold that *Yang Yue* was the branch of indigenous *Bai Yue* living on the border of Hunan, Hubei, and Jiangxi provinces (Yang, Q.X. 1989).

In the time of the Warring States, *Gan Yue* and *Yang Yue* states were annexed one after another by *Chu* State, and respectively administrated in Yuzhang (豫章), Guiyang (桂阳) and Danyang (丹阳) prefectures in Qin and Han dynasties.

2.2.1.7 *Dian Yue* and *Yi Yue*

Dian Yue (滇越) and the adjacent *Yi Yue* (夷越), *Yue Xi* (越巂), *Teng Yue* (腾越) were the branches of *Bai Yue* locating in the southwest plateau in the border of Yunnan (云南), Guizhou (贵州) and Sichuan (四川), and were annexed into the Yuexi Prefecture and so on after being subjugated by emperor Wudi of the Han Dynasty.

According to "Biography of Dawan Regions" (大宛列传) of the *Records of the Historian*, "At about one thousand *li* to the west of *Kunming* (昆明) state, there is the *Dian Yue* state being famous as riding elephant, where the merchants from Sichuan come to trade with them" (Sima, Q. 1959: 3844).

The chapter of the "Biography of Zhuge Liang" (诸葛亮传) in the *History of the Three Kingdoms)* (Sanguo Zhi三国志) records: "Generally the king should possess Jing (荆) and Yi (益) prefectures, defend the country by the mountainous environment, pacify various tribes of *Rong* to the west and *Yi Yue* to the south" (Chen, S. et al. 2006: 544).

The "Biography of Prefecture in Nanzhong" (南中志) of the *Records of the Huayang States* (Huanyang Guozhi 华阳国志) records: "Nanzhong region was the original land of ancient *Yi* and *Yue* indigenous people, where dozen of states of *Dianpu* (滇濮), *Gouding* (句町), *Yelang* (夜郎), *Yeyu*, *Tongshi* (桐师), *Xitang* (巂唐) are located." "Yongchang (永昌) region is the original land of barbarians with customs of chest piercing, *Dan Er* with big earring pendants, *Minyue Pu* (闽越濮), and *Ju Liao* (鸠僚), all making themselves kings" (Chang, Q. et al. 2007: 144, 186–188).

According to the "Biography of the Southwest Barbarian *Yi*" (西南夷列传) of the *Records of the Historian*, "After perishing the *Southern Yue*…Yuexi Prefecture was established in Qiongdu (邛都), Shenli (沈犁) Prefecture in Zuodu (筰都), Wenshan (汶山) Prefecture in Ran Mang (冉駹), and Wudu (武都) Prefecture in Guanghan (广汉). The emperor dispatched Wang Rangyu (王然于) to persuade the king of indigenous *Dian* (滇) to submit" (Sima, Q. 1959: 3631). The Annotation of Zhang Shoujie (张守节) on the "Biography of Dawan Regions" in the *Records of the Historian* states that "*Dian Yue* and *Yue Xi* are commonly called *Yue*. If distinguish them more definitely they have the separate names of *Xi* (巂) and *Dian*, and so on" (Sima, Q. 1959: 3845).

However, the identification and recognization of *Pu* (濮) and *Yue* have always been a controversial issue in the study of the ancient history of south China. A number of scholars argued that *Pu* and *Yue* were actually the same ethnic group in different stages of cultural development. They realized that the early Chinese literatures had more records of "*Pu*" than "*Yue*", and that the indigenous people of *Pu*, *Yi*, *Man*, *Liao*, *Rang* in the regions of *Chu*, *Ba* (巴), *Shu* (蜀), *Dian* and *Yelang* during the pre-Qin period, all belonged to the category of *Bai Yue* culture (You, Z. 1985; Jiang, Y.L.

1980). Most of the other scholars believed that *Pu* and *Yue* were obviously different. *Pu Liao* (濮僚) was an ethnic group in the southwest region, while *Bai Yue* in the southeast. After the *Han* and *Jin* dynasties on, the indigenous people in the southwest were often called "*Liao*" and "*Yi Liao*" (夷僚), and all of them were the descendants of *Bai Pu* (Meng, W.T. 1983; Meng, M. 1989; Jiang, B.Z. 1985).

In short, *Bai Yue* was an important "Barbarian" *Man* and *Yi* ethnic group which had been "encountered" by *Huaxia* and *Han* nationalities in their southeastern direction in Eastern Zhou, Qin, and Han dynasties. Judging from the changes of the appellations of the native ethnic groups distinguished in the Chinese historical records, from various *Man* including the "*Wu*", "*Yue*" (越), "*Yue*" (粵), "*Ou*", "*Min*" in the Shang and Zhou dynasties, to "*Bai Yue*" including the "*Yu Yue*", "*Eastern Ou*", "*Min Yue*", "*Eastern Yue*", "*Southern Yue*", "*Western Ou*", "*Luo Yue*", "*Yang Yue*", "*Gan Yue*"and so on, we inferred that the spread of *Wu* and Y*ue* ethnicities and their cultural assimilation with the aboriginal "Seven Tribes of *Min*" and "Eight Tribes of *Man*" since the Warring States period, have been the key reason for the formation of *Bai Yue,* the various *Yue* in the southeast of China. During the Eastern Zhou Dynasty, *Wu* and *Yue*'s participation in the wars of competing for the controlling the Central Plains led to the more massive migration of their people to the southeast coasts of China, just as the statement of the *Records of the Historian*, "the descendants of the royal family of *Yue* dispersed and lived along the coast to the south of the Yangtze River" (Sima, Q. 1959: 2112). The southward spread of *Wu* and *Yue* cultures and the formation of the mixed *Bai Yue* ethnicities can also be demonstrated in archaeological cultural change of the pre-Qin period, which was typically reflected in the dissemination and assimilation of the cultural connotations of the Mounded Tomb (土墩墓) culture of *Wu* and *Yue* in southeast coast of mainland China (Wu, C.M. et al. 2001).

2.2.2 *The Sinicization of Bai Yue and the Recurrence of Mountainous Yue*

The Sinicization of *Bai Yue* was a continuation of the process of the Huaxianization indigenous *Miao* and *Man* in the southeast of China during the Shang and Zhou dynasties, which directly inherited the geopolitical situation of the unifying of *Chu* state in the south of China and *Bai Yue'*s subjection and assimilation to *Chu* since the late Eastern Zhou Dynasty. The administrative and military unifying of Qin and Han dynasties accelerated this process of Sinicization of *Bai Yue* indigenous people.

2.2.2.1 *Bai Yue* Being Subjected and Paying Tribute to the *Chu* State

The cultural assimilation of *Bai Yue* with *Chu* in pre-Qin period had been the prelude of its Sinicization, which is recorded in the "History of Aristocratic Family

of Goujian, the King of *Yue*" in the *Records of the Historian*, as quoted previously, "King Weiwang of *Chu* attacked the *Yue* state…Since then the *Yue* state was subjugated, the descendants of royal family of *Yue* dispersed and lived along the coast to the south of the Yangtze River, subjecting to the *Chu* state" (Sima, Q. 1959: 2112).

The annotation of Zhang Shoujie (张守节) on the chapter of "Annals of Economy and Finance" of the *Records of the Historian* states: "*Yue* state perished *Wu* state and annexed its land to the north of Jianghuai (江淮) plain. *Chu* perished *Yue* and then annexed the original lands of both *Wu* and *Yue*, therefore the broad regions of south China are altogether called *Chu Yue* (楚越) region" (Sima, Q. 1959: 3964).

The chapter of "Biography of Southern Barbarians *Man* and *Southwestern Yi*" (南蛮西南夷列传) of the *History of Late Han Dynasty* (Houhan Shu 后汉书) states: "*Chu* state dominated hegemony in southern China with the *Yue*'s surrender and tribute" (Fan, Y. 1965: 2835).

The *Chu* people had very close relation with the *Huaxia* nationality of Central Nation and was formally conferred by the Zhou Dynasty. The historical classics, social rites, and ideas of *Huaxia* culture were systematically spread and accepted in the state of *Chu* in early Chinese civilization, and *Chu* culture became an important source of the *Han* nationality. Hence the *Ch*u and *Han* had come down in one continuous and unified cultural series (Li, Z.H. 1989: 70). Therefore, the statement of "*Chu* state dominated hegemony in southern China with the *Yue*'s surrender and tribute" essentially reflects an important reason of the sinicization of the indigenous *Bai Yue* in the southeast of China.

2.2.2.2 Han's Unification and Administration on Original Land of *Bai Yue*

The unification of politics and military of Qin and Han dynasties was the social basis for the large-scale cultural dissemination and ethnic migration of Huaxia people outward from Center to peripheral regions. With the progress of military unification of Qin Dynasty and the conquest on the *Southern Yue* and *Eastern Yue* of Han Dynasty, the administrative system of prefecture and county was carried out one after another in the southeast native regions, resulting the climax of the sinicization of indigenous societies.

Qin Dynasty annexed the territories of all states "under the heaven" into its domain and set up prefectures in Kuaiji, Minzhong, Guilin, Nanhai, Xiangjun, and so on in the original land of *Bai Yue*, which was the beginning of administrative unification of this indigenous area in the "Southeastern Direction" of Huaxia into the territory of Central Nation.

The "Biography of the First Emperor of Qin Dynasty" (秦始皇本纪) of the *Records of the Historian* states: "In the second year (222 BC) of the King Zheng (政) of Qin Dynasty…general Wang Jian (王翦) conquered the region of Jingzhou and south of Yangtze River, subjected head of *Yue*, and established the Kuaiji Prefecture" (Sima, Q. 1959: 302).

According to "Biography of *Eastern Yue* Ethnic" in the *Records of the Historian*, "Both the King Wuzhu of *Min Yue* state and the King Yao of the *Eastern Sea* state were the descendants of King Guojiang…After Qin conquered the whole China, their states were abolished, but they were respectively conferred as chiefs ruling their original lands under the Minzhong Prefecture" (Sima, Q. 1959: 3609). Though some historians argued that the Minzhong Prefecture was only nominally established, it actually was the first step of the administrative ruling of Central Nation on the original land of indigenous *Min Yue*.

The "Biography of the First Emperor of Qin Dynasty" of the *Records of the Historian* records the same system of the Qin administration in the original land of *Southern Yue*: "Dispatching escaped criminals and businessmen…to attack the land of Lulian (陆梁), and established the prefectures of Guilin, Xiangjun and Nanhai to relocate the former soldiers from inland and north China…cultivate the original land of *Southern Yue*" (Sima, Q. 1959: 323).

After emperor Wudi of the Han Dynasty destroyed the native states of the *Eastern Yue* and *Southern Yue* and suppressed the southwest "barbarians" *Yi*, re-governed them under the system of prefecture and county in the unified empire.

The "Biographies of Southwest Barbarian *Yi*, Two *Yue* and Korea" (西南夷两粤朝鲜传) in the *History of the Han Dynasty* records: "After the conquering the *Southern Yue*, (Han Dynasty) divided its land to be the nine prefectures of Dan Er, Zhu Ya, Nanhai, Cangwu, YuLin (郁林), Hepu, Jiaozhi, Jiuzhen (九真), and Rinan (日南)" (Ban, G. 1962: 3859).

The "Annals of Prefectures" (州郡志) of the *History of Song of South Dynasties* (Songshu 宋书) recorded: "After the fugitives of ancient *Min Yue* reappeared later in Late of Han Dynasty, Yexian (冶县) county was established to rule them" (Shen, Yue 1997: 1092).

According to the "Biography of the Southwest Barbarian *Yi*" in the *Records of the Historian* as quoted previously, "After perishing the *Southern Yue*…the Yuexi Prefecture was established in Qiongdu, Shenli Prefecture in Zuodu, Wenshan Prefecture in Ran Mang, and Wudu Prefecture in Guanghan" (Sima, Q. 1959: 3631).

2.2.2.3 The Immigrant of *Han* People Southward to the Original Land of *Yue* and the Emigration of Indigenous *Yue* Northward to Hinterland of the Empire

Under the administrative system of prefecture and county in the unified imperial territory, the population migration and ethnic mixture in the original land of ancient *Bai Yue* promoted the assimilation of *Han* and *Yue* cultures.

On the one hand, the large number of the immigration of the *Han* people from the northern interior southward was the main reason for the population growth of the *Han* nationality in the original land of the *Bai Yue* and the rapid sinicization of the indigenous *Bai Yue* people. The settlement of the imperial soldiers was the main source of immigrated *Han* population, hundreds of thousands of soldiers from the North and Central Plains settled down in the regions after the end of the war of *Han*

suppressing *Yue*, consolidating the early administrative system of prefecture and county in southeast coast of China. The family of the King Zhaotuo of the *Southern Yue* state was just the soldier immigration of an expedition army of the *Han* nationality from inland.

According to the "Biography of the Huainan and Hengshan Regions" (淮南衡山列传) of the *Records of the Historian*, "The emperor ordered captain Zhao Tou to cross Wuling mountains southward to attack *Bai Yue*… Qin emperor promised fifteen thousands of unmarried women or widows to be the logistics service for the soldiers" (Sima, Q. 1959: 3751).

The "Biographies of Southwest Barbarian *Yi*, Two *Yues* and Korea" of the *History of the Han Dynasty* states that the King Zhaotou of *Southern Yue* state… established the prefectures of Guilin, Nanhai, and Xiangjun to relocate the criminals from the north (Ban, G. 1962: 3847).

The "Biography of *Southern Yue* Ethnic" of the *Records of the Historian* states: "In the fifth year of Yuanding reign (112 BC), emperor Wudi sent a navy of one hundred thousand soldiers to attack *Southern Yue*…In the sixth year of Yuanding reign (111 BC), the navy general commanded crack soldiers to march on…together with tens of thousands of navy solider and thousands of criminals to attack *Southern Yue*" (Sima, Q. 1959: 3601, 3604).

The chapter of the "Record of Food and Commodity" (食货志) of the *History of Han Dynasty* records: "The emperor granted a general amnesty for the criminals all over the country, then sent a navy with two hundred thousand soldiers southward to attack *Southern Yue*" (Ban, G. 1962: 1173).

After emperor Wudi conquered the southeast, the Han Dynasty continued to suppress the regions of Two *Yue* with force. The chapter of "Biography of Southern Barbarians *Man* and *Southwestern Yi*" of the *History of the Later Han Dynasty* records: "In the eighteenth year of emperor Guanwu (光武) (AD 42), general Ma Yuan (马援) and Duan Zhi (段志) commanded ten thousand of soldiers from Changsha (长沙), Guiyang (桂阳), Lingling and Cangwu to attack the original land of Two *Yue*." The chapter of the "Biography of the Emperor Xiao'an" (孝安帝纪) of the same book records: "In the third year of Yuanchu (元初) reign (AD 116), the barbarian *Man* and *Yi* tribes in Cangwu, Yulin and Hepu rebelled, then the emperor sent an army to suppress them" (Fan, Y. 1965: 225, 2836–2837).

More over, the original land of *Bai Yue* in the southeast were also the places to which the criminals from the inland of Han Dynasty were exiled, being recorded respectively in the biographies of both the *History of the Han Dynasty* and the *History of the Later Han Dynasty*. In the late Western Han Dynasty alone, there were as many as eleven batches of criminals were exiled from capital Chang'an (长安) to Hepu in Lingnan (岭南), and there was an unabated increase in the Eastern Han Dynasty when the criminals were exiled to the regions of Jiuzhen, Hepu, and Rinan in Lingnan. And, the rebellions of the imperial clansmen in Guangling (广陵), *Chu*, Huaiyang (淮阳) and Jinan (济南) resulted in the exiling of "dozens of thousands" criminals during the period of Yongping (永平) reign of Han Dynasty (Ge, J.X. 1997: 118, 266). The "Biography of Southern Barbarians *Man* and Southwestern *Yi*" of the *History of the Later Han Dynasty* records that "Many

criminals of Central Nation were exiled there and mixed with the local inhabitants who were enlightened and civilized gradually for the cultural assimilation" (Fan, Y. 1965: 2836).

For the reasons of these immigrations from interior to the southeast coast, the population in the original land of Two *Yue* rapidly grew up during the Han Dynasty. According to the "Annals of Geography" of the *History of the Han Dynasty*, the five prefectures of Nahai, Cangwu, Hepu, Jiuzhen, Rinan in Lingnan had a population of more than half a million during the Western Han dynasty (Ban, G. 1962: 1628–1630). According to "Annals of Prefectures and States" (郡国志) of the *History of the Later Han Dynasty*, the population in the four prefectures in Lingnan during Eastern Han Dynasty reached more than eight hundred thousand (Fan, Y. 1965: 3530–3532). The original land of *Eastern Yue* was sparsely populated after the extinction of the *Min Yue* state and establishment of Yexian county in the late Han Dynasty. According to the "Annals of Geography" of the *History of the Jin Dynasty* (Jinshu晋书), during the Three Kingdoms period, the Yexian county extended to be the Jian'an Prefecture (建安郡) including seven counties with 4,300 families. One of the important reasons for these growths of the population there was the immigration of large number of *Han* people coming from the Central Plains and interior regions.

On the other hand, a considerable number of *Yue* people were forced to emigrate northward and relocated to the interior regions in Qin and Han dynasties, which accelerated the assimilation and sinicization of these indigenous cultures. According to the "Biography of the *Eastern Yue* Ethnic" of the *Records of the Historian*, "In the third year of Jianyuan reign (138 BC) of Han Dynasty, *Eastern Ou*… migrating all of its the people northward to the region between the Yangtze and Huaihe rivers." "In the first year of Yuanfeng reign (110 BC) the emperor Wudi…ordered relocating *Eastern Yue* people by force to the region between the Yangtzer and the Huaihe rivers. The original land of the *Eastern Yue* was sparsely populated since then" (Sima, Q. 1959: 3610, 3614).

In a word, with the ruling of administrative system of the prefecture and county in the southeast region during Qin and Han dynasties, as well as the large-scale migration and culture assimilation of the *Han* and *Yue* ethnic groups, the original land of the indigenous *Bai Yue* gradually was populated mainly by the of *Han* nationality as new generation of ethnicities in south of China. This new stage of *Han* nationality included both the *Han* people immigrated to the south and the sinicized indigenous *Yue* people of southeast region, and the mixed and assimilated groups of them. They composed a new segment of the unified nationality through "Assimilation and Integration of Pluralistic Cultures" of ancient China (Wu, C.M. 2004).

2.2.2.4 The Recurrence of *Mountainous Yue* and the Miscellaneous *Southern Man*

The sinicization of *Bai Yue* ethnicities since the Qin and Han dynasties did not mean the complete "extinction" of these indigenous cultures in the southeast. There were not only the cultural elements of indigenous *Yue* deposited in the *Han*

nationality in south of China for the ethnical mixture and assimilation of *Han* and *Yue*, but also the recurrence of the descendants of *Yue* whose ancestors escaped to the mountainous areas to resist the northward relocation of Han Dynasty in the wars of suppressing *Yue*. These recurred *Yue* people were slandered as "Mountainous Thief " (山贼), "*Mountainous Yue*", "*Yi Yue*" and so on, appearred frequently with scattered groups and lived in the mountainous areas in the southeast since the late Eastern Han Dynasty (Ye, G.Q. et al. 1982).

The "Annals of Prefectures" of the *History of Song of South Dynasties* records: "During the time of emperor Wudi, the *Eastern Yue* restored its native state but was perished soon. (Han government) emigrated its people northward to the regions in the basins of Yangzte and Huaihe rivers by force, but many of them escaped and hid in the mountainous areas. After these fugitives of ancient *Yue* recurred again in late of Han Dynasty, Yexian county was established there to rule them" (Shen, Yue 1997: 1092). The annotation of Hu Sanxing on the "History Forty-Eight of Han Dynasty" (汉纪四十八) in *General Reflection for Political Administration* states: "The *Mountainous Yue* originally was the indigenous *Yue* people. They lived in the dangerous mountains that were hard to access and refused to pay taxes to the government, so they were called *Mountainous Yue*" (Sima, G. 1956: 1817).

A few of historical facts of "*Mountainous Yue*" or "Mountainous Thief" can be read from the *History of the Later Han Dynasty*. The "Biography of Emperor *Xiaoling*" (孝灵帝纪) records: "In the second year of Jianning (建宁) reign (AD 169), the mountainous thieves in Danyang Prefecture (丹阳郡) attacked the local office." The "Biography of Zanghong" (臧洪传) records: "In the second year of Xiping (熹平) reign (AD 172), the mountainous thieves of Kuaiji Prefecture rebelled in Juzhang (句章) county, proclaiming himself the great general and his father the king of *Yue*. His troops with dozens of thousand soldier broke the county town" (Fan, Y. 1965: 330, 1884).

Much more stories about the "*Mountainous Yue*" or "Mountainous Thief" were recorded in the *History of the Three Kingdoms*. The "Biography of Sunquan" (孙权传) says: "Even now the *Yang Yue* and other *Man Yi* (蛮夷) were still not subjected and the domestic troubles were not solved." "In the fifth year of Huangwu (黄武) reign (AD 226) divided ten rebellious counties in three prefectures to establish the new prefecture of Dong'an (东安) commanded by the chief Quancong (全琮) to suppress *Mountainous Yue*." The "Biography of Xujing" (许靖传) says:"*Yi Yue* in the county of Cangwu and others rebelled and overthrew the prefecture office, blocked the local traffic transportation." The "Biography of Zhuzhi" (朱治传) says: "In the seventh year of Jian'an (建安) reign (AD 202) Sun Quan made Zhu Zhi the prefecture chief of Wu…ordered him to suppress *Yi Yue* and quell the southeast." The "Biography of Chenbiao" (陈表传) states: "In the third year of Jiahe (嘉禾) reign (AD 234), Zhuge Ke (诸葛恪) was conferred as the chief of Danyang Prefecture to suppress the *Mountainous Yue*." The "Biography of Lvmeng" (吕蒙传) records: "When Lv Meng was the general under prince Sun Ce, he led the army several times to attack *Mountainous Yue*." Similar other stories of quelling and suppressing the *Mountainous Yue* in southeast China were also respectively recorded in the

biographies of Liu Hua (刘晔), Jian Qing (蒋钦), Lu Xun (陆逊), He Qi (贺齐), etc. in the same book *History of the Three Kingdoms* (Chen, S. et al. 2006: 575, 662–672, 754, 762, 764, 772, 795, 814).

Since Tang Dynasty on, through further cultural integration and assimilation, the "*Mountainous Yue*" developed into a series of "barbarian" ethnics of "*Xi Dong*" (溪峒), "*Dong Liao*" (峒僚) and so on, and finally evolved into the modern minority cultures of *She* (畲), *Yao* (瑶), *Li* (黎) in the southeast, and *Dai* (傣), *Buyi* (布依), *Dong* (侗), *Shui* (水), *Zhuang* (壮) of *Zhuan Dong* (壮侗) or *Zhong Dai* (壮傣) language family in the southwest of China.

The "Biography of Southern Barbarian *Man*" of the *History of Sui Dynasty* records: "The southern barbarians *Man* with diverse ethnicities live together with *Huaxia* people in south of China, such as the tribes of *Dan*, *Rang*, *Li*, *Liao* and *Yi* (狪) who are without a chieftain. They live in the caverns of mountain, and their ancestors were the so-called *Bai Yu*e ethnicities" (Wei, Z. et al. 1982: 1831).

In an important paper on the *She* ethnic culture of Song Dynasty, the *Instructions to She in Zhangzhou* (Zhangzhou Yushe 漳州谕畲) records: "The government always stationed troops near the mountainous areas where *Xi Don*g lived. These places usually were in the thick forests and very difficult to access. The household registered residences of *Han* nationality there mixed with *Mountainous Yue*. The old defensive strategy of separating the *Mountainous Yue* from *Han* was almost forgotten. The tribes of *Xi Dong* vary with *Man*, *She*, *Li* and *Dan*, and *Sh*e in Zhangzhou" (Xie, C.G. 2006).

The section of "Others Record" (杂录) in the volume twenty-six of *Chronicle of Nanhai County* (Nanhai Xianzhi 南海县志) of Qing Dynasty states: "The people of *Xi Dong* in the mountains are called *Dong Liao*, that is the cavern barbarian, the ancient *Mountainous Yue*" (Gui, D. 1973: 1965).

In summary, the indigenous "Territory of *Bai Yue*" in the southeast of China experienced drastic cultural changes in the process of the "Assimilation and Integration of Pluralistic Cultures", along with the geopolitical order of "Central Nation-Four Directions" as well as the pattern of ethnic interaction between Center and Periphery during the late of Eastern Zhou, Qin, and Han dynasties. On the basis of the initial Huaxianization of *Miao* and *Man*, the successively enforced military and political unification, the administration of prefecture and country, the population migration and the ethnic assimilation in Zhou, Chu, Qin, and Han dynasties, the *Bai Yue* indigenous people comprehensively sinicized. Though a small amount of *Mountainous Yue*, *Man*, *Liao* as the descendants of ancient *Bai Yu*e continued to live in the southeast mountainous areas mixing with the *Han* nationality, the new generation of *Han* nationality formed and mixted by the assimilation of the immigrant *Han* and indigenous *Yue* became the main entity of ethnic cultures in south of China from the Han and Tang to Ming and Qing dynasties.

2.3 The *Island Yi* and *Maritime Fan* Over the "Four Seas" Since Han Dynasty

After the Han Dynasty, on the basis of the sinicization of *Bai Yue* and formation of new generation of *Han* nationality in southeastern China, along the extension of the traditional and differentiated geopolitical order of "Central Nation-Four Directions-Four Seas", the cultural interaction between *Han* nationality and "barbarian" ethnicities in the "Southeastern Direction" extended further to the "Maritime Region of Southeastern Asia". Various maritime "barbarians" of the *Maritime Fan* and *Island Yi* over the "Four Seas" between the East Asian continent and the northwest Pacific, gradually entered the humanistic vision of *Han* nationality, reflecting the new stage of cultural interaction between the mainland Chinese and maritime indigene. In Chinese historical records, in addition to the specific chapters on these maritime cultures in official history of each dynasties, such as "Annals of Geography", "Annals of Prefectures and States", "Biography of Barbarians" and "Annals of Foreign States", there were more oversea ethnographical monographs focusing on these indigenous *Maritime Fan* and *Island Yi*, such as *Biography of the Environment and Product of the Linhai Prefecture* (Linhai Shuitu Yiwuzhi 临海水土异物志, Shen, Yin 1998), *Biography of the Foreign Nations* (Zhufan Zhi 诸蕃志, Zhao, R.S. et al. 2000), *Biography of the Foreign Island Yi* (Daoyi Zhilue 岛夷志略, Wang, D.Y. 1981), *General Survey on the East and West Oceans* (Dongxiyang Kao 东西洋考, Zhang, Xie 1981), *Records of Countries in the West Oceans* (Xiyang Fanguo Zhi 西洋番国志, Gong, Z. 1961) and so on. These land-sea cultural interactions and assimilition took place not only along the coast of mainland south China and Indochina Peninsula, but also on the islands of Southeast Asian Archipelago, coinciding with the two wings of the traditional sea routes of southward navigations of ancient China respectively along the West Ocean (西洋) and South Ocean (南洋), and the East Ocean (东洋), presenting us distinct memories of maritime cultural interaction in Asia–Pacific region since Han Dynasty (Fig. 2.2).

2.3.1 Southern Yi, Southern Man and Maritime Fan Along the Coast of South and West Oceans

The coasts of the Indochina Peninsula and the adjacent islands in the west part of South China Sea are far off the region "Beyond the Nanling Mountain", where, originally were the territory of barbarian *Luo Yue* during Zhou, Qin, and Han dynasties, and the three southern prefectures of the "Nine Prefectures" of *Southern Yue* such as Jiaozhi, Jiuzhen, Rinan established in the Han Dynasty. As the extension of the cultural geography of the "Miscellaneous Southern Barbarian *Man*" after *Bai Yue* indigenous states were suppressed, this "South of the South" region remained its "barbarianous" cultures in a prejudiced vision of Central Nation, such as the "*Diao Ti*

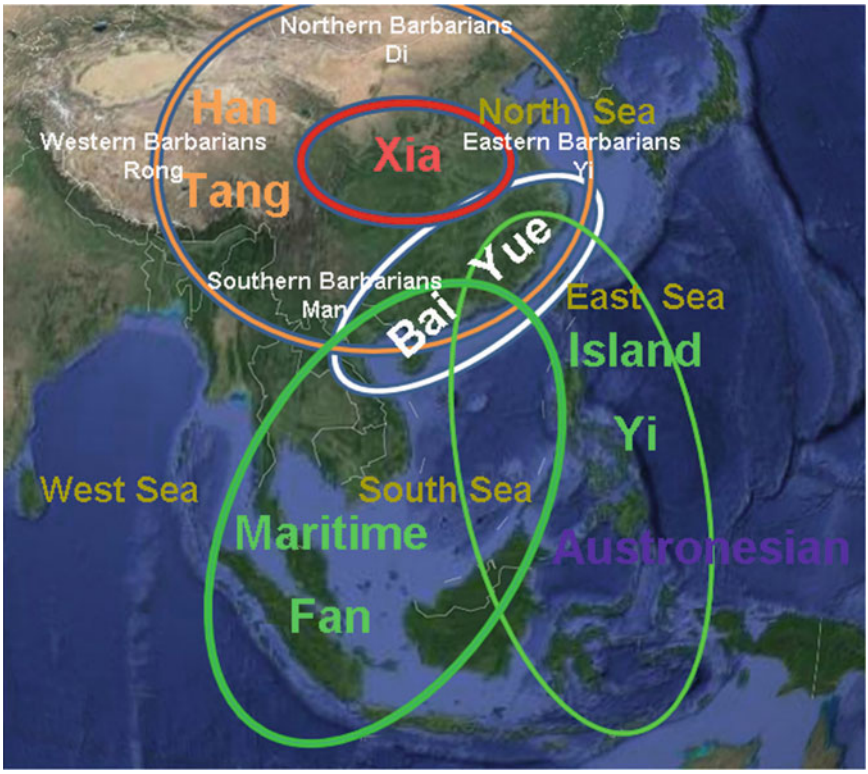

Fig. 2.2 The distribution of Southeastern "barbarians" *Bai Yue*, *Island Yi* and *Maritime Fan* in Chinese historical records

Tatoo and men and women taking bath together in the same river" described in the "Mornachy" (王制) of the *Record of Rites* (Li Ji 礼记) and chapter of "Biography of Southern Barbarians *Man* and *Southwestern Yi* (南蛮西南夷列传)" of the *History of the Later Han Dynasty* (Ruan, Y. 2009: 2896; Fan, Y. 1965: 2834). From Han to Tang dynasties and on, the Central Nation of ancient China continuously enforced military and administrative measures on the original land of this "*Luo Yue* in Jiaozhi" (交趾骆越), the "South to Jiaozhou" (交州之南), and further to the "Remote Tributors in Southern Barbarian Regions" (南荒朝贡者), presenting step by step the scene of the historical process of southward extension of *Huaxia*'s assimilation and *Han*'s suppression of *Bai Yue* along its "Southeastern Direction".

This *Yi* and *Man* region in this "South of the South" of *Huaxia* vision, coincided with the traditional "South Ocean" region of ancient Chinese navigation, constituting the same route system with the "West Ocean" between the Strait of Malacca and the Indian Ocean. The "Foreign Barbarian *Fan* States" (海外诸番国) in the *Interlocution on the History of South Coast of China* (Lingwai Daida 岭外代答) of the Song Dynasty distinguished the "East Ocean" from the "South Ocean", "in the

south of the Sumatra there is the sea of the South Ocean" (Zhou, Q.F. 1996: 37). The "Barbarian *Fan* States" (诸番国) in the *Biography of the South China Sea* (Nanhai Zhi 南海志) of Yuan Dynasty records that "both the Tambralinga (单马令) state on the Malay Peninsula of Thailand and Samboja (三佛齐) island state are in charge of managing the small West Ocean" (Chen, D.Z. 1991: 46). The *General Survey on the East and West Oceans* of Ming Dynasty records that "Brunei (文莱 northeast of Kalimantan) is Borneo, where is located in the end of the East Ocean and the beginning of the West Ocean" (Zhang, Xie 1981: 102). The continuous development and evolution of ancient Chinese navigation along the coastal sea route of "South China Sea Route via Xuwen and Hepu" (徐闻合浦南海道) during the Qin and Han dynasties, and the offshore sea route of "Guangzhou Sea Route to Foreign States" (广州通海夷道) during the Tang and Song dynasties, promoted the interaction and assimilation between *Han* people in south of China and foreign maritime *Fan* along this coastal region of the South and West Ocean.

2.3.1.1 The Sinicizated Jiaozhi and the South to Jiaozhou Along Coast of the "South China Sea Route via Xuwen and Hepu"

The time from Han, Jin dynasties to Six Dynasties was an important period for the extension of the Chinese military and administrative systems of prefecture and county and cultural contact of *Han* nationality to the "South of the South" after the ancient "*Luo Yue* in Jiaozhi" was annexed into the three prefectures of Jiaozhi, Jiuzhen, Rinan as the southern part of the "Nine Prefectures" of *Southern Yue*. However, the region in these three prefectures was still considered to be the barbarian *Man* and *Yi* as described in the *Record of Rites* (Ruan, Y. 2009: 2896). The enforcement of Chinese military and political measures, as well as the population emigration and ethnic mixing, were the main ways promoting the assimilation of these *Southern Man* and *Southern Yi* with the *Han* nationality of south China.

The "Biographies of Southwest Barbarian *Yi*, Two *Yues* and Korea" in the *History of the Han Dynasty* records: "After conquering the *Southern Yue*, (Han Dynasty) divided its land to be the nine prefectures of Dan Er, Zhu Ya, Nanhai, Cangwu, Yulin, Hepu, Jiaozhi, Jiuzhen, and Rinan" (Ban, G. 1962: 3859).

The chapter of "Biography of Southern Barbarians *Man* and *Southwestern Yi*" of the *History of the Later Han Dynasty* records: "The customs there is that men and women taking bath together in the same river, originally being called Jiaozhi…the *Wuhu* (乌浒) people now are their descendants. In the south of Jiaozhi there is the Yueshang (越裳) state." "Though the land of Jiaozhi has been governed by administrative system of prefecture and county of China, the indigenous people there still remained in uncivilized state with different languages that are difficult to be understood, none respect for seniority as wild beast…Then the Chinese emperor exiled the inland criminals and demotion southward to relocate there and live together with the indigenous inhabitants who therefore were enlightened gradually" (Fan, Y. 1965: 2834–2836).

In this period, "the south to Jiaozhi (or Jiaozhou)" was still far beyond the influence of the *Huaxia* and *Han* nationality of China. The "Biographies of Barbarian *Yi* and *Man*" (夷蛮列传) of *History of Song of South Dynasties* records: "*Southern Yi* and *Southwestern Yi* mostly live in the south and southwest to Jiaozhou, on the big islands of the ocean…They can only be reached by sailing boats, but the route is not well known" (Shen, Yue 1997: 2377). Both the *History of Qi of South Dynasties* (Nanqi Shu 南齐书) and the *History of Liang of South Dynasties* (Liangshu 梁书) records the exotic humanity of the Linyi (林邑 ancient Champa, now south Vietnam) state and Funan (扶南, Nokor Phnom, now Cambodia and Thailand) state in this "South of the South" region (Xiao, Z.X. 1972: 1012–1018; Yao, S.L. 1973: 784–793).

The expansion of the military, administration and *Han* cultural assimilation of the Central Nation to this coastal region in "South of the South" from the "*Luo Yue* in Jiaozhi" to the "South to Jiaozhou" during the Han, Jin dynasties, and Six Dynasties generally accompanied with the early flourishing of the navigation in the South and West oceans along the "South China Sea Route via Xuwen and Hepu". The "Annals of Geography" of the *History of the Han Dynasty* records this sea route successively sailing through the Xuwen and Hepu, Zhangsai (障塞) of Rinan Prefecture (now Quan Nhat Nam of Vietnam), Ruhmi (邑卢没, now Myanmar) state, Chenli (谌离, now Irrawaddy river, Myanmar) state, Fugandulu (夫甘都卢, now middle reaches of the Irrawaddy river, Myanmar) state, Duyuan (都元, now Sumatra) state, Huangzhi (黄支, now east coast of India) state, Yichengbu (已程不, now Sri Lanka) state (Ban, G. 1962: 1671). This sea route as the near shore navigation, basically along the coast of Beibu Gulf (Tonkin Gulf) and the Indochina Peninsula, reaching as far as the Indian Peninsula on the early Maritime Silk Road, promoted the ethnical and maritime cultural interaction between the south coast of China and the "barbarian" *Man* and *Yi* in the "South of the South" beyond the Central Nation.

2.3.1.2 The Four Prefectures of Annan and the Remote Tributors in Southern Barbarian Regions Along Coast of the "Guangzhou Sea Route to Foreign States"

During the Sui and Tang dynasties, the ancient Jiaozhi in the northern coast of the Indochina peninsula was annexed into the "Four Prefectures of Annan" (安南四郡) of Central Nation. The "Annals of Geography" of the *New History of the Tang Dynasty* (Xin Tangshu 新唐书) records: "The Lingnan Dao (岭南道, Dao or road was an administrative division of Tang dynasty) is located to the southern border of the ancient Yangzhou state…of which the Annan Zhongduhufu (中都护府) military office was established in the original land of old Jiaozhi Prefecture". It was divided into four districts being respectively established the "Yushan (玉山) Prefecture in Luzhou (陆州) state", "Chenghua (承化) Prefecture in Fengzhou (峰州) state", "Jiuzhen Prefecture in Aizhou (爱州) state", and "Rinan Prefecture in Huanzhou (驩州) state" (Ouyang, X. et al. 1982: 1095, 1111–1114).

However, the "South to Jiaozhou" was still prejudicially considered as the region of *Southern Man* without regular tributes paid to Central Nation. According to the "Biography of Southern Barbarian *Man*" in the *History of Sui Dynasty*, "There were originally about ten tributors states in the remote southern barbarian regions, but most of them were changed and oblivious and only four of them were still recorded" (Wei, Z. et al., 1982: 1831). Among them, Linyi, Kmir (真腊, now Cambodia), Songkhla (赤土, now Malay Peninsula), Valis (婆利, now Kalimantan or Bali) were located in the remoter oceanic region in the "South of the South" (Wei, Z. et al. 1982: 1833, 1834, 1838). The "Biography of Southern Barbarian *Man*" of the *New History of Tang Dynasty* also records the cultures of Huanwang (环王, ancient Champa and Linyi, now South Vietnam), Xituyi (西屠夷, now South Vietnam), Funan, Panpan (盘盘, now Thailand's Malay Peninsula) and Keling (诃陵, now Java) (Ouyang, X. et al. 1982: 6300, 6302).

From the "Four Prefectures of Annan" in the original land of "ancient Jiaozhi" to the more than ten tributors states in the further "remote southern barbarian regions", the cultural interaction of *Han* nationality differentially with these "barbarian" people were also accompanied with development of the maritime trade through "Guangzhou Sea Route to Foreign States" in the Sui and Tang dynasties. This sea route across the South Ocean described by Jia Dan (贾耽) was cited in the "Annals of Geography" of the *New History of the Tang Dynasty*, "Sailing from Guangzhou", and then successively going through Tuenmun (屯门, now Hong Kong), Jiuzhoushi (九州石, northeast of Hainan), Xiangshi (象石, southeast corner of Hainan), Zhanbulaoshan (占不劳山, Champa island of Vietnam), Huanwang state, Lingshan (陵山, southeast of Vietnam), Mendu (门毒, southeast of Vietnam) state, and another day to the Kauthara (古笪, central Vietnam) state, Bentuolangzhou (奔陀浪洲, southeast of Vietnam), Juntulongshan (军突弄山 now Kunlun island or Con Dao, Vietnam), Zhi (质) strait (Malacca), Luoyue (罗越, southern part of Malay peninsula) state, Sri Vijaya (佛逝, Samboja in Song Dynasty, now Sumatra) state, Keling (诃陵, Yavadvipa 阇婆 in the Song dynasty, now Java) state (Ouyang, X. et al. 1982: 1153). This sea route across the South China Sea as the core segment of Maritime Silk Road directly linked the south coast of China with the Indochina Peninsula, promoting the ethnic emigration of *Han* nationality from south of China, and their cultural interaction with these various "barbarian" people in the remote "South of the South" in southeast Asia.

2.3.1.3 Foreign *Maritime Fan* Along Coast of the South and West Oceans Sea routes

During the Song, Yuan, and Ming dynasties, the indigenous foreign *Maritime Fan* along the searoutes of South and West oceans were more detailly recorded in a number of special overseas ethnographies focusing on southeast Asia. These historical records witnessed the deepening of the cultural interaction between the *Han* nationality of southern China and foreign *Maritime Fan* in Southeast Asia.

The "barbarian" ethnic groups and states along the South Ocean sea route being recorded in the *Biography of the Foreign Nations* of Song Dynasty includes Jiaozhi (now north Vietnam), Champa (southeast Vietnam), Panduranga (宾瞳龙 southeast Vietnam), Kmir (Cambodia), Dengliumei (登流眉 Malay Peninsula), Pagan (蒲甘 Myanmar), Tambralinga, Langkasuka (凌牙斯加 Malay Peninsula), Xintuo (新拖 Java), Samboja (Sri Vijaya in Sumatra), etc. (Zhao, R.S. et al. 2000: 1, 8, 16, 18, 28, 31, 34, 43, 45, 48).

More than 50 foreign *Maritime Fan* states along the South Ocean sea route were recorded in *Biography of the Foreign Island Yi*, such as Jiaozhi, Champa, Mindorang (民多朗, now southeast Vietnam), Panduranga, Kmir, Tambralinga, Rili (日丽 Malay Peninsula), Pengkeng (彭坑 Malay Peninsula), Kelantan (吉兰丹 Malay Peninsula), Ding Jialu (丁家庐 Malay Peninsula), Jung (戎 Malay Peninsula), Luo Wei (罗卫 Malay Peninsula), Lopburi (罗斛 Thailand), East Singgora (东冲古剌 Malay Isthmus), Srokam (苏洛鬲 Malay Peninsula), Zhenlu (针路 Malay Peninsula), Martaban (八都马 Myanmar), Tamiao (淡邈 East Java), Bajienajian (八节那间 Central Java), Samboja, Sebang (啸喷 southern tip of Malay Peninsula), Siam, Java, Tagara (重迦罗 Java), Langkasuka (龙牙犀角 Malay Peninsula), Palembang (旧港 Sumatra), Lankawi (龙牙菩提 Malay Peninsula), Baros (班卒 Sumatra), Lingga (龙牙门 Singapore), Con Dao (昆仑岛 south Vietnam), Lingshan (灵山south Vietnam), Pulau Aur (东西竺 southern tip of Malay Peninsula), Diamond Point (急水湾 Malacca Strait), Battak (花面 Sumatra), Tamiang (淡洋 Sumatra), Suwentala (须文答剌 Sumatra), Lamuri (喃巫哩 Sumatra), etc. (Wang, D.Y. 1981: 50–261). These diversity, complex connotation and broad distribution of maritime *Man* and *Yi* states reflects the closer cross-cultural contact and ethnic interaction of *Han* nationality of the south China with those indigenous people in Southeast Asia.

The chapters of official history of Chinese dynasties also provided similar information about these foreign "barbarian" cultures along the coast of mainland Southeast Asia and adjacent islands. The "Annals of Foreign States" (外国传) of the *History of the Song Dynasty* (Songshi 宋史) records the various *Fan* states such as Jiaozhi, Champa, Kmir of the Southeast Asian peninsula and the adjacent Samboja (Tuotuo, 1977: 14057–14072, 14077–14088), which mostly consisted with the facts listed in the *Biography of the Foreign Nations*. The "Biographies of Foreign Barbarian *Yi*" of the *History of Yuan Dynasty* (Yuanshi 元史) also records the cultures of *An'nan* (north of vietnam), Champa and Java states (Song, L. et al. 1976: 3633–3653, 3660–3666). The descriptions of the humanities on foreign states in the Southeast Asia were more detailed in the "Annals of Foreign States" in the *History of Ming Dynasty* (Mingshi明史), concerning the foreign states of An'nan, Champa, Kmir, Siam, Java, Samboja (三佛齐), Malacca (满剌加), Sumatra, Suwentala, Pahang (彭亨 now Malay Peninsula), Lamuri (南渤里 Sumatra), Aru (阿鲁 Sumatra), Johor (柔佛 Malay Peninsula), Ding Jiyi (丁机宜 east island of Sumatra) and so on (Zhang, T. 1984: 8406–8409, 8419–8422, 8426–8429). Most of these states maintained close tributary relationship with the Ming Dynasty, forming the foundation for their humanistic interaction and assimilation with the *Han* nationality 9-in south of China.

The deepening of the cross-cultural interaction between Chinese and indigenous societies in the "South of the South" were also accompanied by the prosperity of navigation along the coast of the South and West oceans. The main sea route of this regional navigation can be briefly read in the *Description of Nature and Culture of Kmir* (Zhenla Fengtu Ji 真腊风土记) of Yuan Dynasty (Zhou, D.G. et al. 1981). This sea route as the main segment of the ancient Maritime Silk Road was also detailed in the *Charts of Zheng He's Voyages* (Zhenhe Hanghai Tu 郑和航海图) and the *Sea Routes with Successful Sailing* (Shunfeng Xiangsong 顺风相送) of Ming Dynasty (Xiang, D. 1961, 1981).

2.3.2 The Island Yi and Maritime Fan on the Archipelago of the East Ocean

The overseas region in the East China Sea and adjacent islands in the east region of the South China Sea, namely the eastern part of southeast Asian archipelagos, including the Taiwan, Philippines and the east of Indonesian Archipelago, was another major wing of oceanic expansion and assimilation of the *Han* Nationality in the South China Sea since the Han Dynasty. According to the Chinese historical documents, this east wing of land-sea cultural interaction happened step by step from north to southeast, from the *Island Yi* societies in Yizhou (夷洲), Liuqiu (流求) and Eastern Fan (东番 now Taiwan), Small East Ocean (小东洋) indigenous societies in Sanyu (三屿, now southwest of Luzon of Philippines), Mait (麻逸, now Mindoro of Philippines), to the *Maritime Fan* of the Great East Ocean (大东洋) in Java, Burni (佛坭,渤泥, now Borneo, northeast of Kalimantan island) in the east region of Indonesian archipelago.

This island belt in the east part of the Southeast Asian archipelago had been the traditional East Ocean navigation of *Han* nationality of southeast coast of China centered in Fujian and Guangdong. The "Foreign Barbarian *Fan* States" in the *Interlocution on the History of South Coast of China* of Song Dynasty states: "The East Ocean is located to the east of Yavadvipa (阇婆 now Java)" (Zhou, Q.F. 1996: 37). The "Barbarian *Fan* States" in the *Biography of the South China Sea* of Yuan Dynast y records: "The state of Burni in the East Ocean is in charge of managing the Small East Sea (小东洋)", "the state of Kerajaan Tanjungpura (单重布啰国) is in charge of managing the Great East Ocean (大东洋)", "the *Yavadvipa* (闍婆国, Java) state is in charge of managing the Great East Ocean" (Chen, D.Z. 1991: 46–47). The *Biography of the Foreign Island Yi* of Yuan Dynasty also claims that "*Java* as the ancient *Yavadvipa* state……was large and densely populated, and the wealthiest among the states in the East Ocean" (Wang, D.Y. 1981: 159). The *General Survey on the East and West Oceans* of the Ming Dynasty states: "Brunei is the state of Borneo, where is located in the end of the East Ocean and beginning of the West Ocean" (Zhang, Xie 1981: 102).

2.3.2.1 The *Island Yi* on the Yizhou and Eastern Fan

Taiwan and Penghu (澎湖) islands were also called Small East Ocean in Ming Dynasty (Zhang, Xie 1981: 185). Since Later Han Dynasty, the indigenous people *Dong Ti* (东鳀), *Mountainous Yi* (山夷), *Yi*, *Indigenous Fan* (土番) of the islands of Yizhou, Chanzhou (澶洲), Liuqiu, and Eastern Fan were successively recorded in the Chinese historical literatures, revealing the cultural process of interaction of the *Han* nationality of the mainland China with the indigenous people on the islands.

The "Biographies of *Eastern Yi* (东夷传)" of the *History of the Later Han Dynasty* records that "there are *Dong Ti* people with more than 20 states living on the island beyond the sea out of Kuaiji, including Yizhou and Chanzhou." "Some people from East Ye county of Kuaiji Prefecture sailed into the sea and were drifted to Chanzhou, where is far away to access normally" (Fan, Y. 1965: 2822). The "Biography of Sun Quan" in the *History of the Three Kingdoms* states: "Generals Wei Wen (卫温) and Zhuge Zhi (诸葛直) led more than ten thousand soldiers and sailed in the open sea to look for Yizhou and Chanzhou…returned with thousands of indigenous people captured in Yizhou" (Chen, S. et al. 2006: 674).

Shen Yin (沈莹) published his *Biography of the Environment and Product of the Linhai Prefecture* in Three Kingdoms period, which is the first ethnography of Yizhou in the vision of the *Han* nationality. "Yizhou is located two thousand *li* (里) away from the southeast of Linhai (临海) Prefecture. The land is free of snow and frost, and is ever green in four seasons. The indigenous *Mountainous Yi* live in the places surrounded by hills and streams" (Shen,Yin 1998: 1). According to Yizhou's location of two thousand *li* southern away from the coast of Zhejiang, its environmental content such as climate, vegetative cover, mountainous landscape, and its cultural connotation of the ethnic diversity, piercing ears, extracting teeth, head-hunting, this island *Mountainous Yi* was identified by historian as the Taiwan aborigines.

Each chapter of the "Annal of the Liuqiu State" respectively in the *History of Sui Dynasty, History of Song Dynasty* and *History of Yuan Dynasty* successively recorded the cross-cultural interaction between *Han* people of mainland southeast China and indigenous society in Taiwan. For example, the *History of Sui Dynasty* provided the second literature systematically describing the Liuqiu island indigenes. "The Liuqiu state is located on the island with five days' eastward sailing from the Jian'an Prefecture. There are many caverns dweller in the state, and the family name of its chief's is Huansi (欢斯) and given name Kechidou (渴剌兜)" (Wei, Z. et al. 1982: 1823–1825). This description of Liuqiu natives presents a deeper cognition of *Han* nationality on the Taiwan indigenous society.

The descriptions of indigenous people respectively in each of the chapters of "Liuqiu" in *Biography of the Foreign Nations*, *Biography of the Foreign Island Yi* are almost the same as the content of the *History of Sui Dynasty*. Further more, the *Biography of the Foreign Island Yi* records the earliest administrative agency set up in Penghu by the Yuan Dynasty. "An inspection office was established during the year of Zhiyuan (至元) reign (AD 1264–1294) of Yuan Dynasty, subordinated to Jinjiang (晋江) County, Quanzhou Prefecture of Fujian" (Wang, D.Y. 1981: 13).

The *Record of Eastern Fan Barbarian* (Dongfan Ji东番记) with 1400 Chinese characters written by Chen Di (陈第) after his field study in Taiwan, was the most detailed ethnographical record of Taiwan's indigenous culture in Ming Dynasty. "The indigenous *Yi* people live on the island of Eastern Fan in the outer ocean of Penghu, which lost their history of origin. The indigenous villages …are located along the west coast for more than one thousand *li*. There are many different kinds of communities with thousands or five to six hundred people but without a chieftain" (Chen, D. 1987). Most of the official documents and private writings on Taiwan's indigenous people in Ming Dynasty were all cited from Chen Di's record.

After large-scale emigration of the *Han* people from the mainland of southeast China to Taiwan and establishment of prefecture and county system in Taiwan in Qing Dynasty, the *Han* people grew up to be the main population of Taiwan. The comprehensive ethnic cultural interaction and assimilation between *Han* and the indigenous people were recorded in a series of Chinese literatures (Liu, R.Z. et al. 1992; Yang, X. 1983). Majority of the early books on the Taiwan indigenous of Qing Dynasty also quoted the work of Chen Di, such as the "customs" of the *Indigenous Fan* in the "Records of Customs and Mores of Barbarian *Fan*" (Fansu Jilue 番俗纪略) written by Ji Qiguang (季麒光) (Ji, Q.G. 2006: 116–118), the "*Wild Fan"* (野番) in *Traveling Notes Across Taiwan Strait* (Bihai Jiyou 裨海纪游) by Yu Yonghe (郁永河) (Yu, Y.H. 1987: 9–11 of vol.one, 32 of vol.two). The *Records of Mission Trip to Taiwan* (Taihai Shichai Lu 台海使槎录) written by Huang Shujing (黄叔璥) firstly made an ethnographical classification on indigenous peoples into thirteen ethnicities according to their geographical distribution (Huang, S.J. 1936: 89–150). The *Albums of Aboriginal Folklore in Taiwan* (Fanshe Caifeng Tu (Fanshe Caifeng Tu 番社采风图) by Liushiqi (六十七) provided a more direct, vivid and realistic investigation and descriptions of the customs and mores on island aboriginal society (Liu-Shi-Qi 1961).

2.3.2.2 The Foreign *Island Yi* on the Philippine Islands of Small East Ocean

Since Song Dynasty, the mainland Chinese reached to the further distant societies of foreign *Island Yi* on the Philippines in the East Ocean. The *Biography of the Foreign Nations* records the Pisheye (毗舍耶 now Babuyan), Sanyu, Mait, Bai Puyan (白蒲延 now Babuyan), Pulilu (蒲里噜 now Polillo in southwest of Luzon), Riyin (里银 now Lingayen in the middle Luzon), Dongliuxin (东流新 now central Luzon), Rihan (里汉 south Lubang Island to the southwest Luzon), etc. Their social-cultural landscapes were also described in the vision of *Han* nationality, such as "The language of Pisheye can't be understood and the business man can't access to the island. The indigenous people are naked without cloth like beast." "The state of Mait is located to the north of Borneo, their villages are built along the river banks, each of which has more than one thousand houses. The natives wrap around body or cover their waist with a large piece of cloth" (Zhao, R.S. et al. 2000: 141, 143, 149).

The *Biography of the Foreign Island Yi* records the Pisheye, Sandao (三岛, same as Sanyu), Marilu (麻里鲁, same as Pulilu, now Polillo Islands), Mait, Jianshan (尖山, southern Palawan) and Sulu (苏禄), etc. The author states: "Pisheye is located in the secluded corner of the east sea…the indigene there are inclined to robbery, with hair bun and puncture tattoo…other indigenous groups in the East Ocean are frightened of Pisheye and keep away from them." "Sandao is located in the east of Daqishan (大崎山)…the custom and mores there are similar to that of *Han* people in China" (Wang, D.Y. 1981: 23–37, 89–92, 135–137, 178–180, 193–195).

Besides the *Eastern Fan* of Taiwan and Penghu, the other *Island Yi* in the Small East Ocean recorded in the *General Survey on the East and West Oceans* includes Luzon, Sulu, Maoliwu (猫里雾), Sayao (沙瑶) and Nabeitan (呐哔啅, all these three islands are near Luzon) (Zhang, Xie 1981: 89–100). The "Annals of Foreign States" of *History of Ming Dynasty* similarly records the indigenous states in the region of now Philippines as Luzon, Sulu, Maoliwu, Sayao, Nabeitan, etc. "Luzon is located in the center of South China Sea and is far away from Zhangzhou… Because it is not very far away from Fujian and the land there is fertile, tens of thousands of Fujian merchants generally went and stayed there for many years, even for generations. Then Franc (佛郎机, Spanish) arrived to Luzon, killed the indigenous king and conquered the local society. The Spanish worried about chaos of the Chinese merchants and expelled them back to China. The properties of those Chinese who stayed were seized by Spanish office" (Zhang, T. 1984: 8370–8375).

2.3.2.3 Foreign *Maritime Fan* on the East of Indonesian Archipelago in the Great East Ocean

The islands of Kalimantan, Java and Sunda as the east part of Indonesian archipelago, are located to the east and north of the Malacca Strait, and the junction of the East Ocean and West Ocean, as the *General Survey on the East and West Oceans* states, "Brunei is the state of Borneo, where is located in the end of the East Ocean and the beginning of the West Ocean" (Zhang, Xie 1981: 102).

The *Biography of the Foreign Nations* of Song Dynasty recorded the indigenous societies of foreign *Maritime Fan* in the Great East Ocean, such as Burni, Sujidan (苏吉丹 now west coast of Kalimantan). It says that "the Burni state constructs its city with planks, where more than ten thousand people live in fourteen prefectures. The house of the king is covered with pattra and the common people with grass. … The common people fashion naked and barefooted, with gold rings accessories on arms, gold laces on wrists, and a large piece of clothes wrapping the body" (Zhao, R.S. et al. 2000: 135). The record on Burni in the *History of Song Dynasty* share similar description with this paragraph (Tuotuo 1977: 14094–14095).

There were more indigenous states of foreign *Maritime Fan* in the Great East Ocean recorded in *Biography of the Foreign Island Yi*, they were Burni, Puben (蒲奔 now Kalimantan), Jialimada (假里马打 now an island in west of Kalimantan), Tanjong Datu (都督岸 now Kalimantan), Gelam Mount (勾栏山 now Gelam island in west of Kalimantan), Giri Timor (古里地闷 now Timor), Karimun (遐来勿 now

Sulawesi), Maluku (文老古 now Moluccas), etc. Among them, "the custom and more of the indigenous people in Giri Timor are lascivious. Men and women cut hairs without pin, and wear shirts made of mockmain tissues of Champa. The wine and meat are cheap in the city, and the women have no sense of shame." "The Karimun indigenous people worship monsters and evil spirit, prefer to the hair bun wrapped in red cloth" (Wang, D.Y. 1981: 93–95, 148–151, 172–174, 199–212, 248–249).

The *Island Yi* in the Great East Ocean recorded in *General Survey on the East and West Oceans* includes Meiluoju (美洛居 now Moluccas) and Brunei. "Meiluoju is also called Miliuhe (米六合), which is a wealthy state in the East Ocean. Whenever the chief goes out with great prestiges, people clasp hands and lie prostrated on the road sides. Men cut hairs without pin and women have the hair bun style." "Brunei is the state of Borneo…the king cuts his hair and wraps his body with a big piece of cloth embroidered with gold, and goes out on foot by himself wearing two swords on the waist" (Zhang, Xie 1981: 101–103). There are also similar descriptions in the *History of Ming Dynasty* (Zhang, T. 1984: 8374, 8411–8415).

The cultural expansion of *Han* nationality from southeast coast of China to the East Ocean islands since the Han Dynasty, had also been accompanied with the development of the historical sea routes carried out by the navigators of the southern China. The *General Survey on the East and West Oceans* records a number of different sea routes linking the East Ocean archipelagos, of which one was the route between mainland of southeast China and the Philippines archipelagos known as "Navigation from Taiwushan (太武山) of Zhangzhou (漳州) to Miyan (密雁) harbor of Luzon via Penghu" (Zhang, Xie 1981: 182–185). The *Sea Routes with Successful Sailing* records the routes started from the coastal harbors of Fujian and Guangdong, such as Meizhou (湄洲), Quanzhou (泉州), Zhangzhou, and Nan'ao (南澳), making their ways to Penghu, Luzon, Sulu, Brunei in the islands of the East Ocean. The nautical routes from Fujian and Guangdong of mainland southeast China to Taiwan, Penghu and Luzon in the East Ocean archipelagos recorded in the *Guide to the Right Sea Routes* are more than that in the *Sea Routes with Successful Sailing*, which constituted a complex network of nautical routes in the East Ocean.

2.4 Conclusion: Central Nation's Expansion Toward the Southeastern Maritime Regions and Its Sociocultural Dynamics

The ethnographic chapters on *Miao, Man* and *Bai Yue* of early history of China, and the oversea *Island Yi* and *Maritime Fan* in the Ming and Qing dynasties, reflect the memories of the cultural vision of the *Huaxia* and *Han* nationalities, showing the historical process of cultural dissemination and assimilation of *Huaxia* and *Han* step by step from the north to the south, and from the mainland to the ocean.

The Huaxianization and sinicization was the manifestation of the outward expansion of the Central Nation along with geopolitical order of "Central Nation-Four Directions-Four Seas". This cultural expansion of *Huaxia* and *Han* heading to the maritime regions in their "Southeastern Direction" implied complex social, political, economic and cultural backgrounds. The military expeditions of the central empires, the migration of the pluralistic ethnicities, the administrative management of prefecture and county, the tributary exchange and the commercial trade system, and alike, are a few types of important geopolitical measures promoting this land-sea interaction between *Huaxia-Han* and "barbarians" *Man* and *Yi* in the "Southeastern Direction" over last thousands of years.

The military expeditions of Central Nation outward to the "Various States in Four Directions" had been the most powerful action to promote ethnical interaction and cultural assimilation. Both the sinicization of *Miao, Man* and *Bai Yue* in the mainland Southeastern Direction, and the cultural interaction with the *Island Yi* and *Maritime Fan* over the South Ocean and East Ocean, were preluded with the military expeditions. The continuous military expeditions of the Xia and Shang dynasties southward to the regions of Three Tribes of *Miao* and *Southern Man*, the *Chu* state conquering *Bai Yue,* and Qin state suppressing south region of Yangtze River during the late of Warring States Period, the emperor Wudi of the Han Dynasty perishing the indigenous states of *Eastern Yue* and *Southern Yue*, generally completed the political foundation for the sinicization of territory of *Bai Yue*. After then, during the Han, Tang, Song and Yuan dynasties, the vanguard of the military expeditions of the Central Nation extended to the Indochina peninsula. The Southern Dynasties troops attacking the "South to Jiaozhou", the Sui Dynasty conquering Linyi and Huanwang for their discontinuing tributes, and the Yuan Dynasty attacking Annan, Champa and Java, and alike, all strengthened the administrative system of prefecture and county, the tribute and trade relationship between the Central Nation and its peripheral "South of the South". On the island belt of the Eastern Ocean, since the Wu state of Three Kingdoms sent the navy to seek Yizhou and Chanzhou, the Sui, Tang, Song and Yuan dynasties continued to sail and attack Liuqiu until Taiwan was administratively unified into empire in the early Qing Dynasty, which was also an important political basis for the expansion and assimilation of *Han* nationality onto the *Island Yi* of East Ocean.

Over the thousands of year, the population migration had been an effective measure directly leading to the crosscultural interaction and assimilation between *Huaxia* in the Central Plains and "barbarian" *Miao, Man* and *Bai Yue*, as well as the *Island Yi* and *Maritime Fan* in Southeastern Direction. The relocation of *Eastern Ou* and *Min Yue* to the inland Yangtze and Huaihe rivers basins in the Han Dynasty, the settlements of tens of millions of soldiers from north southward to the original land of *Bai Yue* and the ancient Jiaozhi during Qin and Han dynasties after the conquering wars, were the important social and cultural mechanism for the sinicization of *Bai Yue* indigenous cultures. The capture of thousands of island inhabitants of Yizhou and Liuqiu during the Han and Tang dynasties, as well as the settlement of a large number of *Han* people from southeast coast in the Eastern

Ocean islands as Taiwan and Luzon during the Ming and Qing dynasties, also enhanced cultural interaction and ethnical assimilation between land and sea.

The administrative system of prefecture and county was the result of sociocultural interaction between the center and periphery of ancient Chinese civilization, and also an important means to consolidate and accelerate the Huaxianization and Sinicization of indigenous people of "Various States in Four Directions". In the original land of *Southern Man* and *Bai Yue* from the southeast coast of mainland China to the "South of the South" in Southeast Asian Peninsula, the administrative system of prefecture and county had continuously advanced by empires of Central Nation. Qin initially annexed all the states "under the heaven" into its territory and established prefectures of Guilin, Nanhai, Xiangjun in original land of *Southern Yue* and Minzhong Prefecture in the *Eastern Yue*, the Han Dynasty perished the Two *Yue* states and established "Nine Prefectures of *Southern Yue*" and Yexian county under the Kuaiji Prefecture, enhancing the unity of "Assimilation and Integration of Pluralistic Cultures" of early empire. During the Han and Tang dynasties, three prefectures of Jiaozhi, Jiuzhen, Rinan and Annan Zhongdufufu military office, the four prefectures of Yushan, Chenghua, Jiuzhen, Rinan were successively established in the "South of the South" in Southeast Asian Peninsula, by empires of Central Nation, resulting and maintaining the cross-cultural interaction and assimilation of indigenous people there with the *Han* nationality of southern China.

The suzerain vassal and tributary relations was not only the means to maintain the geopolitical order of "Central Nation-Four Directions-Four Seas" of ancient Chinese civilization, but also an important way to enhance the interaction between the center and periphery. As the indigenous "barbarian" region in the "Southeastern Direction" of *Huaxia*, early Yangzhou maintained a normal tributary relationship with the Xia Dynasty, and "paid the tributary goods of gold, silver and copper". During the Shang Dynasty, the indigenous *Southern Man* in the further southern coastal Lingnan paid tributary good to the emperor "with marine pearls, tortoise shells, ivory, rhinoceros horns, peacock feathers, cranes and dogs". Since the Han and Tang dynasties on, the various indigenous states in Indochina Peninsula intermittently paid tributes to the Central Nation (Fan, Y. 1965: 1156; Wei, Z. et al. 1982: 1831; Tuotuo 1977: 13981; Zhang, T. 1984: 8309).

The development of the interregional economic relationship and trade, especially the navigation and maritime trade between mainland and island, were the important dynamical force for the sociocultural expansion of the central *Huaxia* and *Han* to the peripheral "barbarian" ethnicities in their "Southeastern Direction". Since the Han Dynasty on, the continuous prosperity of the traditional "Maritime Silk Road", such as the "South Sea Route via Xuwen and Hepu", the "Tributary Maritime Road of the Seven Prefectures of Ancient Jiaozhi" and the "Guangzhou Sea Route to Foreign States", had successively promoted the maritime cultural exchanges between *Han* nationality of China and the "barbarians" of *Man, Yi* and *Fan* far away in the "South of the South". The ethnical interaction and assimilation of the *Han* nationality with the indigenous societies of foreign *Maritime Fan* and *Island Yi* in the East Ocean had also been promoted by the maritime trade along the dozens of sea routes.

In summary, following the process of military and political expansion from "Central Nation" to the various states in "Four Directions" and over the "Four Seas", the ethnic migration, administration of prefecture and county, suzerain vassal tribute relationship, interregional economic exchanges and trade, the indigenous ethnicities in the southern part of East Asia and the northwest Pacific islands, gradually appeared in the records of Chinese historical literatures. From *Miao* and *Man* indigenous people in the Southeastern Direction of the mainland in the early history, to *Bai Yue* ethnicities along the southeast coast in the end of Zhou, Qin and Han dynasties, as well as the *Island Yi* and *Maritime Fan* over the northwest Pacific ocean from the Han and Tang to the Ming and Qing dynasties, this indigenous ethnic group of "other culture" or "hetero-culture" on the perspective of *Huaxia-Han* nationality, was closely related to the maritime culture of the Proto-Austronesian and Austronesian identified in the West ethnography. The spatial and temporal distribution of the indigenous peoples from *Southern Man* and *Bai Yue* in mainland of southeast China to the maritime cultures of Austronesian in southeast Asia and Pacific archipelago, are not only the historical memories of the recognition of *Huaxia* and *Han* nationalities on their "Southeastern Direction", but also the records of the multicultural interaction in the maritime region of Asia - Pacific for thousands of years.

Part II
Archaeological Exploration on the Prehistoric Cultures in the "Maritime Region of Southeastern Asia"

Chapter 3
The Indigenous Paleolithic Cultural Inheritance in the "Maritime Region of Southeastern Asia" During the Early Neolithization Around 10,000 Years Ago

The "Maritime Region of Southeastern Asia" between the south coast of China and Southeast Asia was once an important cross-border community in the multicultural lineages of human history. During the Mesolithic age around ten thousand years ago and the era of synchronically global and tremendous cultural change in human prehistory, the indigenous cultural connotation in this region and its unique model of cultural evolution along with both inheritance, continuation, and innovation between the Paleolithic and Neolithic age, are of great significance in the cultural history of humankind and Asia–Pacific ethno-history.

The author once made a preliminary analysis of this regional Mesolithic cultural evolution and its connotation variants, examining the distribution and evolution of the three main categories of material cultures, namely the chopped pebble stone tools, the innovative style of pebble stone tools with chiseled concave or perforation and ground edge, and the regional Microlithics and small stone implement industry, in the hilly and mountainous regions along the south coast of China, Indochina peninsula and Southeast Asia archipelago. This research emphasized the cross-border commonness and indigenous continuity of the prehistoric culture around 10,000 years ago and its implied meaning for understanding the origin of Austronesian, which is the most important ethno-historical event in the region (Wu, C.M. 1999b, 2006).

In the past ten years, a series of new archaeological discoveries and researches around the ten thousand years ago have been achieved in this region, and scholars have made a lot of more in-depth studies on the Neolithization and stone age cultural changes, prehistoric cultural and economic adaptation respectively to land and sea, subsistence pattern growth and the origin of cereal cultivation, human evolution and ethnics migration (Zhao, Z.J. et al. 2005; Zhang, C. et al. 2008, 2009; Xiang, J.H. 2014; Fu, Y.X. 2019; Chen, Y.C. et al. 2017; Matsumura, H. et al. 2019; Higham, C.F.W. 2019; Hung, H.C. et al. 2019). This chapter intends to further replenish the model of the inheritance and continuation essence of indigenous cultures during the transitional period from the Paleolithic to Neolithic ages in this region, and the significance of this inheritance model to the understanding of regional ethnic history.

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3.1 The Issues of the "Maritime Region of Southeastern Asia" and Origin of the Austronesian Around 10,000 Years BP

The geological age between Pleistocene and Holocene around 10,000 years ago was a turning point with great changes in the earth and human history, accompanying with the last melting of glaciers on the earth, the "Neolithic Revolution" or "Agricultural Revolution" occurred simultaneously all over the world.

The upheaval might initially happen with the earth itself, no matter what the relationship between natural connotations as climate, biological environment, and human cultural change, the melting of last glaciers at the end of Pleistocene was undoubtedly the event in the geological history most closely affecting human survival. The Paleontological, paleo-climatological, and chronological evidences in the seabed sediments in the Pacific have confirmed that the last glacial retreat occurred at the turning point between Pleistocene and Holocene, and, around 11,000 to 9,000 years ago there were a series of cultural "revolutions" roughly synchronizing over the world. As early as the middle of the nineteenth century, European archaeologists put forward the topic of "Mesolithic Age" of the transition period between the Paleolithic and Neolithic ages, noting the simultaneous innovation of the subsistence economy and social life, such as the miniaturization of hunting objects, expanded utilization of aquatic animal resources, and alike. With the extensively archaeological discoveries and studies of the "Neolithic Revolution" and "Agricultural Revolution" since the middle of the twentieth century, the archaeological understandings of the Mesolithic cultural connotation such as subsistence economy, settlement pattern, and social life have been greatly deepened. The prehistoric archaeologists all over the world generally paid attention to the simultaneous changes in crop cultivation, animal domestication, pottery making, stone tool grinding, resident settlement, and agricultural society around the world during postglacial period (Childe, P.V.G. 1958).

Nevertheless, most archaeologists realized that this roughly synchronized social and cultural upheaval of the Mesolithic age had also presented obvious temporal and spatial diversity over the world. In the process of "Neolithization" in Mesopotamia of the Southwest Asia, European, middle and lower reaches of the Yellow and Yangtze rivers, coastal region between South China and Southeast Asia, and the American continent, the transition modes varied considerably in cultural discontinuity or continuation, cross regional transmission and replacement or intrinsic inheritance, different dynamics of environment or population pressure, asynchronism of the Neolithic innovations, and the developing gap between the "center" and "periphery", highlighting the complexity and diversity of the cultural evolution of this era (Yu, X.Y. et al. 2011).

The East Asia is one of the relatively independent regions in the global Mesolithic "upheaval" and Neolithization around ten thousand years ago. Moreover, the regional cultural complex and its evolution models of the north and south of East Asia are also obviously different. Judging from the view of stone

industrial technology and artifact variants, this regional division of the Paleolithic cultures are basically consistent with the modern boundary of natural, humanistic, and geographical separation of south and north in mainland China, which is bounded by the Qinling (秦岭)-Huaihe River (淮河). In the "North", centering on the area between the middle and lower reaches of the Yellow River and the piedmont Mongolia-Loess Plateau, Mesolithic culture characterized with the typical Microlithics implements as main content and accompanying with ground edge stone tools and millstones, was distinctively different from that in the "South" stretching from the plain of middle and lower reaches of the Yangtze River to the mountainous region around Wuyi (武夷)- Nanling (南岭) characterized with the chopped pebble stone tools with chiseled concave or perforation and ground edge. Regarding the subsistence patterns, not only the "North" characterized by the initial cultivation of millet and broomcorn millet, but also the west and north area of the watershed Wuyi-Nanling mountains in "South" centered in the middle and lower Yangtze River basin characterized by the initial cultivation of rice, were obviously different from the east and south area of the watershed Wuyi-Nanling mountains were mainly characterized by the foraging pattern of hunting, gathering and fishing for a long period of time in the Neolithic age. This coastal area of southeastern China presents an independent regional or sub-regional model of Mesolithic transition with specific stone tool complex and distinctive subsistence pattern in prehistory, showing initial cultural region of "South of the South" in ancient China (Ruan, Y. 2009: 2896; Fan, Y. 1965: 2834; Shen, Y. 1997:2377).

The Mesolithic cultural pattern of this region in "South of the South" of China around ten thousand years ago, extended actually to the peninsula and archipelago of Southeast Asia, forming the early prehistoric cultural sphere of the "Maritime Region of Southeastern Asia" (Lin, H.X. 1937,1958b). The main cultural commonness with the unique characteristics in this cross-border region was the continuation and inheritance of the native tradition of chopped pebble stone implements of the Paleolithic Age and its innovative patterns of post-Paleolithic complex, including both the oval or disk shaped pebble choppers and the "Neolithic" forms of pebble tools with chiseled concave or perforation and ground edge, as well prototype axes and adzes. The small stone tools and Microlithics differentially accompanied with these pebble stone implements, reflecting the global lithic commonality and the interregional cultural exchange between the north and south of East Asia. Regarding the livelihood economy, this hilly and mountainous region along the coast of South China Sea had long maintained its unproductive and "marginal" Neolithic foraging models of gathering, hunting, and fishing until cultivated rice was gradually introduced from the northern part of the "South" in middle and lower reaches of Yangtze River since the late and latest Neolithic period differentially from five or six thousand to three or four thousand years ago (Zhang, C. et al. 2009; Higham, C.F.W. 2019; Zhao, Z.J. 2005a). This cultural pattern with unique complex played a special role in the turning period between the Paleolithic and Neolithic ages in the world prehistory, which will be inevitable basis for understanding the development of prehistoric ethnicities in this maritime region, especially the origin of proto-Austronesian.

"Austronesian" or "Malaya-Polynesian", mainly includes Malays in the Southeast Asian islands, Micronesia, Melanesians, Polynesians, and other ethnic groups on the Pacific islands, covering the broad maritime region from Easter Island in east of the Pacific Ocean to Madagascar in west of the Indian Ocean. It is the most widely distributed indigenous community mainly living on islands. Through the investigations and researches of linguistics, ethnology, archaeology, physical anthropology, and molecular biology, the international academic community has made fruitful achievements in the exploration of the origin of Austronesian. As a linguistic nomenclature, Austronesian is one of the few cross-border ethnic groups in the world ethnographies being identified as the language community. Therefore, linguistic approaches have always been the entryway for the comparative study of its origin. Historical linguistics, paleontology, and comparative linguistics have constructed a series of hypotheses for the origin and dispersal of Austronesian. Among them the most influential is comparative linguistics, which establishes "Family Tree for Austronesian" through classification and kinship analogy of the Austronesian language, assuming that it split successively in the original home in Taiwan, then spread to the Southeast Asian islands and the Pacific islands. The theory of "Language-Farming Model", with linguistic methods, advocates that the proto-Austronesian who first spread to the Asia–Pacific maritime region was a group of "farming" and "Neolithic" people. Accordingly, based on this hypothesis, a number of archaeologists of the Southeast Asia put forward the "Two-Layer Model" theory, considering that the "farming" and "Neolithic" Austronesian were different from, and replaced the gathering-hunting groups in Paleolithic and Mesolithic ages or Hoabinhian period (Diamond, J. 1988; Diamond, J. et al. 2003). The archaeological "Two-Layer Model" was initially discovered by C. F. Gorman of the Department of Anthropology at the University of Hawaii in the 1960s, who put forward the cultural, ethnic, and economic differences in the two stages of "Hoabinhian Culture" and "Post-Hoabinhian Culture" after the excavation of cavern sites in the transitional period around ten thousand years in Southeast Asia, such as Spirit Cave in Thailand. He advocated that the Neolithic cultural elements such as grinding techniques of stone tools and pottery making of "post-Hoabinhian" stage were introduced by the foreign population from the region with developed culture characterized by lowland rice farming. He said: "By 6500 BC a new technological complex entered, or developed in, Southeast Asia. Over the next 1,500 years, a shift took place in population density, from the Karst riverine, inter-montane valleys to the Southeast Asian plains; a shift most probably brought about by the introduction of cereal grain, making the plains the most favorable environmental zone" (Gorman, C.F. 1971).

A representative and authoritative work which constructed the history of origin and spread of Austronesian on the basis of "Language-Farming Model" was carried out by Professor Peter Bellwood of the National University of Australia. He held that the earliest Austronesian had been the ancestor of Taiwan aborigines and established the theoretical framework of "Out of Taiwan", considering that Austronesian spread from Taiwan southward to the Philippines, the Indonesian archipelago, and Oceania. "The Austronesian who expanded into the Indo-Malaysian Archipelago carried a full agricultural economy and introduced pottery and a new repertoire of unibeveled stone

adzes. However, woven in with this agricultural economy were continuing skills in terrestrial and maritime hunting and gathering. Linguistically, a presence of rice in the agricultural repertoire seems certain. Archaeologically, the evidence is less conclusive. The pre-Austronesian inhabitants of the archipelago occasionally used edge-ground stone axes and shell adzes, but they did not use pottery while they undoubtedly exploited many tubers fruit trees, later to be of great importance, as domesticated, they did not systematically cultivate these species …During the millennia of expansion southward and into Oceania, the economics of Austronesian societies underwent a number of latitudinal and more localized ecological adaptations. Cereals were apparently replaced in eastern Indonesia by tubers and tree fruits. Some groups even specialized away from agriculture in the directions of terrestrial or maritime hunting and gatherings" (Bellwood, P. 1997: 201–202). Nevertheless, his views have somewhat changed recently, holding that Austronesian as "language-farming" did not completely replace and annihilate the original "hunter-gatherers", but that there was a genetic mix between the original hunter-gatherers and the immigrated rice farmers, and even that the original hunter-gatherers provided unique cultural knowledge to the immigrated farmers. But his latest view has not changed the basic tone of the "Language-Farming Model" for the origin of Austronesian. "As far as the early Austronesians are concerned, my opinion over many years has been that their Pre-Austronesian ancestors moved as Neolithic and probably rice-and millet-cultivating populations from Fujian to Taiwan between 5,000 and 6,000 years ago" (Hung, H.C. 2017).

The multidisciplinary investigation and archaeological exploration of the origin of Austronesian involve a number of complicated theoretical issues. In fact, as one of the mainstream archaeological research on the origin of the Austronesian, "Two-Layer Model" or the population replacement under the theory of "Farming-Language Model" does not coincide with a lot of prehistoric archaeological discoveries in the maritime region of Southeastern Asia, such as the general continuity of indigenous culture around ten thousand years ago and its long inheritance in local Neolithic culture.

3.2 The Indigenous Paleolithic Cultural Inheritance in the "Maritime Region of Southeastern Asia" During the Early Neolithization Around 10,000 Years Ago.

In the "Maritime Region of Southeastern Asia" covering the south coast of China, the Indochina peninsula, and the Southeast Asian archipelago, the prehistoric cultures between Pleistocene and Holocene were widely discovered in caverns and rock shelters where mollusk shell remains accumulated, besides some discovered in open-air sites (Fig. 3.1). These cultural relics generally contain three categories of connotation of stone tool, namely the chipped pebble stone implements, the innovated forms of pebble implements with chiseled concaves or perforation and

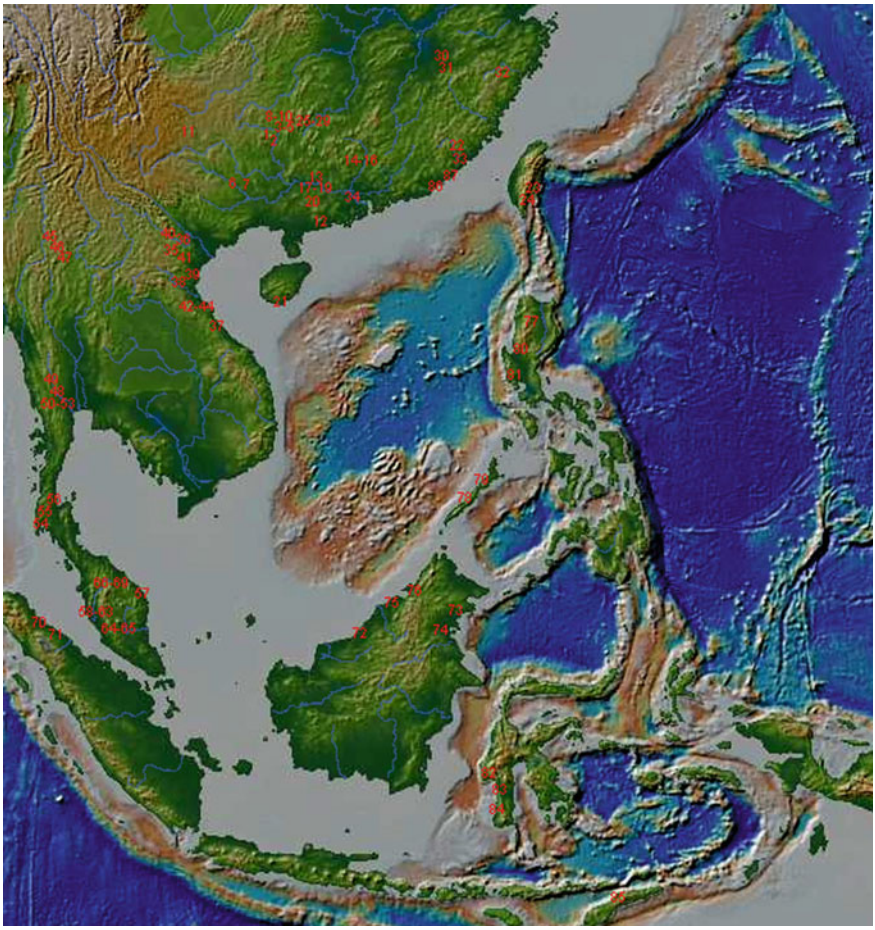

Fig. 3.1 Distribution of the Mesolithic sites in South Coast of China and Southeast Asia mentioned in the text (Figure made by C.F.W. Higham using GeoMapApp, www.geomapapp.org, CC by Ryan et al. 2009). (1. Bailian Dong, 2. Liyuzui, 3. Zengpiyan, 4. Miaoyan, 5. Dayan, 6. Yawaidong, 7, Baoqiao a, 8. Baxun b, 9. Tengxiang c, 10. Beimen d, 11. Niupo Dong, 12. Dushizi, 13.Huangyan Dong, 14. Zhuwuyan, 15. Huangmenyan, 16. Niulan Dong, 17. Shuiqiyan, 18. Qigaiyan, 19. Luojiyan, 20. Fangzengshan, 21. Luobi Dong, 22. Qihe Dong, 23. Hailei Dong, 24. Chaoying Dong, 25. Maguaiyan, 26. Sanjiaoyan, 27. Houlong Dong, 28. Yangjiayan, 29. Dongweiyan, 30. Xianren Dong, 31. Diaotonghuang, 32.Xiatang, 33. Lianhuachishan, 34. Xiqiaoshan, 35. Hoabinhian, 36. Xom Trai, 37. Ban Du, 38. Con Moong, 39. Sao Dong, 40. Nguom, 41. Dieu, 42.Bo Nam, 43. Hang Doi, 44. Bo Lam, 45. Spirit Cave, 46. Banyan Valley Cave, 47. Pha Chang, 48. Sai Yok, 49. Tham Ongbah, 50. Khao Talu, 51. Men cave, 52. Hip, 53. Phet Kuha, 54. Lang Rongrien, 55, Khao Thao Ha, 56.Khao Khi Chan, 57. Gua Bukit Ta, 58. Gua Gunung Runtuh, 59, Gua Kelawa, 60. Gua Harimau, 61. Kota Tampan, 62. Gua Baik, 63. Gua Kerbau, 64. Gua Sag, 65. Gua Tenggek, 66. Gua Peraling, 67. Gua Chawas, 68. Gua Madu, 69. Gua Cha, 70. Lhokseumawe, 71. Medan, 72. Niah cave, 73. Tingkayu, 74. Madai, 75.Baturong, 76. Lahad Batu, 77. Liwan, 78. Tabon, 79. Guri, 80. Rizal, 81. Bulakan, 82. Leang Burung, 83. Ulu Leang, 84. Paso, 85. Uai Bobo, 86. Xiangshan, 87. Dongshan)

ground edge, and the regional Microlithics and small stone tool industry. These three categories of stone tools continuously distributed on the south coast of China to Southeast Asia, and their connotations varied gradually and regionally, highlighting the characteristics of cross-border community in this turning age. These cultural relics presented clear internal essentiality of cultural inheritance of local Paleolithic tradition and source tracking of prehistoric culture in the diachronic development from the late Paleolithic to the early Neolithic age.

3.2.1 Archaeological Discoveries of the Cultural Remains of the Paleolithic-Neolithic Transition Period in the "Maritime Region of Southeastern Asia"

3.2.1.1 Coast of Southeast China

In the mountainous areas of south coast of China, the cavern cultural remains of Paleolithic -Neolithic turning stage include the second and third stages of Bailian Dong (白莲洞) cave in Liuzhou (柳州) (SMBLZ et al. 1987), the first stage of Dalongtan Liyuzui (大龙潭鲤鱼嘴) rock shelter in Liuzhou (LZMM et al. 1983), the first to fourth stages of Zengpiyan (甑皮岩) cave (IA-CASS et al. 1983) and Miaoyan (庙岩) cave in Guilin (桂林) (Chen, S.L. 1999), Dayan (大岩) cave in Linggui (临桂) (Fu, X.G. et al. 2001), the second and third stages of Yawai Dong

(娅怀) cave in Long'an (隆安) county (Xie, G.M. et al. 2018; Wu, Y. et al. 2020), as well as the previously investigated Baoqiao (苞桥) cave a in Wuming (武鸣), Baxun (芭勋) cave b, Tengxiang (腾翔) cave c, Beimen (北门) cave d of Guilin (He, N.H. et al. 1985), in Guangxi; the first to third stages of Niupo Dong (牛坡) cave in Guian (贵安) of Guizhou Province (FSCAT-IA-CASS et al. 2015, 2017; Fu, Y.X. et al. 2017); the lower, middle and upper layers of Dushizi (独石仔) cave in Yangchun (阳春) (Qiu, L.C. et al. 1980;1982), the lower layer of the Huangyan Dong (黄岩洞) cave in Fengkai (Song, F.Y. et al. 1983; Zhang , Z.Q. et al. 1994), Zhuwuyan (朱屋岩) and Huangmenyan (黄门岩) caves in Qingtang (青塘) (GDPM 1961; Cai, Y.Z. et al. 1999; GDPICRA et al. 2019) of Yingde (英德), the first and second stages Niulan Dong (牛栏洞) cave (YDMM et al. 1999) in Yingde, Shuiqiyan (水乞岩), Qigaiyan (乞丐岩), Luojiyan (罗髻岩) caves (Qiu, L.C. 1989) in Fengkai, Fangzengshan (饭甑山) cave in Luoding (罗定) (Song, F.Y. et al. 1989), in Guangdong Province; the lower and middle layers of Luobi Dong (落笔) cave in Sanya (三亚) of Hainan island (Hao, S.D. et al. 1994, 1998); the early and middle stages of Qihe Dong(奇和) cave in Zhangping (漳平) of Fujian (FJPM et al. 2013); and Hailei Dong (海雷) and Chaoying Dong (潮音) caves (Han, Q. 1979; Kato, S. 1990; He, C.K. 1996; Tsang, C.H. et al. 2018) in Changbin (长滨) of Taiwan. In addition, other related remains were also discovered in the adjacent areas of the northwest side of wuyi-Nanling Mountainous watershed at Maguaiyan (麻拐岩),

Sanjiaoyan (三角岩), Houlong Dong(后龙), Yangjiayan (杨家岩) and Dongweiyan (洞尾岩) caves in Daoxian (道县) county of Hunan Province (Yuan, J.R. 1991), the lower layer of Xianren Dong (仙人洞) and the middle layer of Diaotonghuang (吊桶环) caves in Wannian (万年) county of Jiangxi Province (JXPS 1963; JXPM 1976; SAM-PKU et al. 2014). Besides, a number of open-air sites such as Xiatang (下汤) in Xianju (仙居) County of Zhejiang (Sun, H.L. et al. 2019), the upper layer of Lianhuachishan (莲花池山) in Zhangzhou of Fujian (You, Y.Z. 1991), No. 17 and 18 locations at Xiqiaoshan (西樵山) site in Nanhai (南海) of Guangdong (Huang, W.W. et al. 1979; Zeng, Q. 1984), also belong to the culture of this stage.

These remains mainly contain three categories of stone implements, reflecting the origin, continuation, and change of prehistoric culture in this Paleolithic-Neolithic turning stage in the south coast of China (Figs. 3.2, 3.3 and 3.4).

A. Chipped pebble stone implements, includes the discoid or ball shape beating, knocking, or chopping tools with straight blade or arc edge, made of the flat, long and round pebble or thick pebble flake, the discoid or fan shape scrapers with straight blade or arc edge made of pebble flakes, and the pointed implements made of pebble flakes. This series of remains are common and

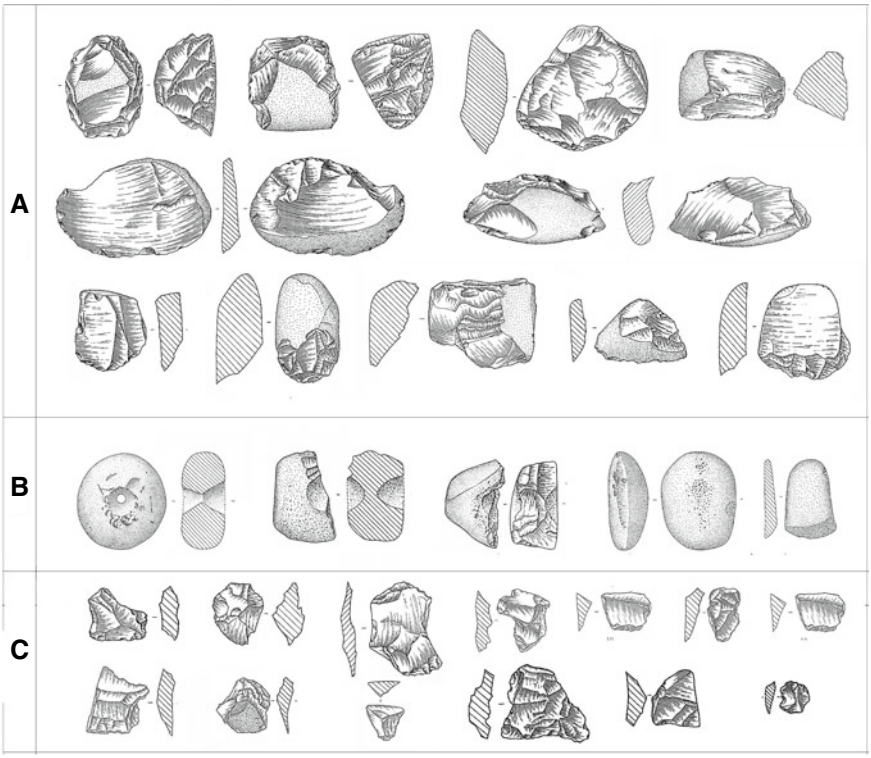

Fig. 3.2 Three categories of stone implements of the second–third stages of Bailian Dong

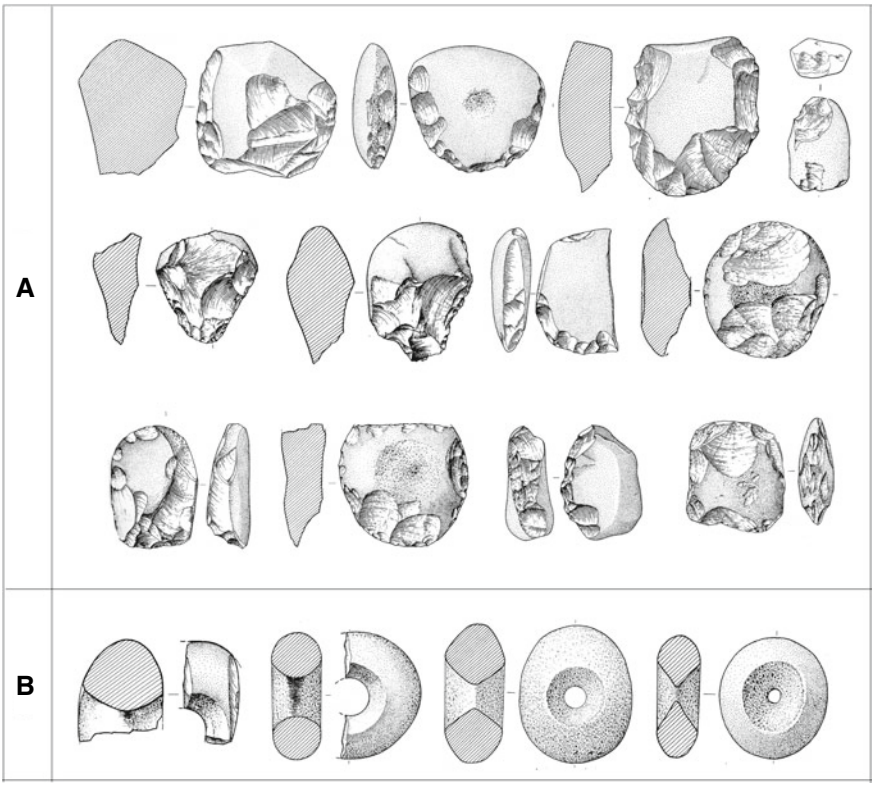

Fig. 3.3 Two categories of stone implements of Zengpiyan

representative in cavern sites around ten thousand years ago, except that in Yawai Dong cave in Long'an of Guangxi.

B. The innovative implements of "Neolithic" type including the chipped pebble tool with chiseled concave and perforation or ground edge, and the proto-axe and proto-adze. The blade cutter with ground arc oblique edge made of flat pebble flakes, and the "heavy stone" with bifacial chiseled and ground perforation made of sandstone pebble, were the two types of common artifacts from these caves. The chiseled concave pebble and coarsely ground rectangular axes and adzes were also differentially and respectively discovered in Zengpiyan and Niupo Dong caves.

C. The emergence of Microlithics and small flint implements were discovered respectively in different amounts. The typical Microlithic artifacts accompanying the pebble tools were small flint tools (Bailian Dong, Liyuzui, and Niupo Dong caves), including scrapers, small points, carvers, arrowheads made of flint flakes, or columnar cherty cores material. The Microlithics and small stone implements unearthed in Hailei Dong and Chaoying Dong caves in Changbin of Taiwan include core materials of indefinite form, wedge-shaped implements,

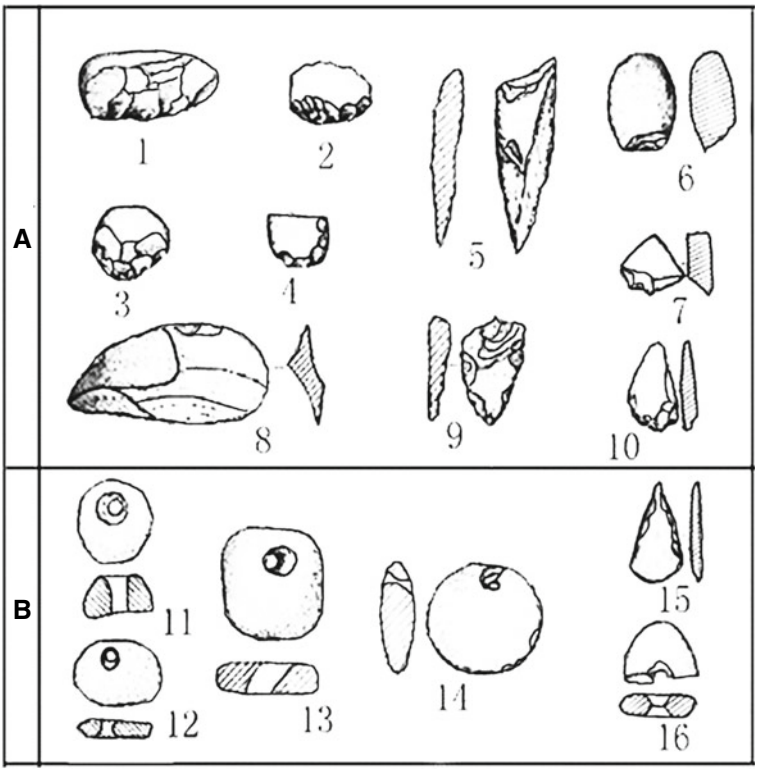

Fig. 3.4 Two categories of stone implements of Mesolithic cavern sites in Guangdong (1, 2, 6, 7, 15. Dushizi; 2, 3, 4, 16. Huangyan Dong; 5, 8, 9, 11–14. Niulang Dong)

flakes, side edged scrapers, knife-shaped device, notched edge scrapers. The remains of small stone implements along the coast of Fujian and Guangdong, represented by the upper layer of Lianhuachishan, includes fine fakes, bifacial chipped fine scrapers, pointed tools, arrowhead, carvers, drills, pestles, and so on, made of various kinds of flint, basalt, quartzite, and alike. Among them, the most representative were scrapers with a series of different shapes edge. The typical Microlithics culture represented by No. 17 and 18 sites at Xiqiaoshan were also unearthed in the second and third stages in Niupo Dong cave, includes wedge-shaped, columnar, conical, multi platforms cores, stone blades, and stone flakes made of cherty and agate, as well as fan-shaped core implements, core scrapers, core carvers, points, flake scrapers, knife-shaped tools, arrowheads.

In addition, other tools made of the bone, horn, and shell with perforating and ground edge, and primitive coarse pottery with corded pattern also unearthed in various cavern sites.

Although the above three categories of artifacts were not completely symbiotic unearthed at each cavern site, they actually constituted distinct cultural

characteristics temporally and spatially, which inherited the local Paleolithic pebble tool industry but developed a lot of innovations in the region, initiated the important technologies of Neolithic culture but remained at a preliminary stage, and, were similar with the Mesolithic cultures represented by the typical Microlithic implements in the "North" of East Asia (north of China) but mostly with different forms (Wu, C.M. 1999b).

3.2.1.2 Indochina Peninsula

The prehistoric cultures of the Southeast Asian peninsula around ten thousand years ago have been included in the academic category of Hoabinhian Culture for a long time. These remains were discovered relatively concentrating in the mountainous regions of northern Vietnam, the limestone mountains in the north and west highlands of Kanchanaburi Province and the southern region in Thailand, and the Malay Peninsula (Higham, C,F.W. 1989: 31–32).

The northern Vietnam is the most densely distributed area of Hoabinhian cultural heritage. According to the latest statistics more than 120 cavern sites in limestone mountains of the Tỉnh Hoà Bình , Tỉnh Ninh Bình , Tỉnh Thanh Hóa , Tỉnh Nghệ An and Tỉnh Quảng Bnh provinces have been excavated (Bui Vinh 1994), among them the important remains were the middle layer of Con Moong cave in the Cuc Phuong highland of Tỉnh Thanh Hóa, the middle layer of Sao Dong cave in Tỉnh Hoà Bình (Higham, C.F.W 1989: 35–38), and the middle and late stages of Nguom rockshelter in Tỉnh Bac Thai (Ha Van Tan 1995). These cavern settlements and cultural layers near rivers were mostly composed of river snail shells, mountain snail shells, wild animal bones, and cavern debris. The stone implement remains in them were mainly pebble choppers and diggers, pebble flake scrapers, points and pebble artifacts with chiseled concave, partly ground edge stone tools, as well as some bone and horn implements. For instance, the lower layer of Con Moong cave was the remains of Paleolithic Son Vi Culture, the middle layer (12,000–11,000 BP) of it was the Hoabinhian assemblages of the unifacial discoid "Sumatralith" pebble tools and short axes, together with the chopped pebble tools of Son Vi tradition, accompanied with bone and horn implements, and the upper layer was the early Neolithic Bac Sonian Culture. The other example is the Nguom rockshelter, in the shell sediments of the middle stage of the site (23,100–18,600 BP), the pebble chopped choppers with side or end edges, and pebble flake implements were excavated. The discoid pebble tool of the "Sumatralith" style, short axes, ground edge tools, and pebble flake tools, accompanying with the pebble chopped chopper of Paleolithic tradition, were also unearthed in the mollusk shell sediments and tombs in its upper layer (Fig. 3.5).

More than thirty hunter-gatherer's cavern and rock shelters of Hoabinhian Culture have also been found in limestone areas in western and northern Thailand (Kiernan, K. et al. 1987), among them the important sites are the first stage of Spirit Cave in Mae Hongson (Gorman, C.F. 1970, 1971; Higham, C.F.W. 1989: 46–54), the lower layer of Banyan Valley Cave 35 km west from Spirit Cave, Pha Chang rock shelter in Chiang Mai (Sabtoni, M. et al. 1990), Sai Yok in Kanchangaburi, the

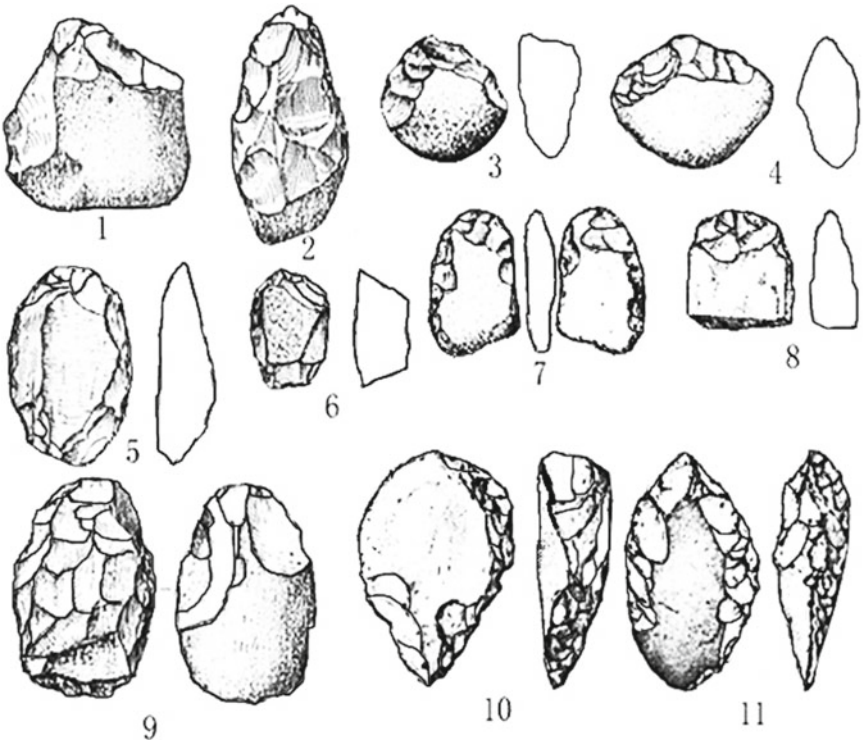

Fig. 3.5 Stone implements of Hoabiahian in the north of Vietnam (1,2,9. Nguom, 3–8, Bac Bo; 10,11. Hoabiahian)

lower, or middle and lower layers of Tham Ongbah cave, Khao Talu cave, Men cave, Hip cave, and Phet Kuha cave (Pookajorn, S. 1990). Represented by the first stage of Spirit Cave (11,690–8750 BP), the unearthed objects of the Hoabinhian layer were mainly pebble stone tools, including the discoid chopper with a row unifacial removal of flakes as Sumatralith type, scrapers, used flakes, and ground pebble and so on. The second stage (8806–7622 BP) had not only continued the cultures of pebble stone tool of the first stage but also appeared the innovative elements such as square stone adzes, ground stone knives, and hand-made coarse pottery with corded pattern, representing the cultural continuation and innovation of the Hoabinhian tradition in the early Neolithic age. In the first phase of Pha Chang rockshelter the chopped pebble tools and rock paintings were found, and among the stone implements were pebble choppers, scrapers, hammer stones, axes, chopped axes, adzes, millstones, as well as the perforated pebbles which are also commonly seen in the cavern sites of southern China (Fig. 3.6). The discoid choppers of Sumatralith type pointed pebble flakes, chisels, scrapers, hammer stones, and so on were also found in the middle and lower layers of Khao Talu, which were the witnesses to the continued activities of hunter-gatherers in western Thailand around ten thousand years ago.

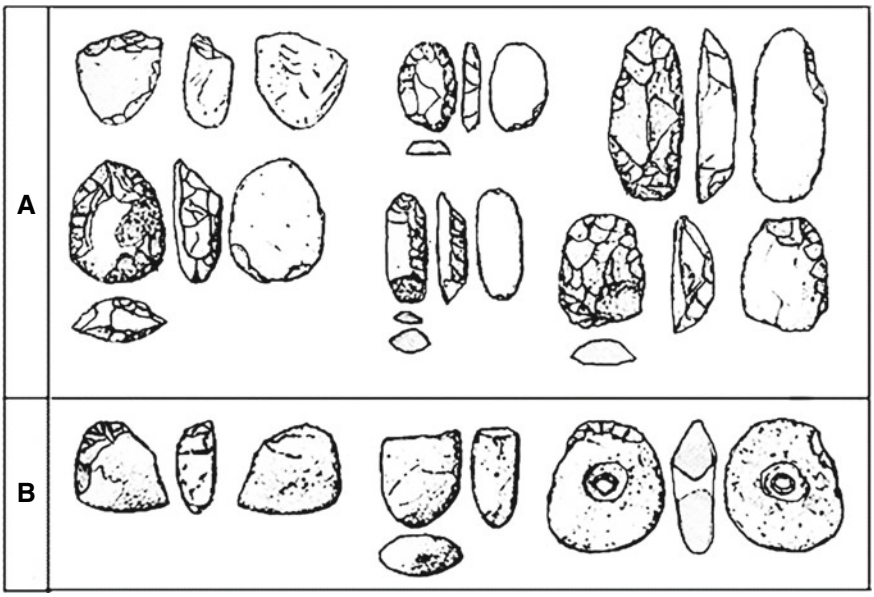

Fig. 3.6 Chopped and perforated pebble implements of Pha Chang Rockshelter in North Thailand

There are also densely populated cavern sites of Hoabinhian Culture in southern Thailand and the Malay peninsula. The important ones among them are Lang Rongrien rockshelter in Krabi Province in Thailand, Gua Bukit Ta at of Terengganu state, Gua Gunung Runtuh, Gua Kelawa, Gua Harimau, Kota Tampan, Gua Baik, Gua Kerbau in Perak state, Gua Sag, Gua Tenggek in Pahang state, Gua Peraling, Gua Chawas, Gua Madu, Gua Cha in Kelantan state of Malaysia (Bellwood, P. 1997: 158–169; Gorman, C.F. 1971). The stone implements in Gua Cha were characterized by discoid pebble implements with a row bifacial flaking, which could be the progressive type of unifacial flaking tool of general Sumatralith, and a small amount of roughly chopped pebble tools, pebble flakes, and hammer stone, as well as square stone adzes and primitive pottery. In Gua Peraling unearthed together were bifacial flaking implements, a large number of bifacial flaking discoid pebble tools, and ground edge stone tools. In Kota Tampan, unearthed together were chopped pebble tools, ground edge tools, and a large number of flakes.

3.2.1.3 Southeast Asian Archipelago

The prehistoric culture of the Southeast Asian archipelago during the Hoabinhian period also evolved into a new stage on the basis of the continuation of the Paleolithic culture with the compound assemblage of both pebble implements and the flake industries. The remains with oval-shaped, almond-shaped, and indefinite shaped pebble stone tools, pebble flakes, and a small number of ground edge

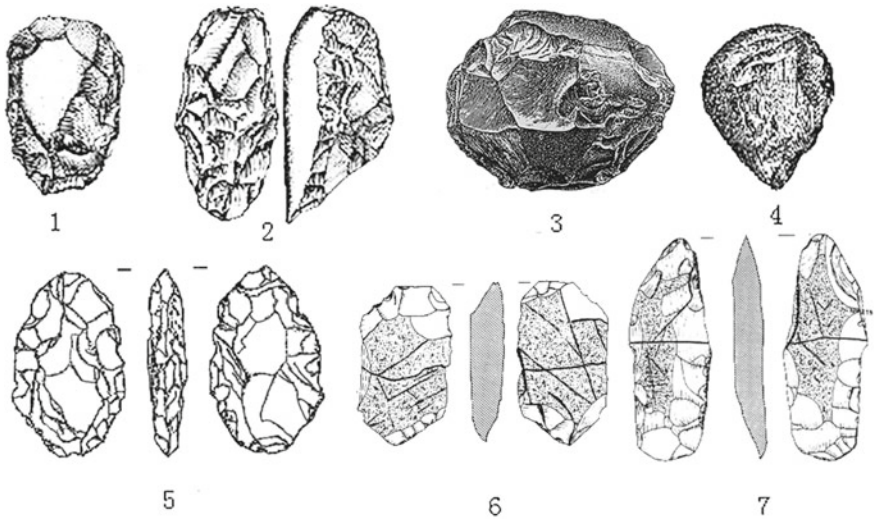

Fig. 3.7 Mesolithic pebble stone implements in Southeast Asian Islands (1–2. Cagayan, After F.L. Jocano 1975; 3. Sambat of Batanyas, After O.H. Beyer 1948; 4. Tabon, After F.L. Jocano 1975; 5–6. Tingkayu, After P. Bellwood 1990,1997)

implements were discovered, as well as the remains of Microlithic of flint and obsidian implements (Figs. 3.7 and 3.8).

The remains of the Hoabinhian Culture represented by chopped pebble tools and ground edged stone tools also have been discovered in Lhokseumawe and Medan shell mounds in Sumatra, the middle layer of Niah cave, Tingkayu site and nearby Madai caves, Baturong rockshelter, and Lahad Batu bay in Kalimantan (Bellwood, P. 1990, 1997: 169–170, 173–175; Cheng, T.K. 1969), as well as in the later stage of Liwan remains in the Cagayan valley in northern Luzon, the middle layer of Tabon and Guri caves in Palawan of Philippines (Jocano, F.L. 1975: 77–85). Among them, in Lhokseumawe shell mound the row flaked discoid pebble implements, long pebble stone tools, bifacial flaked implements and ground edged implements, millstone, and chiseled concave pebble implements were discovered. In the Mesolithic layer of the Niah cave, the improved flake tools and ground edged pebble axes were collected. In Tingkayu and Madai caves, Baturong rockshelter and Lahad Batu bay also unearthed regular oval-shaped chopper, sharp point with bilateral symmetry, drills, and carvers processed with pebble cores and pebble flakes. In the later stage of Liwan remains, the unifacial pebble flake scrapers, and pebble core choppers, and prototype "hand axe" were unearthed together with "horse hoof shaped scraper". In Tabon and Guri caves also discovered a number of regular discoid and almond-shaped pebble tools.

The Microlithics and small stone implements made of flint and obsidian flakes can be seen in Rizal and Bulakan in Luzon (Beyer, H.O. 1948: 12–14; Jocano, F.L. 1975: 186–190), Leang Burung No. 2 cave, Ulu Leang No. 1 cave, Paso shell mound in Sulawesi island, Uai Bobo in East Timor (Bellwood, P. 1997: 181–189). Among them, the Bulakan assemblage of various types of fine and small scrapers

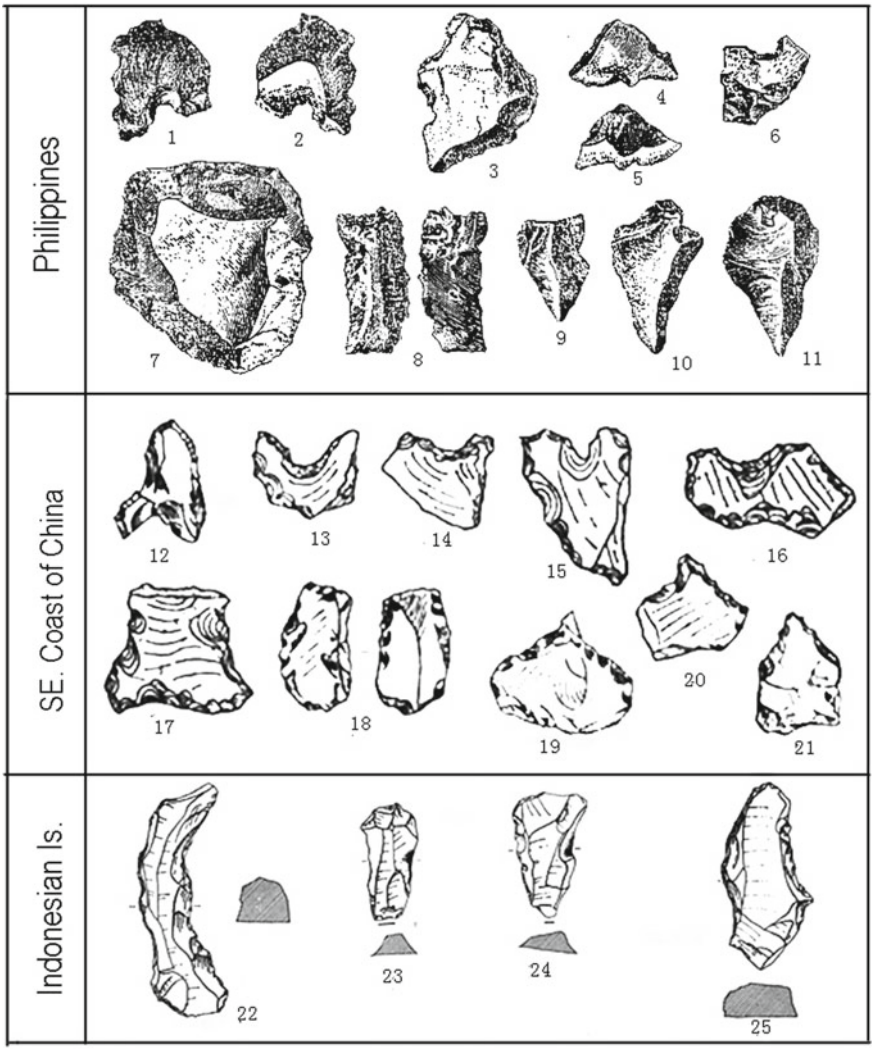

Fig. 3.8 Microlithic implements on south coast of China and Southeast Asian islands (1–11. Rizal and Bulakan, Philippines, After O.H. Beyer 1948; 12, 18–21. Xiangshan of Nan'ao, GuanDong, After Q. Zeng et al. 1995; 13–17. Dongshan, Fujian, After Y.Z. You 1991; 22–25. Uai Bobo, After P. Bellwood 1997)

with blades of concave, convex, concave and convex, concave and straight, or single straight, and the points, processed with obsidian, cherty and volcanic glass were very unique. The obsidian small stone tools in Leang Burung No. 2 cave were processed with obsidian flakes and multiplatform cores. The stone tools in the Ulu Leang No.1 cave were characterized by their domed tools with steep edged and horse hoof shaped cores of white cherty. Cherty flakes in Uai Bobo caves in East

Timor were processed into steep edged scrapers, and, some utilized flakes, long and thick blades were also discovered.

3.2.2 *The Continuation, Innovation, and Exchanges of Stone Tool Industry*

Among the three categories of stone industries in the "Maritime Region of Southeastern Asia" around ten thousand years ago, the mainstream was the continuously progressive pebble stone industry (implements of category A and B) which originated indigenously in distant Paleolithic age.

Pebble implements were the major tradition of Paleolithic culture in the "South" of East Asia that lasted for hundreds of thousands of years. They were discovered in Paleolithic sites early in the middle layer of Pleistocene, such as in Shilongtou (石龙头) in Daye (大冶) of Hubei, Jigongdang (鸡公垱) and Dashengmiao (大圣庙) in Lixian (澧县) of Hunan, Shuiyangjiang (水阳江) in Xuanzhou (宣州) of Anhui, Baise (百色) basin of Guangxi, the lower layer of Lingfeng (灵峰洞) cave and Chuanfan (船帆洞) cave at Wanshouyan (万寿岩) in Sanming of Fujian, as well as the early remains in Ban Mae Tha, Sao Din in Thailand, the early stage of Liwan Culture in Luzon of the Philippines. Other pebble implements of the early stage of late Pleistocene were discovered at Lion Rock (狮子岩) and Qima Rock (骑马石) in Maba (马坝) of Guangdong, Yongshan Rock (涌山岩) in Leping, Liaohe (潦河) in Anyi, Zhushanyuan (竹山园) in Pingxiang of Jiangxi (Wang, Y.P. 1997: 62–90; Wu, C.M. 1999c: 41–61). Most of these remains were large choppers, points, scrapers, and bifacial flaked quasi "hand axe" made of pebble cores and large pebble flakes, which were processed by platform of the pebble surface with mostly hammered unifacial flaking and gradually developed bifacial flaking. These remains had developed for hundreds of thousands of years, but the connotation of the pebble cobble and pebble flake industry was basically preserved stability in this cross-border region, reflecting the emergence and the earliest stage of cross-border community in the "Maritime Region of Southeastern Asia".

By the later Late Pleistocene Age, which was about 50 to 12 thousand years ago, the pebble implement industry flourished and was mainly discovered in cavern sites. Among them, the importances are the first stage of Bailian Dong (白莲洞) in Liuzhou, Baojiyan (宝积岩) in Guilin, Dingmo Cave (定模洞) in Tiandong (田东) of Guangxi, Ruoshayan (罗砂岩) in Fengkai (封开) of Guangdong, the upper layer of Chuanfan Cave (船帆洞) in Sanming (三明), the lower layer of Lianhuachishan and Zhulinshan (竹林山) in Zhangzhou of Fujian, Qianyuan Cave (乾元洞) in Taidong of Taiwan (Jia, L.P. et al. 1960; SMBLZ et al. 1987; Wang, L.H. et al. 1982; Li, Y.H. et al. 1985; Zhang, Z.Q. et al. 1994; You, Y.Z. 1991; He, C.K. 1996; Tsang, C.H. et al. 2018), the lower layer of Con Moong, the lower layer of Sao Dong (Higham, C.F.W. 1989: 35–38), the early stage of Nguom rock shelter in the northern Vietnam (Ha Van Tan 1995), the lower layer of Niah in

Kalimantan (Cheng, T.K.1969), the late stage of Liwan in Luzon , the lower layer of Tabon Cave in Palawan in Philippines (Jocano, F.L. 1975: 77–85), most of them were deposited in the lower layer of the Hoabinhian Culture sites. In general, these remains continued the culture of earlier stages of the choppers, scrapers, hammer stones, points processed with pebble cobble, and pebble flaker, which were made by unifacial flaking with hammer stone on a platform of pebble cobble surface.

At the turning period of the Pleistocene and Holocene around ten thousand years, whether the caverns and rock shelters differentially distributed in the south China, Indochina peninsula, and Southeast Asia islands or the shell mounds and open-air sites in Luzon and Kalimantan, shared both inheritance and innovation of chopped pebble tool industry, indicating to some extent the postglacial cultural community of "Hoabinhian Age" in this "Maritime Region of Southeastern Asia". The main chopped stone implements of this industry include the relatively regular or symmetrical, oval or almond-shaped, flat discoid pebble choppers, beaters, and various forms of pebble flake scrapers. The technologies and forms of pebble stone tools in this stage were finer, more diverse and improved than those in the middle and late Pleistocene, representing the developed stage of pebble tool industry.

Coexisted with the major of the chopped pebble tool industry during this time and space was varying degrees of improved pebble tool complex with chiseled perforation, concaved surface, ground edge, as well as quasi "Neolithic" of embryonic axes and adzes. These innovative technologies include the grinding and polishing the fracture section of the pebble cores or pebble flakes into oblique, arc cutting edge of choppers and scrappers, the seriously and bifacial row flaking and grinding the flat pebble core or pebble flake into oval, rounded rectangle or rounded square implements as embryonic axes and adzes, the biface-chiseled flat pebbles into perforated artifacts, the biface-chiseled pebble into concaved stone tools, and correspondingly, the grinding edge and perforated bone, horn and clam into various tools. These compounds of new elements were the foundation of Neolithic stone tool technologies, different but inseparable from the original cultural tradition of Paleolithic pebble tools. They were the continuous, inheriting development and innovation of the local pebble tool industry, revealing the strong vitality of this indigenous pebble tool tradition and the important clues of native origin of Neolithic culture.

The gradual development of several categories of Microlithics and small stone tool industries in the "Maritime Region of Southeastern Asia" and their coexistence with mainstream pebble tools assemblage reflects the general and common trend of the postglacial global cultural "upheaval" around ten thousand years ago, and the exchange of prehistoric culture between the south and north of East Asia.

Firstly, in a few typical remains of Microlithics culture, such as Xiqiaoshan No. 17, 18 and Niupo Dong cave, wedge-shaped, columnar, conical, multiplatform cores, stone blades and flakes, and various kinds of stone tools made of these Microlithics cores and flakes were almost the same as those of the typical Microlithics culture in north of China developed since the late Pleistocene, which should be the result of the cultural spreading of "North" Microlithics southward to this early "South of the South".

Secondly, the remains of the small stone tools made of flint flakes coexisted with pebble stone tools in the Bailian Dong, Liyuzui, and Niupo Dong caves, shared the common features with the small stone tool industry of north of China since the middle and late Pleistocene. A small number of columnar cores also belonged to the category of Microlithics. Both of these the regional small stone culture in the south should have been formed under the influence of the Microlithics and small stone industry of "North" China. The wedge-shaped flake implements discovered in Hailei Dong and Chaoying Dong caves in Changbin of Taiwan shared the similar cultural connotation of the Microlithics in north of China, and some flakes were also similar to that of the late Paleolithic culture in the western islands in Japan.

Lastly, small flint tool remains on the coast of Fujian and Guangdong, especially the large amount of the variously characteristic curved blade scrapers represented by the upper layer of Lianhuachishan were in some degree similar with the "North" small stone tool industry. And, on the representatively concaved flint blade scrapers were similar to those discovered in Sanshan Island (三山岛) of Wuxian (吴县) in Jiangsu Province (Chen, C. 1987). However, on the whole, the local characteristics of this small flint implement industry were prominent. Quite similar remains were also discovered in Rizal, Bulakan in Luzon, Leang Burung 2, Ulu Leang 1 caves and Paso shell mound in Sulawesi island, and Uai Bobo Cave in East Timor, reflecting one of the important commonness of small flint tool industry and the possible cultural interaction in this cross-border maritime region around ten thousand years ago.

In short, the indigenous tradition of prehistoric culture characterized by pebble tool industry actually originated in distant Paleolithic and developed lately into the Neolithic age in the "Maritime Region of Southeastern Asia". The pebble tool industry continued to be the main stream of the cultures in this cross-border region at the turning period around ten thousand years ago, with the technological innovations such as perforation-chiseling, concave-chiseling, and edge-grinding on pebble tools and the creation of quasi "Neolithic" type embryonic form of axes and adzes, indicating the profound indigenous foundation of local Paleolithic tradition in initiating of Mesolithic and early Neolithic cultures. At the same time, the gradual introduction of the Microlithics and small stone tool industries from the "North" to varying degrees became one of the sources of Microlithics and small stone tools with the local characteristics of this prehistoric "South of the South".

3.3 Discussing on "Language-Farming Model" and Ethnical "Two-Layer Model" Related to the Origin of Austronesian from the View Point of Indigenous Paleolithic Cultural Inheritance

The indigenous characteristics and their cultural continuity during the Mesolithic and early Neolithic ages around ten thousand years ago in the "Maritime Region of Southeastern Asia", being represented by both the inheritance and innovation of

pebble tool industry of Paleolithic, provide the new clues for re-understanding the prehistoric cultural evolution, ethnical migration and population change of this region and the related issue of the origin of Austronesian.

The argument of the "Ethnic Replacement" or "Population Change" of the origin of Austronesian based on "Language-Farming Model", cuts apart the continuing line of cultural development in the "Maritime Region of Southeastern Asia" at the turn point between the Paleolithic and Neolithic ages. The new stage of prehistoric culture, being represented by the technological innovations of the pebble tool such as perforation-chiseling, concave-chiseling, and edge-grinding, as well as the quasi "Neolithic" type embryonic forms of axes and adzes, actually inherited and developed the local tradition of pebble tool industries of hundreds of thousands of years ago, rather than the result of "introduction" by or "intrusion" of an "external" Neolithic culture. In other words, the typical material and cultural characteristics as the basis of the argument of "Ethnic Replacement" of "Two-Layer Model", such as the ground stone tools and pottery making of so-called the "upper layer" cultures and "foreign invaders" of the "post-Hoabinhian" stage, were actually the products of indigenous cultural continuation, inheritance, and innovation of the long-standing Paleolithic tradition.

The "Language-Farming Model" and "Two-Layer Model" generally regard Austronesian as migrated rice farmers different from the indigenous "hunter-gatherers" in the mountainous coast of the south China and Southeast Asia, that is, the race of "upper layer" in the "Two-Layer Model". This "Two Layer" was depicted as the indigenous hunter-gatherers of lower layer and the rice farmers of upper layer who migrated southward from the north. In this model, "rice farming" was considered as the inherent cultural essence of the proto-Austronesian, and the spreading history of rice farming was taken as the key evidence of the dispersal of Austronesian. This argument is not consistent with the main aspect of ethnic histories that the indigenous "hunter-gathers" continued and developed their original culture and subsistence pattern for thousands of years during Neolithic Age in south coast of China and Southeast Asia, which were demonstrated by the cultural continuation and inheritance from the Paleolithic to Neolithic ages in this cross-border region.

On the one hand, in view of the development of the subsistence economy in the "Maritime Region of Southeastern Asia" over the past ten thousand years, indigenous cultures, including the proto-Austronesian, remained in a state of "hunting-gathering" for a long period of time. The history of Austronesian activities in this region is much earlier than that of rice farming. Agriculture, especially rice cultivation, is not the inherent livelihood and subsistent pattern of Austronesian. The southward track of the dissemination of rice farming is by no means circumstantial evidence of the Austronesian migration and the history of Austronesian ethnic replacement and conquest, but only the new cultural feature disseminated southward from the middle and lower reaches of the Yangtze River, which were gradually accepted by the indigenous hunting-gathering-fishing people including Proto-Austronesian in the late stage of their history.

The middle and lower reaches of the Yangtze River are one of the independent origin centers of cereal domestications in the world. The cultivation of rice here

originated roughly about ten thousand years ago, initially developed in 8000–7000 years ago, and were more developed in Hemudu (河姆渡), Chengtoushan (城头山) in 7000–6000 years ago. However, in the coastal and mountainous regions of Fujian, Guangdong, and Guangxi, which are located to the east and south of Wuyi-Nanling mountain watershed, rice cultivation did not start until 6000–5000 (Guangxi) to 5000–4000 (Fujian and Guangdong) years ago, and was introduced into the Red River Delta of Southeast Asia about 4000 years ago, and then into the southern coast of Vietnam and the Gulf of Thailand between 3500 and 3000 years ago. Rice, millet, and other cultivated agriculture were introduced into Taiwan about 5000–4000 years ago in the late stage of Tapenkeng Culture (Zhao, Z.J. et al. 2005; Zhang, C. et al. 2009; Higham, C.F.W. 2019; Kaikkonen, T. 2019; Tsang, C.H. et al. 2013: 158–159). A newly discovered phytolith remain of the domesticated rice in two layers of Minanga Sipakko site in Sulawesi Island of Indonesia, dating back to 3500–2500 years ago, pushing evidence of rice farming to the more southern Southeast Asia archipelago (Deng, Z.H. et al. 2020). In fact, there is no evidence that the spread of rice farming to the south "synchronized" with the prehistoric cultural and ethnical change. In the strata discovered of the early rice farming in Vietnam and Southeast Asia, the Neolithic culture preserved and continued its original and local connotation, while in Taiwan, the rice farming even appeared as late as the late stage of the development of Tapengkeng Culture, both of which revealed that the rice farming had been accepted by the varying and maturely developed Neolithic cultures while it spread southward. There is no evidence of synchronic emergence of the migrated Austronesian and southward rice farming on south coast of China and Southeast Asia. In the meantime, after the emergence of rice farming in mountainous coastal areas lying to the east and south of Wuyi-Nanling mountain watershed and Southeast Asia, it had been underdeveloped on a small scale for a long period of time, the original local foraging pattern of hunting, gathering, and fishing had generally coexisted as the main part in the social-economic life. Not until 2500 to 2000 years ago, being equivalent to the Zhou Dynasty and even in the Eastern Zhou, Qin, and Han dynasties in the chronology of the Central Nation, rice farming just began to develop on a large scale in some estuaries, deltas of big rivers and coastal plains in regions (Wu, C.M.1996; Ma, T. et al. 2019, 2020). Obviously, the fact that rice farming had been widely spread and become the main food production pattern along the mountainous coast of south China and Southeast Asia was the result of cultural practices of regional indigenous people in the late prehistoric period, far later than the history of aboriginal *Bai Yue* ancestors and proto-Austronesian.

Regarding ethnographical distribution of the livelihood patterns of the Austronesian, rice farming was neither the common cultural connotation of all branches of Austronesian, even nor the subsistent method of its main population in the three archipelagos of the Pacific. So, it is hard too say that the rice farming had been the inherent means of livelihood of the proto-Austronesian. Although the coastal population of the Indochina Peninsula and the islanders of Southeast Asia and Madagascar have developed rice cultivation in their history and have continued it to the present, there is no agricultural practice of rice and other major starch grain cultivation in all three Pacific archipelagos, where the Austronesian have been

densely dispersed. They planted root tubers such as dioscorea, taro, arrowroot (kudzu), ginger, sugar cane, sweet potato, and fruits such as coconut, breadfruit, banana, plantain, gourd, and pepper, mainly by the "agroforests" or "orchard gardens" system. This horticultural system was the basis of their livelihood and even the basis for the development of a few complex societies of local Pacific. In the archaeological sites of Lapita Culture, which dated about 3500–2500 years ago and was the oldest archaeological remains of Austronesian of the Pacific Islands, no remains related to cultivated rice has been found (Kirch, P.V. 2002: 109–112). In the eastern far end of the ocean dispersal of the proto or historical Austronesian, the indigenous peoples of three Pacific archipelagos should be logically the descendant of early population in the history of ethnic migration, therefore, obviously, rice farming was not the inherent cultural connotation of the proto-Austronesian. Before the spread of pro-Austronesian or Austronesian to the south coast of China, Southeast Asia, and the Pacific archipelagos, there was no rice farming. That is to say, the early proto-Austronesian was not "Rice Farmer". Before the rice farming gradually spread along the coast of south China and Southeast Asia, the proto-Austronesian had long lived in this land-sea connecting maritime region, with the compound foraging means of gathering, fishing, hunting, and the broad utilization of the tubers plants as their common, inherent and lower layer of subsistent pattern.

Taking "Rice Farming" as the inherent cultural characteristics of the proto-Austronesian and tracking the path of so-called Austronesian migration and dispersal along the spreading history of rice cultivation from south China to Southeast Asia, began with the linguistic practice of the Austronesian investigation. The linguistic paleontologists inferred and reconstructed the environmental and cultural background of contents including the animals and plants in the original land of the proto-Austronesian before migration, based on the analysis of the lexical composition of modern Austronesian languages. The representative figure in the field was made by Dutch linguist H. A. Kern who inferred dozens of plant and animal components inherent in the proto-Austronesian, including sugar cane, coconut, banana, bamboo, reed, rice, cucumber, sweet potato, nettle, taro, etc. It is true that linguistic inference may investigate the cultural composition and environmental characteristics in the "history" of a particular ethnic group, but these characteristic elements would be actually the superposition and accumulation of historical process, lacking the scale of time depth and the reliable dating respectively for each different historical element. The plant components inherent in the so-called "proto-Austronesian" Kern inferred, in fact, varied greatly with their starting times being used and cultivated. For example, the sweet potato, which was originally cultivated in America, spread to Southeast Asia and East Asia only after the Age of Discovery and maritime globalization less than 500 years ago, through Spanish trans-Pacific the "Manila Galleon" maritime trade routes. Obviously, linguistic methods can not accurately determine date and period of "history" when these plant components were used and cultivated by Austronesian, while "Rice Farming" included in them, had been verified by archaeological discoveries as a new feature of the Austronesian's subsistence and livelihood pattern in the late stage after fishing, hunting and gathering of their ancestor.

On the other hand, the "Two-Layer Model" of the ethnic history of Southeast Asia in last ten thousand years reconstructed by physical anthropology is synchronized with the changing of the subsistence patterns from hunting-gathering to rice farming but did not coincide with the migration and replacement of Austronesian. Judging from the latest evidences of paleo-anthropology and molecular anthropology in the "Maritime Region of Southeastern Asia", the people of Malay-Polynesian or Austronesian are not the "upper layer" rice farmers in the "Two-Layer Model", but the indigenous hunter-gatherers in "lower layer", being consistent with the continuation and inheritance of Paleolithic cultural tradition in Neolithic Age.

The regional features and diachronic stratification of the ancient ethnic groups in the "Maritime Region of Southeastern Asia" were complicatedly intertwined. The traditional research of paleo-anthropometrics and archaeology in last more than 100 years shared the general consensus that there had been both the continuation, inheritance of indigenous ethnicity, and mixture of variants during the long history of ethnic migration and interaction. Early research revealed that the main body of race and ethnic groups since prehistoric times had been stable and inherited, at least, the populations in Southeast Asia of the late Pleistocene to the early and mid-Holocene had hereditary genetic connection with the present Melanesians of Austronesian. These discoveries became the basis of the main viewpoint of preliminary "Regional Continuity Model" or "Local Evolution Hypothesis" of this regional physical anthropology (Howard, A. 1967; Wu, X.Z. 1987). Zhu Hong (朱泓) stated that the skulls of Neolithic "Ancient South China Type" represented by Hemudu (河姆渡), Tanshishan (昙石山), Hedang (河宕), Youyugang (鱿鱼岗), Zengpiyan (甑皮岩) and Jinlanshi (金兰寺) showed the species characteristics of the "Ancient *Yue* Ethnic" and their mixing with the northern Chinese population who historically moved southward and forming the contemporary southern Chinese people. He discovered that this "Ancient South China Type" had also been close to Indonesians and Melanesians as the branches of Austronesian, whose origin could even be traced to the Liujiang (柳江) people of late Paleolithic age (Zhu, H. 2002). Anyway, these early physical Anthropological studies also found evidence of the ethnic evolution and its stratification, that is, before the Han and Indian population migrated to Southeast Asia, indigenous Negrito, Negroids, Malay Polynesia (or Indonesian, that is, Austronesian) had been active in this region.

The more explicit information of "Two-Layer Model" found in the study on the nonmetric features of dental morphology also confirmed that the people of "lower layer" or the early ethnic groups of East and Southeast Asia had originated from late indigenous population of the Pleistocene period and had been closely related to Oceania natives. By distinguishing the geographical types of dental morphology, C. G. Turner II considered that the "Sinodonty" of north China, Mongolia, and south Siberia, and the "Sundadonty" of the Southeast Asian Peninsula and the archipelago centered on "Sunda Shelf", extending to Hokkaido and Sakhalin of marine Northeast Asia, were separated and evolved respectively in their own path for a long time. The Sundadonty type at least has kept its local features preserved from the late Pleistocene, with many characteristics similar to that of the indigenous

Australian, which is the result of continuous population inheritance and local evolution. However, he also acknowledged that the populations in Southeast Asia, including Malays, Thais, and Laotians, had temporally external genetic exchanges and regional changes that evolved in the direction of the "Sinodonty" (Turner II, C. G. 1990). Hirofumi Matsumura's similar study proposed the variation and stratification, their "Two-Layer Model" also argues that the early populations were closely related to modern Australian and Melanesian populations and that late population variability was associated with the spread, diffusion, and population expansion in East and Northeast Asian driven by agriculture in Neolithic Age. However, they also admit that these "two layers" of the new population expansion and the early indigenous population are not completely separated, but interacted with genic exchange and mix, eventually forming the morphology and genetic composition of the population in Southeast Asia today (Matsumura, H. et al. 2014).

The recent studies of molecular anthropology further support the viewpoint of the indigenous or "lower layer" essence of the proto-Austronesian population, rather than immigrated or "upper layer" feature. In the skull remain of "Liangdao I" (亮岛I号) dating back to 8,320–8,160 years ago, the researchers reveal that mitochondrial DNA of haplogroup E1, are commonly seen among aboriginal Taiwanese, Filipino, Indonesian and Pacific islanders but not in the mainland Chinese. Moreover, in "Liangdao II" dating back to 7,590–7,560 years ago, mitochondrial DNA of haplogroup R9b, R9c, are commonly seen among indigenous Zou (邹), Bunong (布农), Lukai (鲁凯) of Taiwan, Filipino, Indonesian and Pacific Islanders but rarely seen in Chinese (Chiu, H.L. 2015; Chen, C.Y. 2019). A newly published DNA study of migration and assimilation of the ancient people in China shows that early Neolithic populations in the south and north presented different patterns and had no common ancestors, the Neolithic peoples of Southeast Asia and the South Pacific shared highly genetic similarity, which proves that Austronesian originated in Fujian and adjacent coastal areas of south China 8400 years ago (Yang, M.A. et al. 2020).

The evidences of economic archaeology and physical anthropology show that it is the "upper layer" population of the "Two Layer" gradually promoted the spread of cultivated agriculture such as rice farming from the middle and lower reaches of the Yangtze River to Southeast Asia. The skull and dental morphology unearthed in Man Bac in Beibu (Bac Bo) Gulf of North Vietnam, Khok Phanom Di of Thailand, and other typical sites of early rice farming in Southeast Asia dating back to three or four thousand years ago, show the variation characteristics of the "upper layer" population and culture, which is considered to be related to immigration of the rice farmers in the Yangtze River Delta (Higham, C.F.W. 2019; Matsumura, H. et al. 2014). But, earlier than them, the human remains in the tombs of Vietnam's Hoabinhian and Bac-Sonian cultures as the typical hunting and gathering society in Southeast Asia have been identified as Melanesia and Indonesian branches of the Austronesian (Bui Vinh, 1994). The same is true of the hunting and gathering society in the early Neolithic age in the mountainous areas of south China. The study of the skull morphology of Gaomiao (高庙) Culture in Hunan dating back to six or seven thousand years ago showed its connection with the lower layer of the "Two Layer",

which has the genetic characteristics of the early indigenes in southern Eurasian continent since the late Pleistocene, and share the common ancestors with the present indigenous Australian and Melanesian peoples (Matsumura, H. et al. 2017).

It is obvious that whether the paleo-anthropometrics, recent dental morphology, or molecular anthropology studies, in the "Two-Layer Model" of ethnic studies of the Southeast Asia, it is the "lower layer" indigenous people as the direct descendants of ancient foraging people since the late Pleistocene that have directly genic relationship with Melanesian and others Austronesian in Pacific, rather than rice farmers of the "upper layer" who gradually moved from the north to south, causing the "variation" of southeast Asian populations and the genetic exchange in the direction of "Sinodonty" in three to four thousand years. Therefore, these immigrated rice farmers into Southeast Asia during the late and the latest Neolithic age might not be the new formation of Austronesian and Austroasiatic people of the "Maritime Region of Southeastern Asia".

3.4 Conclusion

The cultural commonness, the indigenous continuity and inheritance of the pebble tool industry, and the local origin of Neolithic culture in the "Maritime Region of Southeastern Asia" around ten thousand years ago provided important clues for rethinking the prehistoric origin and migration of Austronesian.

The pebble tool industry with far distant origin since the early Paleolithic age continued to be the cultural property of the Paleolithic-Neolithic turning period. The new technologies such as perforation-chiseling, concave-chiseling, edge-grinding, and quasi "Neolithic" type embryonic axes and adzes, represented the origin, innovation and development of local Neolithic culture on the base of indigenous Paleolithic tradition. The introduction, and assimilation of the Microlithics and small flint tools as supplements of this period reflected the global cultural trend and the cultural interexchange between north and south of East Asia. The mainstream of this indigenous continuity, inheritance, and innovation of Paleolithic culture around ten thousand years revealed the deep roots of prehistoric aborigines such as Austronesian, who are not the foreign immigration transplanted and conquered this maritime region in the late and the latest Neolithic period.

The "Two-Layer Model" of livelihood economy and ethnic history revealed the indigenous and "lower layer" characteristics of the Proto-Austronesian. The archaeological discovery and chronology of domesticated rice and the ethnography of the subsistence patterns of Austronesian in the "Maritime Region of Southeastern Asia", proved that rice farming was not the inherent livelihood pattern and cultural essence of the proto-Austronesian, that the emigration history of Austronesian was not synchronized with the spread of rice farming culture, that the main body of the indigenous community, including the proto-Austronesian, was the direct descendants of the indigenous "fisher, hunter and gatherers" of Paleolithic, Mesolithic and early Neolithic age around ten thousand years ago and even earlier, that rice

farming was the just result of the cultural spread and influence of the lower reaches of the Yangtze River, which was accepted by the proto-Austronesian later than the mid-Holocene. The "multi-layer" or "two-layer" models of physical anthropology also confirmed that the prehistoric and early historic people of "lower layer", such as "Ancient South China Type" or "Sundadonty Type" more than seven or eight thousand years ago, were genetically related to the indigenous Australian and Oceanian population. These "lower layer" people were actually the foraging population of the turning period between Paleolithic and Neolithic, as well as the early and middle Neolithic ages, whose ancestors can even be traced back to the earlier human being of south coast of China as Liujiang Man in the late Pleistocene. On the contrary, the "upper layer" population with rice farming culture is characterized by "genetic variation", which can be classified as "Sinodonty", Northeast Asian or mainland Chinese, and their immigrant mixture since the late prehistory. They might not be the main origin of Austronesian and other indigenous people in the "Maritime Region of Southeastern Asia".

In conclusion, the indigenous population of the "Maritime Region of Southeastern Asia", including Austronesian, were the direct descendants of early prehistoric fisher, hunter, and gatherers who proliferated and evolved in thousands of years, based on the Paleolithic tradition of pebble tool industry. This indigenous population was not the rice and millet farmers immigrating to mountainous coast of South China and Southeast Asia from the middle and lower reaches of the Yangtze River after the late and the latest Neolithic Age. During the last glacial epoch, the global sea level dropped sharply, causing that the shallow shelf around the South China Sea where the "Sunda Shelf" situated was exposed to be the "land bridges" along the coast of South China, Beibu (Bac Bo) Gulf, Gulf of Thailand, Java Sea, Taiwan Strait, and Bashi Strait, connecting the "continent" and "islands" in the "Maritime Region of Southeastern Asia" into a broader land environment. This land bridges connection might be one of the reasons the indigenous ancestors such as the Proto-Austronesian moving to and staying in this coastal region since the far distant Paleolithic age.

Chapter 4
The Spatial Variants and Temporal Sequence of the Indigenous Cultural System of Southeast China During Neolithic, Bronze, and Early Iron Ages

The archaeological cultures from Neolithic Age to early Iron Age in the Southeast of China including south of Jiangsu (江苏) and Anhui (安徽), Zhejiang (浙江), Jiangxi (江西), southeast of Hunan (湖南), Fujian (福建), Guangdong (广东), Guangxi (广西), Hainan (海南), Taiwan (台湾) and the adjacent coast of Vietnam, compose one of the special segment in the unity of "Assimilation and Integration of Pluralistic Cultures" in prehistoric and early history of China. These regional cultures with the continuingly temporal sequence have developed for thousands of years from early Neolithic Age to early Iron Age, "Relying on *Huaxia* Nationality of Central Nation and Facing Maritime Barbarians of Austronesian", are just the material cultural heritages of the indigenous *Miao, Man*, *Bai Yue* and their ancestors in the "Southeastern Direction" of the ancient Chinese history. The archaeological investigations on these indigenous cultural heritages in southeast China from Neolithic to early Iron Age, mainly focused on the evolution of the spatial and temporal types of material cultures characterized by stepped stone adzes, shouldered stone axes and adzes, and stamped pattern potteries, providing an empirical basis for understanding the prehistoric and early cultural distribution and evolution, as well as ethnic group migration, North-South or Center-Periphery interaction, and cultural assimilation between *Huaxia* nationality in North and indigenous *Miao, Man* and *Bai Yue* ethnicities in South (Lin, H.X. 1936, 1937, 1938, 1958a, b; Lv, R. F. 1959; Li, B.Q. 1981; CREC 1981; Peng, S.F. 1987; Wu, C.M. 1999c: 62–81).

Among these spatial and temporal distributions of different cultures of Neolithic, Bronze, and early Iron ages in the "Southeastern Direction" of China, there had no parallel interregional relationship, but a complicated echelon order of different regions, respectively presenting differentiated interactions with the Central Nation of ancient Chinese civilization, while relying on *Huaxia* nationality or facing maritime "Barbarians". These differentiated levels of cultural distributions were mainly constrained by the Wuyi (武夷)-Nanling (南岭) mountainous watershed and the segmentation of oceans, resulting distinctly the regional differences between the inner and outer of mountain, between the land and sea, with different cultural

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connotations and sociocultural and economic development, forming a spatial layout with three regions distribution pattern (Wu, C.M. 1999c: 62–73).

1. The plain region with lakes and rivers lying to the south of the lower Yangtze River, and beyond the west and north of Wuyi-Nanling watershed, centering on the Taihu (太湖) Lake and Poyang (鄱阳) Lake Basins, as the north part of the "Southeastern Direction", relied on Huaxia nationality and territorially connected to the Central Plains in the middle and lower reaches of the Yellow River. The prehistoric and early cultures in this plain region were more influenced and assimilated by the "Central" *Huaxia* and *Han* (汉) cultural system of the North and their sociocultural development had almost synchronized with that of the "Center" of early civilization of ancient China.
2. The mountainous region along the coast beyond east and south of Wuyi-Nanling watershed, covering from the south of Zhejiang to Fujian, Guangdong, and Guangxi, located far away from the *Huaxia* nationality of Central Nation, and faced and connected with the maritime "Barbarians" on islands in the south sea. Though the prehistoric and early cultures of these areas were also influenced and infiltrated indirectly by the cultures of *Huaxia* system from the Central Plains, for a long period of time they developed relatively in the enclosed or semi-enclosed geographical and cultural environment. The prehistoric and early cultures relatively stagnated, the social complexity and early civilization receded far behind the north "Center", until the early Iron Age when these indigenous cultures were assimilated by the southward immigrating *Huaxia*, *Chu* (楚) and *Han* nationalities.
3. The island region of Taiwan, Hainan, and other oceanic areas, where indigenous cultures developed independently, were far beyond the range of cultural influence of the Central Plains, and the social cultures stagnated for a long period until the late and modern periods.

The feature of this differentiated echelon order of the spatial distribution of archaeological cultures with three regions and multi-districts in the "Southeastern Direction" of China, reveals geopolitical layout of the indigenous *Miao, Man* and *Bai Yue*, as well as their interaction and assimilation in varying degrees with the cultures in Central Nation and north of China (Fig. 4.1; Table 4.1).

4.1 Relying on the *Huaxia* Nationality: The Cultural Assimilation Within the Plain Region Lying to the South of the Yangtze River

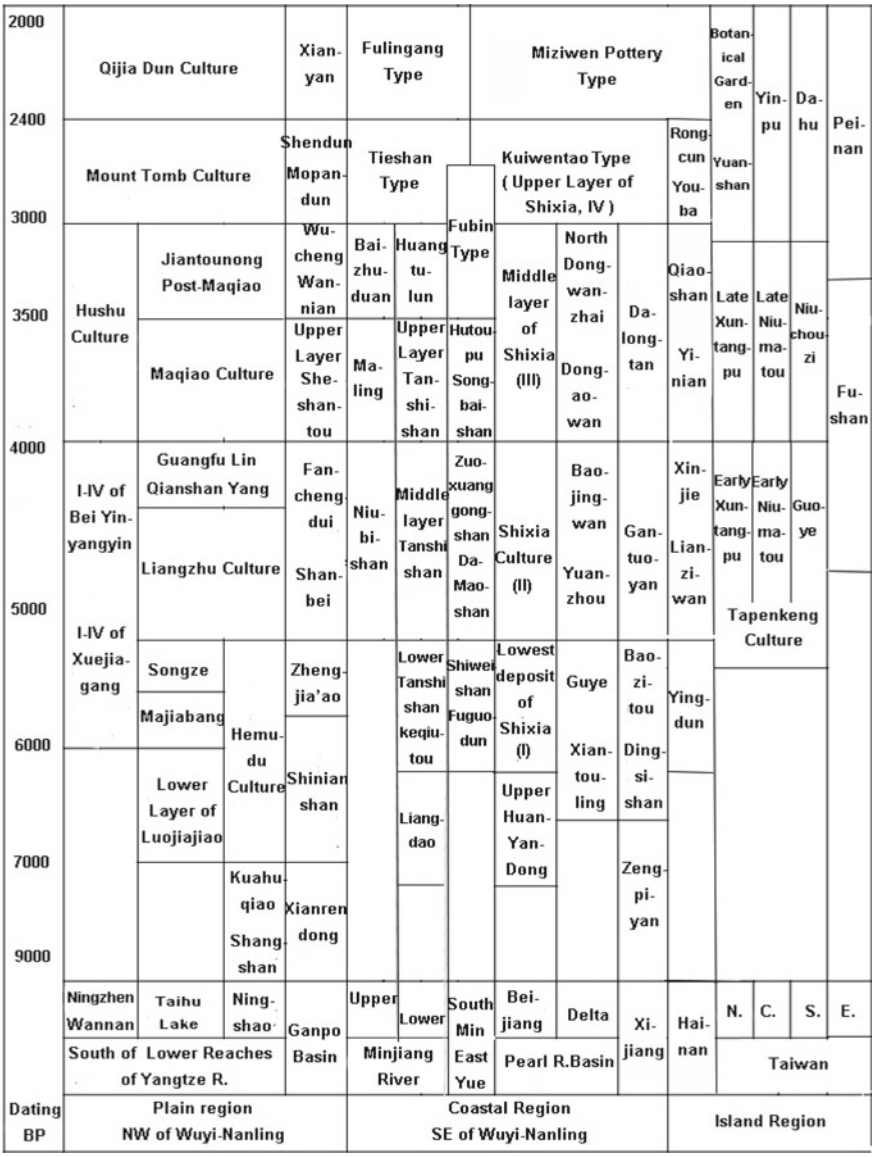
According to the researches on the spatial-temporal typology of the prehistoric cultures, the plain region with the lakes and rivers lying to the south of the Yangtze River, centering on Taihu and Poyang lake basins, was mainly composed of several ancient cultural districts, such as Ningzhen (宁镇)-Wannan (皖南) District coving

Fig. 4.1 Spatial distribution of archaeological cultures in the "Southeastern Direction" of China. I. Plain region lying to south of the lower Yangtze River, II. Coastal region beyond east and south of Wuyi-Nanling mountains, III. Island region of Taiwan and Hainan (1. Ningzhen-Wannan, 2. Taihu Lake Basin, 3. Ningbo-Shaoxing Plain, 4. Ganpo Basin in Jiangxi, 5. Minjiang River Basin, 6. Eastern Guangdong to Southern Fujian, 7. Pearl River Basin, 8. Xijiang River Basin, 9. Taiwan Island, 10. Hainan Island)

Nanjing (南京), Zhenjiang (镇江) and southern Anhui, Taihu Lake Basin in south of Jiangsu and Shanghai, Ningbo-Shaoxing (宁绍) Plain covering the south coast of Qiantangjiang (钱塘江) River in Zhejiang Province and Ganpo (赣鄱) Basin in Jiangxi Province. Among them, the area between southern Jiangsu and northern Zhejiang where Ningzhen-Wannan, Taihu Lake Basin, and Ningbo-Shaoxing Plain situate, formed a relatively independent sub-regional culture unity according to their more similarity of material cultural remains, stood in parallel with another sub-region Ganpo Basin, embodied the multi-level spatial interaction among the prehistoric and early cultures in this north part of "Southeastern Direction" of China.

This region was the original land of the prehistoric ancestors of *Gou Wu* (句吴), *Yu Yue* (于越), *Gan Yue* (干越) and *Yang Yue* (扬越), being contiguous to the territory of Central Plains and the North of China, and relying on *Huaxia* and *Han* cultural system. From the Neolithic to Early Iron ages, its cultural connotations accepted much more influences of the North than other regions and districts in southeast coast of China did. The Neolithic indigenous people developed the earliest cultivated rice of the world, and then initiated one of the earliest states or chiefdoms of ancient civilization in southeast of China, establishing one of the

Table 4.1 The spatial and temporal cultures of Neolithic, bronze, and early iron age in the southeast of China



centers of the pluralistic origin of Chinese civilization in the Longshan (龙山) era. Its sociocultural development almost synchronized with the Central Plains and North of China, and once even "Competing for Controlling of the Central Plains" (逐鹿中原) during the Three Dynasties of early Chinese civilization.

4.1.1 Temporal Sequence of the Indigenous Cultures and Northern Influences in Neolithic Age

The Taihu Lake Basin as cultural center of northern part of plain region lying to the south of Yangtze River, where the other two cultural districts as Ningzhen-Wannan and Ningbo-Shaoxing Plain also situate, witnessed to the successively developing Neolithic cultures of Lower Layer Type of Luojiajiao (罗家角) (7000–6400 BP), Majiabang (马家浜) Type (6400–6000 BP), Songze (崧泽) Type (6000–5300BP), Liangzhu (良渚) Culture (5300–4200 BP), Qianshanyang (钱山漾) and Guangfulin (广富林) Culture (4200–3900 BP), and alike (Mou, Y.K. et al. 1980; Ji, Z.Q. 1984; Huang, X.P. et al. 1981; Song, J. 2014a, b; Chen, J. 2014). The Ningzhen area adjacent to Taihu Lake Basin appeared the cultures of the first to fourth phases (6400–4000 BP) of the Bei Yinyangying (北阴阳营) Culture, and the Wannan area presented the remains of the first to fourth phases (6400–4000 BP) of the lower layer of Xuejiagang (薛家岗) Culture (Yang, D.B. 1984; Jiang, Z.C. 1981). In the Ningbo-Shaoxing Plain and the coast of Qiantangjiang River, there were Shangshan (上山) Culture (10000–8500 BP), Kuahuqiao (跨湖桥) Culture (8000–7000 BP), Hemudu (河姆渡) Culture (7000–5300 BP), and the local type of Liangzhu Culture (5300–4000 BP), forming its own Neolithic sequence (Mou, Y.K. 1981, 1984; Liu, J. 1984; Sun, H.L. et al. 2019a, b).

The Neolithic cultures in the region were distinctively characterized by a compound of two types of material cultural elements, namely the "Southeast" indigenous elements represented by the round bottom and ring foot pottery wares, and a lot of external elements from the Central Plains and "North" represented by tripod and pouch or hollow-leg pottery wares which had originally been the cultural features of the lower reaches Yellow River since the early Neolithic age. Nevertheless, in the different sub-districts and their different temporal stages, the southward cultural influences and assimilation were not completely consistent, and the sociocultural evolution of them did not synchronize, presenting the spatial-temporal variants from the north to south and from the early to late periods.

On the one hand, the typical indigenous pottery wares of Luojiajiao, Majiabang, and Songze cultures were the round bottoms *Fu* (釜) cauldrons with a waist edge or multi angle edge, the round bottom or small flat bottom pots, bowls, plates and kettles, trumpet-shaped or tower-shaped ring foot *dou* (豆) plates, short ring foot or petal-shaped ring foot kettles and cups, and cooking pot supports. This set of pottery utensils basically represented the indigenous cultural connotation of north part of "Southeast" during pre-Longshannian period.

On the other hand, the influence of tripod and pouch-shaped leg vessels of pottery, which were the typical characteristics of Neolithic cultures of the Beixin (北辛), Dawenkou (大汶口) and Longshan centering in the lower reaches of the Yellow River, varied in different times and spaces. These external influences decreased from north to south and increased along with the development from early to late stages. And in the same cultural period or stage, there were significantly more tripod and pouch-shaped leg vessels in the north sub-districts than that in the south. Specifically, the cultures of Luojiajiao and Majiabang in the Taihu Lake Basin had only a few flat chisel-shaped tripods *Ding* (鼎) vessels, while in stage of Songze Type the *Ding* vessels increased and varied with the types of tripod as chisel-shaped, flat lateral-shaped, and bow back-shaped, and the types of *Ding* body as *Fu* pot-shaped, jar-shaped, and basin-shaped, resulting from being reinforced influences of Dawenkou Culture of the North. More direct evidence of this kind of influence can also be seen in Bei Yinyangying Culture in Ningzhen area. In the Ningbo-Shaoxing Plain, being located in the much more southward than Taihu Lake Basin, the round bottom and ring foot pottery vessels and cooking vessel supports were remarkably the majority of the indigenous pottery group in the first to fourth stages of Hemudu Culture, and the external tripod pottery vessels were rarely seen (Fig. 4.2).

Fig. 4.2 The pottery content of Neolithic Hemudu Culture

At the stage of Liangzhu Culture, the tripods vessels of the northern influences in the Taihu Lake Basin began to be as developed as the native ring foot vessels, while the round bottom vessels became rare, but the large or short ring foot kettles, pots, *Gui* (簋) bowl, large basin could be evidently identified as being originated from the artifacts of local combination of Songze Type. There appeared more different forms of tripod *Ding* vessel showing the increase of the northern influences. Of course, not all of them were the direct influences from the typical Longshan Culture, for example, the fish fin-shaped leg of the tripods was developed from the flat lateral leg in the Songze stage. However, the common appearance of polished black pottery and the large pouch-shaped leg *Gui* (鬶) kettle were the product of the direct influence of Longshan Culture of Shandong region. By comparing, we also can see that the types in the southern marginal area of Liangzhu Culture, the remains in Mingshanhou (名山后) in Fenghua (奉化) county in Ningbo-Shaoxing plain, were much less influenced by the North culture (MSAT 1993). More round bottom and small flat bottom *Fu* cauldrons, pots, high and low ring foot pottery vessels were unearthed with fish fin-shaped tripods and conical-shaped tripod vessels.

In the Ganpo Basin district of the southern part of the plain region, covering the Ganjiang (赣江) River and Poyang Lake Basin, Neolithic cultures varied chronologically with Xianrendong (仙人洞) Culture (9000–7000 BP) in early stage, Shinianshan (拾年山) Culture (7000–5000 BP) in middle stage, Shanbei-Fanchengdui (山背-樊城堆) Culture (5000–4000 BP) in late stage, the upper layer type of Sheshantou (社山头) Culture (4000–3500 BP) in the latest stage and so on (Li, J.H. et al. 1986a, 1989; Peng, S.F. 1986; Liu, S.Z 1993; Wu, C.M. 1999c: 83–96). Its latest limit of Neolithic culture receded some more than that of Taihu Lake Basin and Ningbo-Shaoxing Plain, while the cultural connotations had similar compound of those two types. In the Xianrendong and first stage of Shinianshan Culture, the native round bottom, flat bottom *Fu* cauldrons, pots, bowls were the basic forms of utensil pottery, no external tripod vessels developed. During Zhengjia'ao (郑家坳) and the second stage of Shinianshan Culture, more tripods such as *Ding* vessels with *Fu* cauldron, jar or bowl-shaped belly with flat lateral foot, tube foot, or conical-shaped tripods, solid tripod *Gui* (鬶) kettles were unearthed with the original local forms of round bottom, flat bottom *Fu* cauldrons, pots, bowls, and trumpet-shaped and tower-shaped ring foot *Dou* plates, short ring foot *Gui* (簋) bowl and kettles and other vessels. The emergence of these tripod vessels was related to the strong influence from Dawenkou Culture of the lower reaches of Yellow River which dispersing southward via Yangtze-Huaihe rivers (江淮) basin. These external influences had been assimilated with the indigenous culture, for example, the various tripod *Ding* vessels were generally formed by adding tripods on the local indigenous round bottom vessels of *Fu* cauldrons, and even the unique local and mixed varieties of tube foot tripod vessels appeared. At the late stage as Shanbei-Fanchengdui Culture, the "North" elements increased much more than the earlier stage, such as the newly appeared T-shaped, fish fin-shaped, tile-shaped leg of tripod pottery *Ding* vessels and even the pouch-shaped leg *Gui* (鬶) and *He* (盉) kettles. There were also some elements similar to the Qujialing (屈家岭) Culture from the middle reaches of the Yangtze

River, showing the diverse and complex situation of external influences impacted on Neolithic Ganpo Basin.

4.1.2 The North-South Cultural Assimilation During the Bronze and the Early Iron Age

The material cultures of Bronze and early Iron Age in the plain region lying to the south of the Yangtze River belonged to the typical stamped pattern pottery cultural system. Along with the gradual and differentiated influence of northern cultural elements in the Neolithic Age, the indigenous stamped pattern pottery cultures were more deeply influenced by the bronze culture of Xia, Shang, and Zhou dynasties.

The compound of indigenous culture with northern *Xia* and *Shang* bronze cultures were distinctive in the stamped pattern pottery remains of Hushu (湖熟) Culture (4000–3000 BP), Maqiao (马桥) Culture (3900–3000 BP) and Wucheng (吴城) Culture (3500–3000 BP) distributing from north to south in the plain region lying to the south Yangtze river (Ji, Z.Q. 1981; Huang, X.P. et al. 1981; Liu, J.G. et al. 1989; Mou, Y.K. 1993; Song, J. 2014b). In the Hushu Culture, large amount of low tripod *Ding* with pot-shaped belly, pouch-shaped leg double bellies *Yan* (甗) boilers and the pouch-shaped leg *li* (鬲) cookers as characteristic elements of *Xia* and *Shang* cultures were unearthed together with small flat bottom or round bottom urns, pots, *Zun* (尊) pots, basins, bowls, ring foot *Dou* plates and *Gui* (簋) bowls of the indigenous cultural system. In Maqiao Culture and Jiantounong (肩头弄) Culture, the indigenous connotation as the round bottom, concaved-round bottom, and small flat bottom *Fu* cauldrons, bowls, pots, *Yu* (盂) pots, and cups, as well as double bellies boilers *Yan* and ring foot *Dou* plates, *Gui* (簋) bowls, kettles, *Zun* pots were quite popular, while tripod cauldron-shaped belly *Ding* cooking vessels and a small number of pouch-shaped leg *Yan* boiling cookers and *He* kettles were also unearthed. No pouch-shaped leg *li* cookers were found. Moreover, because of the geographical location, the influence of the *Xia* and *Shang* cultures in the plain region of southern Jiangsu and northern Zhejiang, represented by the pouch-shaped leg *Gui* (鬶) kettles, *He* kettles, and *li* cookers, also gradually decreased from the north to south.

In the Wucheng Culture in Ganpo Basin, the indigenous elements presented round bottom, concaved-round bottom, small flat bottom, and ring foot wares of pottery, including the main forms as *Fu* cauldrons, various pots, urns, *Yu* pots, bowls, *Yan* boilers, *Dou* plates and alike, while the external cultural elements included pottery wares of *Shang* culture such as pouch-shaped leg *li* cooker and *Yan* boilers, tripod cooking vessels *Jia* (斚), large rim *Zun* pots, abdomen-shaped ring foot *Dou* plates, long belly pots, as well as bronze ritual vessels and weapons of *Shang* culture, such as tripod *Ding* cooking vessels, pouch-shaped leg *Yan* boilers,

tripod cooking vessels *Jia*, knives, dagger-axe, and alike. The indigenous elements represented by the pottery artifacts were the mainstream of the Wucheng Culture, but the bronze artifacts mainly belonged to the category of external *Shang* Culture. The bronze wares discovered in Dayangzhou (大洋洲) site of Xinggan (新干) county had the similar compound with Wucheng (Li, J.H. et al. 1986b, 1989; Peng, S.F. 1986; Li, B.Q. 1981; Peng, S.F.et al. 1993).

During the Zhou Dynasty, the bronze cultures in this region were unified in the system of archaeological Mound Tomb (土墩墓) Culture (3000–2400 BP). The burial custom of it was regionally distinctive, with burial artifacts of stamped geometric pattern pottery and glazed pottery pots, short jars *Tan* (坛), *Bu* (瓿) pots, *Fu* cauldrons, as well as glazed pottery ring foot *Dou* plates, bowls, basins, plates, and alike, representing the main trend of the indigenous culture, while the corded pattern pottery of the tripod *Ding* cooking vessels, three hollow pouch-shaped leg *li* cookers and *Yan* boilers, as well as the bronze ritual vessels such as tripod *Ding* cooking vessels, pouch-shaped leg *li* cooker, ring foot *Gui* (簋) bowls, *Zun* pots, *You* (卣) wine pots and plates, representing the external influences from northern *Shang* and *Zhou* cultures (Zou, H.B. 1982; Liu, J.G. et al. 1989). Shendun (神墩) and Mopandun (磨盘墩) types (3000–2400 BP), which were in the sub-regional type of Mound Tomb Culture in Ganpo Basin, also manifested the compound of the similar two types (Li, J.H. et al. 1986b, 1989; Peng, S.F. 1986). The indigenous stamped geometric pattern pottery and glazed pottery *Yan* boilers, *Fu* cauldrons, pots with round bottom or round concave bottom, *Dou* plates, *Gui* (簋) bowls, *Yu* pots with ring foot were unearthed together with three pouch-shaped leg pottery *li* cookers and *Yan* boilers, long necked pottery *Zun* pots, as well as bronze ritual vessels and weapons that representing the northern cultural elements of Shang and Zhou dynasties.

In the early Iron Age, Qijiadun (戚家墩) Culture (2400–2000 BP) developed on the basis of the native Mound Tomb Culture in southern Jiangsu and northern Zhejiang, and the indigenous culture was more comprehensively assimilated by the *Chu* and *Han* cultures (Jiang, Z.C. 1981; Huang, X.P. et al. 1981). In early typical remains of this type, the lower layer of Qijiadun Culture and upper layer of Maqiao Culture in Shanghai, the indigenous feature represented by stamped pattern pottery jars, pots, cups, and primitive porcelain bowls, cups remained the main trend of the cultural compound. In the late typical remains, the Lizhu (漓渚) and Fenghuangshan (凤凰山) cemeteries in Shaoxing (绍兴) of Zhejiang, the indigenous primitive porcelain and stamped pattern pottery reduced significantly, while the glazed tripod *Ding* cooking vessels, boxes, and kettles as the bronze ritual wares imitators representing *Chu* and *Han* style vessels gradually became the mainstream. In the Xianyan (仙岩) Type (2400–2000 BP) in Ganpo Basin in the Eastern Zhou Dynasty, a large number of *Chu* and *Han* style utensils such as imitated bronze wares of pottery tripod *Ding* cooking vessels and handled *He* wine kettles were also unearthed together with the native stamped pattern pottery wares (Li, J.H. et al. 1986b, 1989; Peng, S.F. 1986).

4.1.3 *Growing to Compete with Huaxia for Controlling the Central Plains*

From Neolithic to Early Iron ages, the indigenous cultures in the plain region lying to the south of the Yangtze River were influenced and assimilated deeply by the prehistoric and early cultures of the Central Plains in the North. The process of social complication and civilization of this region also synchronized that of *Huaxia,* and was one of the most developed and advanced regions in the indigenous cultural system in the "Southeastern Direction" of China. The region had been one of the earliest origins of cultivated rice in East Asia for thousands of years, establishing the mature rice farming societies in the early and middle stages of Neolithic cultures such as Luojiajiao, Majiabang, and Hemudu. During the period of Liangzhu Culture, the early chiefdom state society formed, being represented archaeologically by the settlement pattern of centralized city ruin, large tombs with jade burials and ancestor worship altar remains. Liangzhu Culture might have been the first social-political entity of the early civilization in the southeast of China, and one of the several central areas in Longshan era "Competing for Controlling of the Central Plains", which promoted the rising of Chinese civilization (Yan, W.M. 1993, 1996; Su, B.Q. 1996). Although the bronze culture in this plain region was generally receding to the Central Plain of north China, it simultaneously emerged and developed. In the Xia and Shang dynasties, a small amount of bronze ware appeared in Maqiao and Hushu cultures, and Wucheng Culture was one of the important bronze cultural centers in Shang Dynasty. The bronze cultures of this region progressed continuingly during the West and East Zhou dynasties, dispersed across the Wuyi-Nanling mountain watershed, and influenced the southeast coast region in Fujian and Guangdong.

In short, an important feature of the cultural development from Neolithic to Early Iron ages in the plain region with lakes and rivers lying to the south of the Yangtze River, was the direct influence and assimilation of the Central Plain and North cultures from the middle and lower reaches of the Yellow River. These influences manifested in a spatial-temporal process that gradually strengthened from the south to north, and maintained a comprehensive and sustained impact from Neolithic to Early Iron ages, until the Eastern Zhou, Qin, and Han dynasties when being unified into the *Huaxia* system. Although the development of its prehistoric and early social cultures was slightly different from North, it basically synchronized with that of the middle and lower reaches of the Yellow River as the "Center" of early civilization in China.

4.2 Facing the *Islands Yi* in the South Sea: The Indigenous Cultural Communities in Mountainous Areas Along the Southeast Coast of China

The prehistoric cultures from Neolithic to Early Iron ages in the coastal hilly and mountainous areas from southern Zhejiang to Fujian, Guangdong, and Guangxi, beyond the east and south Wuyi-Nanling mountain watershed, varied in a number of cultural districts as Minjiang (闽江) River Basin, Eastern Guangdong to Southern Fujian (粤东闽南), Pearl River Basin (珠江流域) and Xijiang (西江流域) River Basin, where the aboriginal *Min Yue*, *Eastern Ou (Yue)*, *Southern Yue*, *West Ou* and *Luo Yue* and their ancestors had lived. These cultural districts were far away from the Central Plain and the North, facing the maritime "barbarians" or *Island Yi* and Austronesian in the South Sea. The separation by the Wuyi-Nanling mountain watershed made them stronger indigenous essence with enclosed or semi-enclosed developing patterns in prehistory and early history. Although the indigenous cultures of these districts were progressively infiltrated and influenced by *Huaxia* system from the Central Plain and North during Longshan era, Xia, and Shang dynasties, they persisted and developed their native essence for a long period of time until being fully assimilated by *Chu* and *Han* culture in the early Iron Age. The distinctively geographic and natural environment hindered the development of rice farming agriculture and the foraging pattern of gathering and hunting remained the important subsistence for a long period of time. The overall level of social development receded behind the plain region beyond the west and north of the Wuyi-Nanling mountain watershed, and the Central Plain in the North of China.

4.2.1 Persisting of the Indigenous Tradition of Neolithic Cultures and the Infiltration of Northern Cultures

The development of Neolithic cultures in hilly and mountainous coast beyond the east and south of Wuyi-Nanling watershed were receding far behind the plain region in north part of the "Southeastern Direction". The Neolithic stage lasted developing and no definite and objective evidences showed the development of bronze culture along this coastal region until Xia and Shang dynasties. Though the Longshan, *Xia* and *Shang* cultures of the North respectively influenced and infiltrated indirectly, partly, and intermittently across the mountain watershed to the coast region, the indigenous tradition represented by the material cultural features of round bottom and ring foot pottery vessels had always been the mainstream in the prehistoric and early cultures along the southeast coast.

4.2.1.1 Minjiang River Basin

The prehistoric and early cultures of the Minjiang River basin developed and evolved with its center in the downstream area. After the earliest Liangdao (亮岛) in the Matzu (马祖) islands around the estuary of Minjiang River about 8000 years ago, the Neolithic cultures varied temporally with Keqiutou Type (壳丘头)-Lower Layer Type of Tanshishan (昙石山 6000–5000 BP), Middle Layer Type of Tanshishan (5000–4000 BP), Upper Layer Type of Tanshishan–Huangtulun (黄土仑) Type (4000–3000 BP). In the upper reaches of Minjiang River also existed the corresponding Neolithic Niubishan (牛鼻山) Type (5000–4000 BP), Maling (马岭) Type (4000–3500 BP) and Baizhuduan (白主段) Type (3500–3000 BP) (Wu, C.M. 1990a, b, 1995; Lin, G.W. 1990; Chen, C.Y. 2012; Chen, C.Y. et al. 2012).

The continuation and inheritance of indigenous Neolithic cultures in the lower reaches of Minjiang River and eastern coast of Fujian were most obviously reflected in the material cultures of pottery connotation (Wu, C.M. 1990a, 1995). As to the paste, coarse sandy pottery of Keqiutou, red pottery of Tanshishan lower layer, gray pottery of Tanshishan middle layer, orange pottery, and gray stoneware of Tanshishan upper layer, and gray stoneware of Huangtulun respectively represented the successive developing stages of Neolithic cultures in this area. Along these evolving stages, the gray pottery in the middle layer of Tanshishan originated from the red slipped gray pottery in the lower layer, and the gray stone ware in its upper layer originated from the high-fired gray fine pottery in its middle layer. As to the decoration patterns, the red slip and red painting lines pattern of the lower layer of Tanshishan was developed into the red painting stripes and round-dot patterns of its middle layer, and the characteristic black painting geometric lines and imitated bronze patterns were also the continuation and development of early color paintings. The stamped stripes pattern being simplified from the corded pattern of the lower type of Tanshishan, became the major decoration in its middle layer, while a small number of grids and check patterns evolving from crossed stripes of its middle layer became the source of representative pattern in its upper layer. The majority forms of pottery ware were round bottom *Fu* cauldrons, pots, kettles and ring foot pots, kettles, *Gui* (簋) bowls, cups, *Dou* plats and so on, forming a continued indigenous compound, together with a very small amount of pottery tripod *Ding* cooking vessels and no pouch-shaped leg vessels of North origin. The traditional cooking utensils of round bottom *Fu* cauldrons and pots with flared rim, accompanying various vessel supports, formed in the lower layer of Tanshishan and continued in the middle and upper layers. The *Yan* boilers with double cauldron-shaped belly of Huangtulun Type were also developed from the lower and middle layers of Tanshishan by heightening or widening the rim of *Fu* round bottom cauldrons, which were greatly different from the Neolithic pottery ware compound in Central Plain of tripod Ding cooker and pouch-shaped leg *Yan*, *Li* cookers and *Gui* (鬶) kettles (Figs. 4.3, 4.4 and 4.5). Besides. The culture of the upstream of Minjiang River was basically consistent with the indigenous connotations in the lower reaches, with only slight differences.

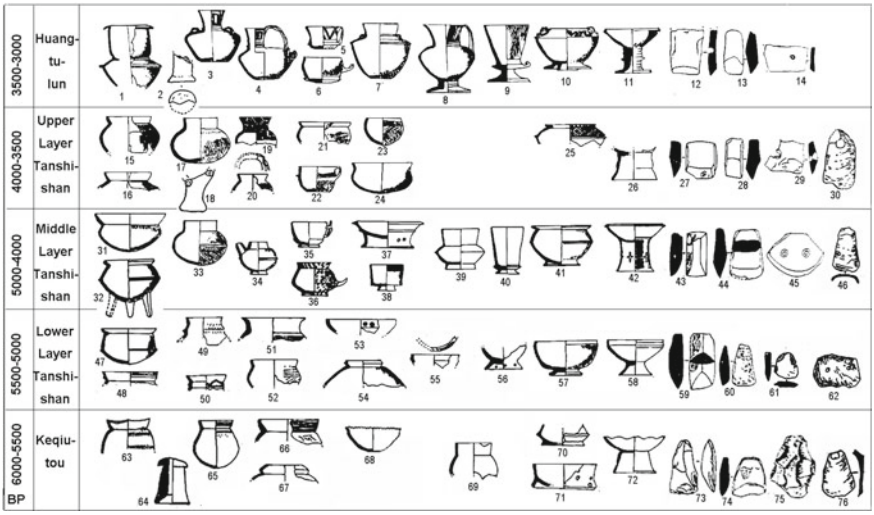


Fig. 4.3 The material cultural chronology in lower reaches of Minjiang River in the Neolithic Age (1, 3–11, Huangtulun; 2, 12–14, Fucun 浮村; 15, 17–20, 23–25, 27, 30, 32, 33, 36–39, 45–47, 49, 51–53, 55, 56, 59–62, Tanshishan; 16, 21, 26, 28, 28, 54, 57, 58, Zhuangbianshan 庄边山; 22, Dongzhang 东张; 31, 34, 35, 40–44, 48, 50, Xitou 溪头; 63–76, Keqiutou. 1–11, 15–26, 31–42, 47, 58, 63–72, pottery wares; 12–14, 27–29, 43–45, 59–61, 73–75, stone implements; 30, 46, 62, 76, shell shovels)

Nevertheless, these Neolithic artifacts in the Minjiang River Basin, especially in its upstream, also showed some cultural influences from the North in varying degrees. The fine ground and perforated stone tools in the middle layer of Tanshishan, the stone knives, axes, shovels, sickles, gray and black pottery, as well as polished thin clay pottery, with a few of tripod *Ding* cooking vessels, *He* kettles, cups, and fitting handles and spouts, showed the cultural dissemination and influences from the Longshan of the North. The elements of cloud-thunder pattern, circular lines and wide folding shoulders, concaved-round bottom of the pottery wares in the upper layer of Tanshishan were the results of the dispersing and imitation of bronze cultures of Xia and Shang dynasties. The tiger-shapes kettle and *Gui* (鬶)-shaped kettles in Huangtulun were similar to those more commonly found in the plain regions of the north part of Southeast and the North of China in Shang Dynasty. Influenced by geographical location, there were more external cultural elements in the upper reaches of Minjiang River, for instance, more perforated stone axes, repeatedly perforated stone knives, various kinds of tripod pottery *Ding* cookers with shallow plate-shaped and basin-shaped bellies and tile-shaped, T-shaped, ghost mask-shaped, flat chisel-shaped legs, and pouch-shaped leg *Gui* (鬶) kettles were discovered. On the whole, however, these northern elements in the Minjiang River Basin still partly existed and were assimilated with local native tradition, for example, the very small amount of the tripod *Ding* cooking vessels in Tanshishan middle layer were made by adding three cylindrical legs on the body of

Fig. 4.4 The pottery wares of Tanshishan Culture

Fig. 4.5 The stamped pattern pottery connotation of Huangtulun Culture

a local round bottom *Fu* cauldrons with flared rim and folded belly, and, the handled *He* kettles and pots were also made by adding a tubular spout and a horn like handle on the body of a local straight neck pot of flat bottom or short ring foot. So these small amounts of the external influences of Longshan, *Xia* and *Shang* cultures did not take over the mainstream of indigenous Neolithic culture.

4.2.1.2 The Pearl River Basin

The Neolithic cultures in the Pearl River Basin mainly included both the lowest deposit remain of Shixia (石峡) site (the First Stage) in Beijiang (北江) River basin of the upper reaches of Pearl River, and the Xiantouling (咸头岭)-Guye (古椰) cultures in the Pearl River Delta during the pre-Longshan era (7000–5000 BP), the Shixia (lower layer, the Second Stage) Culture-Shixia Middle Layer Type (the Third Stage) in Beijian, and the Baojingwan (宝镜湾) Type-Dong'ao'wan (东澳湾) Type in the delta area, during the Longshan period to Xia and Shang dynasties (5000–3000 BP) (Zhu, F.S. et al. 1981; Zhu, F.S. 1984, 1991, 1994; Xu, H.B. 1981; Li, Z.W. 1991a; Li, Y. 1991, 2019; Tang, C. et al. 1991, 1994).

The material cultures of pre-Longshan era of the Pearl River Delta were mainly characterized by red-brown coarse sandy pottery wares with compound decoration of both stamped or shell incised cord, interlaced cord, row lines, comb dot, water wavy patterns, and colorfully painted band lines, dot, water wave lines, folded lines, S-shaped patterns. The basic combination of pottery forms were the round bottom *Fu* cauldrons or pots varying with shallow or deep bellies, bowls, and various kinds of ring foot plates, bowls, *Dou* plates and supports. Among them, the ring foot pottery plates with colorfully painted wave patterns were generally taken as similarity to the typical ring foot plates with the decoration patterns combined of carved, hollowed out, and painted of the Tahixi (大溪) Culture in the middle reaches of the Yangtze River. However, the characteristic connotation of painted wavy and S-shaped patterns should be closely related to marine landscape of the local coast region. Moreover, the distinctive characteristics of the cultures in this stage lacking the tripod pottery vessels, combining with cooking wares of wide rim, narrow neck, round bottom *Fu* cauldrons or pots and hollow supports, were basically different from those of the Neolithic cultures in the inner plain region beyond the north of Nanling mountain watershed in the earlier or the same period, with distinct indigenous identity (Wu, C.M. 1997a).

In the Pearl River Delta, the cultural influences from the North had gradually strengthened during the time of Longshan era, Xia and Shang dynasties. The pottery tripod *Ding* cooking vessel with tile-shaped legs or cylindrical legs unearthed in the sites of Yinzhou (银洲) of Sanshui (三水), Hudi (虎地) of Hong Kong was the result of the spreads and influences of the northern culture in the Longshan era, and high neck and folding shoulder pottery *Zun* pots, kettles, and pots with spouts, as well as the pottery wares with imitated bronze cloud-thunder pattern found in the North Dongwanzhai (东湾仔北) were also influenced by the

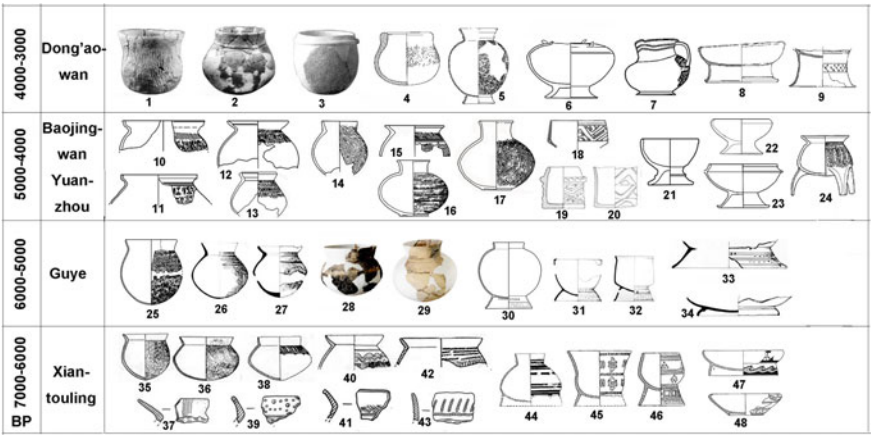


Fig. 4.6 The pottery ware sequence of Neolithic culture in Pearl River Delta (1–3, Dongwan 东湾; 4, 5, 8, 9, Cuntou 村头; 6, Hedan 河宕; 7, Yapowan 亚婆湾; 10, 16, 17, 21, Yuanzhou 圆洲; 11, 12, 14, 15, 22, Youyugang 鱿鱼岗; 13, 23, 24, Yinzhou 银洲; 18–20, Baojingwan 宝镜湾; 25, 30, Shaxia 沙下; 26, 27, 31–34, Guoluwan 过路湾; 28, 29, Guye 古椰; 35–48, Xiantouling 咸头岭)

bronze culture of Central Plains and the North. However, the total amount of such external elements were limited, and the local pottery tradition of the compound of round bottom or concaved-round bottom *Fu* cauldrons, pots, kettles, bowls, ring foot *Dou* plates, pots, and plates formed since the pre-Longshan era basically remained, along with the periodically small changes in shapes and patterns. For example, the only tripod *Ding* cooker in the Yinzhou site was made by adding three tile-shaped legs on the locally typical flared rim, narrow neck, and round bottom pot shape cauldrons. The influence of bronze culture in Xia and Shang dynasties did not synchronously promote the formation and evolution of the Bronze culture in Pearl River Delta (Fig. 4.6).

In the Neolithic cultural connotation of the Beijiang River Basin, the characteristics of potteries in the Qingtang (青塘) cave and the lowest deposit remain of Shixia site were unified with the indigenous forms of the Pearl River Delta, manifesting the combination of the round bottom and ring foot vessels and the lacking tripod pottery wares. Nevertheless, obvious changes took place in the stage of Shixia Culture (tomb burial and the lower layer remains) in which two groups of elements of both native and external coexisted. One group was a continuation of the indigenous artifacts represented by the wide rim, narrow neck, round bottom pottery *Fu* cauldrons, pots, urns, and ring foot pots, plates, *Dou* plate. Another group was the dispersed cultures of the Zhuweicheng (筑卫城) and Fanchengdu from the Ganpo Basin beyond the north of Nanling mountain watershed in Longshan era, being represented by the tripod and pouch-shaped leg pottery vessels consisting of plate-shaped, basin-shaped, *Fu* cauldron-shaped bellies' *Ding* cooking vessels, tripod plates, and pouch-shaped leg *Gui* (鬶) kettles (Fig. 4.7). We believe that this

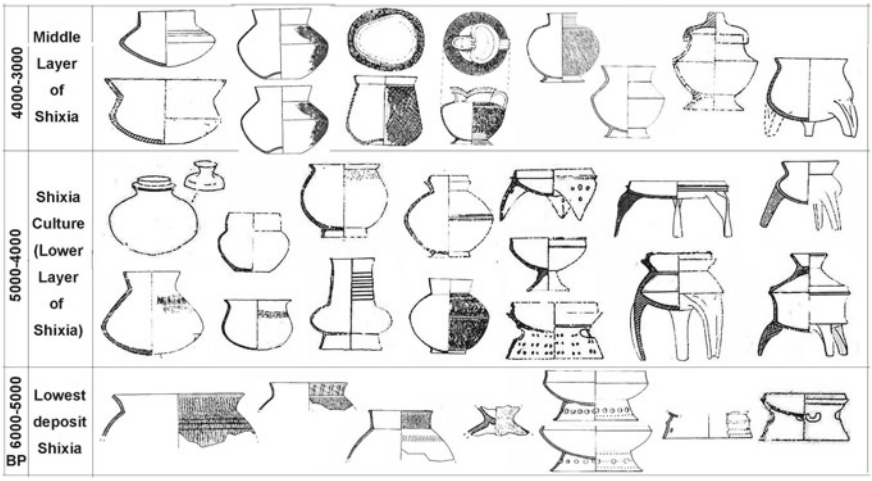


Fig. 4.7 The pottery ware sequence of Neolithic culture of Shixia site

group of external elements of Shixia Culture was not enough to constitute the basis of arguments of "southern distribution of the axis district along the Poyang Lake-Pearl River Delta", or the mixed "Fanchengdui-Shixia Culture" (Li, J.H. et al. 1989), which exaggerated the commonness of Longshannian cultures over the two sides of Nanling mountain watershed, and by no means to consider it as the evidence of "Sino-Tibetan Languages System" (Chang, K.C. 1989), which excessively regarded the coastal region of Longshannian Lingnan (岭南) as the immigrated culture of the *Huaxia* of North.

We found that the indigenous content of Shixia Culture generally remained as the majority, or core of the culture, and the external Longshannian elements from North were limited and being assimilated. For instance, the pot-shaped tripod *Ding* cooking vessels with the stretching legs, and the *Fu* cauldron-shaped belly tripod *Ding* cooking vessels were significantly different from the typical tripod *Ding* of Longshan Cultures beyond the north of Nanling watershed. More importantly, these external Longshan elements represented by various kinds of tripods and pouch-shaped leg vessels did not continue by the way of linking in the cultural series, but "disappeared" later in the Middle Layer Type of Shixia in the Xia and Shang dynasties, forming a false impression of "cultural fault" along the evolving series from the lower to the middle layers of the Shixia site. Nevertheless, the connotation in the middle layer of Shixia, represented by the combination of round or round concave bottom *Fu* cauldrons, pots, *Zun* kettles, bowls, ring foot jars, pots, and plates were actually the continuation of the main content of Lingnan indigenous culture originated from the lowest sediment remains of Shixia site, and the "interruption" from the North in the Longshan era, Xia and Shang dynasties was just the periodical elements of cultural influence (Yan, W.M. 1991). That is to say, the prominences of Neolithic culture in the Beijiang River Basin and the Pearl River

Delta were the same as an unified indigenous culture. In the successive Neolithic cultural series composed of the lowest sediment remains of the Shixia site, the Shixia Culture, and the Middle Layer Type of Shixia, the indigenous cultural majority generally continued and inherited, the external elements in the Shixia Culture were only phased without profound influence and did not overturn the mainstream and core role of the indigenous cultural tradition.

4.2.1.3 Eastern Guangdong and Southern Fujian

The Neolithic cultures discovered in the Jinjiang (晋江), Jiulongjian (九龙江) and Hanjiang (韩江) river basins in eastern Guangdong and southern Fujian, includes the Shiweishan-Fuguodun (石尾山-富国墩) type (6000–5500 BP), Chenqiao-Lazhoushan (陈桥-腊洲山) type (5500–5000 BP) in early stage, the Zuoxuangongshan-Damaoshan (左宣恭山-大帽山) type (5000–4000 BP) in late stage, and the Hutoupu-Songbaishan (虎头埔-松柏山) type (4000–3500 BP) in the latest stage (GDPCRAC 1956; Lin, C.C. 1973; Xu, H.B. 1981; Zhu, F.S. 1984, 1986; Xu, Q.H. 1988; Wu, C.M. 1996b; Chen, C.Y. 1999; FJPM et al. 2003; Gan, X.L. 2010). The indigenous feature of Neolithic culture in this region was similar to that of Minjiang River Basin and Pearl River Basin, and the influences of external culture also appeared in Longshan era, Xia and Shang dynasties, mostly concentrating in the interior areas of the upper reaches of those rivers.

The main pottery content of the Longshan era unearthed at Zuoxuangongshan and Fenqikengshan (粪萁坑山) in Chaoyang (潮阳), Baotiandong (宝田崇) in Jieyang (揭阳), Damaoshan in Dongshan (东山) were sandy paste wares with stamped geometric patterns. The main types of vessels were round bottom *Fu* cauldrons, pots, ring foot pots, *Dou* plate, and vessels supports and alike, and most of the *Fu* cauldrons and pots were wide rim, narrow neck, round bottom, or ring foot, demonstrating the indigenous cultural traditions. The tripod *Ding* cooking vessels with *Fu* cauldron-shaped belly and square column, cylinder, tile-shaped or T-shaped legs unearthed at Baotiandong, and the pouch-shaped leg *Gui* (鬶) cooking vessels at Fenqikengshan were similar to that of Fanchengdui Culture in Ganpo Basin beyond the north of Nanling mountain, which was the result of the northern cultural influences of Longshan era.

Of the remains at Hutoupu and Chiwei Beishan (池尾北山) in Puning (普宁), Shuikoushan (水口山) in Pingyuan (平远), Yishan (蚁山) in Hui'an (惠安) and other cultural remains around the time of Xia and Shang dynasties, the basic type of pottery vessels still were the wide rim pots with globular belly and round bottom or round concave bottom, *Yu* pots, basins, bowls, kettles with round bottom or flat bottom, and various kinds of vessel support, representing the composition of local features. The coexisting imitated bronze vessel patterns, the duck-shaped kettles with spout, and *Zun* pots with the high neck and folding shoulder were the external elements of *Xia* and *Shang* cultures. However, these external influences were quite limited and had not brought in the bronze culture to this coast region far away from the North, and the indigenous culture generally remained at the local Neolithic stage.

On the whole, in the Neolithic cultures on the coastal region beyond the east and south of Wuyi-Nanling mountain watershed, the disseminations and influences of northern cultures generally scattered and partly existed, mainly concentrating in the upper reaches of Minjiang, Pearl (Beijiang) and Hanjiang rivers, and near the Wuyi-Nanling watershed. These external influences were phased and short lived, did not continue and profoundly extend to the whole territory of the hilly, coastal, indigenous region in "Southeastern Direction" of Central Nation, which is facing and territorially connecting to the "barbarians" *Island Yi* and Austronesian in the South Sea.

4.2.2 The Bronze Cultural Dispersal of Zhou and Wu and the Evolution of Indigenous Society in Southeast Coast of China

Since about 3000 years ago, in the time of West and East Zhou dynasties in the royal chronicles of Central Nation, there had been significant cultural changes in the indigenous region along the southeast coast of China, beyond the east and south of Wuyi-Nanling watershed. The Tieshan (铁山) Type (3000–2400 BP) in the Minjiang River Basin, the Fubin (浮滨) Type (3500–2500 BP) in eastern Guangdong and southern Fujian, and the Kuiwentao (夔纹陶) Type or the Upper Layer Type of Shixia (the Fourth Stage, 3000–2400 BP) in Pearl River Basin, represented the main spatial types of the local bronze cultures formed by assimilation between the indigenous Neolithic cultures and external bronze cultures of the *Wu* and *Yue* from Taihu Lake Basin in the plain region of north part of southeast and the *Shang* and *Zhou* in the Central Plain (Wu, C.M. 1990a, 1994a, 1995, 1996b; Chen, C.X. et al. 1990; Xu, H.B. 1981, 1984; Zhu, F.S. 1978, 1986; Zhu, F.S. et al. 1981; He, J.S. 1981; GXZMCRAT 1981; Jiang, T.Y. et al. 1986; Gan, X.L. 2010).

The most obvious case of these mixed and assimilated bronze cultures in the southeast coast was the combination of two groups of cultural elements of Tieshan Type (TSHS et al. 1979; Wu, C.M. 1990a, 1994a, 1995; Chen, C.X. et al. 1990). The first group was the bronze cultural elements originated from *Shang* and *Zhou* cultures in the Central Plain, *Wu* and *Yue* states in the plain region of south Jiangsu and north Zhejiang. The representative bronze artifacts such as swords, spears, dagger-axes, axes, *Nao* (铙) bell, scrapers, chisels, and so on, were respectively identified as the imitation or diffusion of the external cultures of *Shang* and *Zhou,* and *Wu* and *Yue*. The tomb remains of mounded stone and paved pebble structure, funeral objects such as stoneware urns, pots, bowls with mat patterns, primitive porcelain bowls, *Dou* plate and alike were also same as those of the Mound Tomb Culture of *Wu* and *Yue* in different stages. The second group was the continuance of indigenous cultural content since the Neolithic Age, including the typical pottery vessels of round bottom *Yan* boiler vessels with double cauldron-shaped belly, single handle pots, straight neck kettles, and other vessels which were identified as

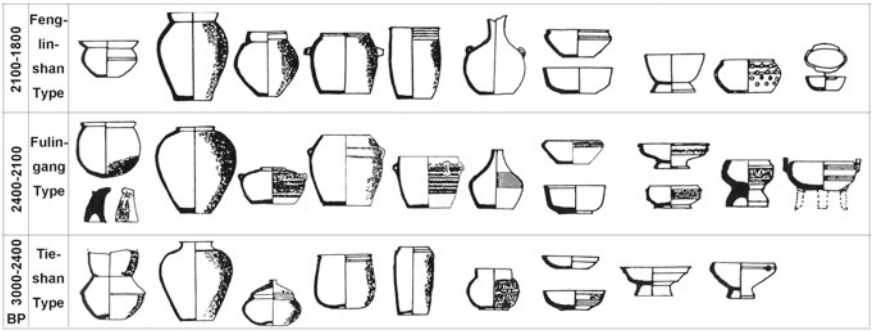


Fig. 4.8 The pottery ware sequence of Bronze and early Iron age in Minjiang River Basin

the inheritance and development of the native Neolithic cultural types of the middle and upper layer of Tanshishan and Huangtulun. Tieshan Type reflects the new stage of southward spreading of *Wu* and *Yue* cultures and its assimilation with the indigenous Neolithic cultures in the Minjiang River Basin (Fig. 4.8).

The Kuiwentao Type in Pearl River Basin also indicates the coexistence of external bronze cultural elements of *Shang, Zhou, Wu* and *Yue*, with the local indigenous cultural content. The external elements including bronze wine vessels as *You*, *He*, *Lei* (罍), and plates, musical instruments as *Zhong* (钟) bells and *Nao* bells, weapons as swords, dagger-axes and spears, were basically the same as those in the *Shang* and *Zhou*, as well as in *Wu* and *Yue* cultures. In addition, the primitive porcelain *Dou* plate and bowls in the upper layer of Shixia site were basically similar to those Mound Tomb Culture in the plain region beyond the north of Nanling mountain. However, the connotation of the Kuiwentao Type had strong indigenous characteristics, *Wu* and *Yue* cultural elements were less seen on most of its pottery artifacts than those on its bronze vessels. Many of the bronze vessels which originated from *Shang* and *Zhou*, as well as *Wu* and *Yue* cultures, also mixed with local features, such as bronze knives and other weapons unearthed in Yuanlongpo (元龙坡) cemetery in Wuming (武鸣), Guangxi. It can be seen that the Kuiwentao Type was a new stage of indigenous culture based on Neolithic culture in Pearl River Basin, under the cultural influence of the bronze civilization of *Shang, Zhou, Wu* and *Yue* (Xu, H.B. 1975, 1984; Zhu, F.S. 1978; He, J.S. 1981; Jiang, T.Y. et al. 1986; GXZMCRAT et al. 1988; Tang, C. 1993).

The external cultural elements in the connotation of Fubin Type were stone and bronze dagger-axes, bronze *Ling* (铃) bells, high neck, and folded shoulder pottery *Zun* pots, which had the characteristics of *Xia, Shang, Wu* and *Yue* cultures, and the glazed pottery cups with deeply folded belly and ring foot with the similar style of the Mound Tomb Culture. However, the Fubin Type lacked tripod and pouch-shaped leg pottery vessels of *Xia, Shang* and northern cultures and its general feature was the continuance of the Neolithic indigenous culture, including the typical objects such as concaved edge stone adzes, concaved edge bronze adzes, stepped bronze adzes, as well as the geometric pattern decorations as the checkered,

zigzag, cloud-thunder, crossed lines on the bronze dagger-axes and *Ling* bell. These were distinctively the indigenous features and were identified their origins in the local Neolithic cultures (Zhuang, J.Q. et al. 1977; Yu, Y.R. 1978; Wu, C.M. 1990a, 1994a, 1996b).

Of all these districts in the southeast coast of China, it can be seen that their bronze cultures during the West and East Zhou dynasties shared common characters of both the continuance of the indigenous cultural tradition that originated in local Neolithic Age, and the dissemination and assimilation of the bronze cultures of *Shang, Zhou, Wu* and *Yue* beyond the north of Wuyi-Nanling mountain watershed. However, the introduction of these bronze cultures of *Shang, Zhou, Wu* and *Yue* haven't change the essential characteristics of indigenous culture represented by the compound of the stamped pattern pottery wares with round bottom and ring foot. These spatial types of mixed bronze cultures could be the archaeological relics of indigenous *Min Yue*, *Southern Yue*, *Ou Yue*, and so on, as variant branches of *Bai Yue* cultures, which formed by the assimilation of the Neolithic indigenous ancestors *Min* (闽), *Yue* (粤), *Ou* (瓯) and others with the external bronze cultures spreading southward from *Shang, Zhou, Wu* and *Yue*. With the influences of the external bronze cultures, the breaking of the enclosed or semi-enclosed pattern of indigenous culture, and the spreading of *Shang, Zhou, Wu* and *Yue* civilization, the civilized social systems of the Central Nation and *Wu*, *Yue* states were also introduced and promoted the social complicating of this coastal region. For instance, a set of 12 pieces stone adze with echelon sizes and no mark of being used, was unearthed in Nan'an (南安) county of southern Fujian and identified as the special ritual vessels for the upper society of Fubin Type (Zhang, Z.C. et al. 1993; Wu, C. M. 1994). A lot of burials with funerary bronze weapons, or even the nice ritual bronze wares, such as *You*, *He* and *Lei*, and plates, were also identified as the remains of the tribal or military leaders in the upper class of local society. These discoveries with complicated elements of the civilized society reflect the origin indigenous state as the early stage of *Min Yue, Ou Yue, Southern Yue, Western Ou, Luo Yue* civilizations (Wu, C.M. 1990b, 1997b; Wu, C.M. et al. 2001).

4.2.3 The Archaeological Remains of Sinicization of the Eastern Yue and Southern Yue in the Early Iron Age

About two thousand four hundred years ago, during the end of Zhou, Qin, and Han dynasties in the empire chronicles of the Central Nation, the indigenous *Bai Yue* people on the southeast coast of China were conquered and their lands were annexed into the territory of the *Chu, Qin* and *Han* empires. More direct cultural interaction and assimilation of the early Iron Age occurred beyond the east and south of Wuyi-Nanling mountain watershed, pushing forward the evolution of the indigenous society and on the way of comprehensive Sinicization.

4.2.3.1 *Min Yue* or *Eastern Yue* Around Fujian Area

The cultural connotations of Zhuangbianshan (庄边山) Type (2400–2200 BP) and Fulingang-Fenglinshan (富林岗—凤林山) types (2400–2000 BP) in Fujian region demonstrate the immigration of *Chu* and *Han* cultures to the southeast coast of China, and the Sinicization of indigenous *Min Yue* and *Eastern Yue* cultures (Wu, C.M. 1988, 1990a, 1995, 1999a; Wu, C.M. et al. 1998; Fig. 4.8).

The main burial objects unearthed from Zhuangbianshan tomb in Minhou (闽侯) county in the lower reaches of Minjiang River included pottery tripod *Ding* cooking vessels, boxes, *Dou* plates and kettles of the imitation of bronze ritual objects of Zhou Dynasty. However, most of these pottery vessels were not plain gray pottery of the *Zhou* and *Han* pattern but stoneware with stamped pattern of *Yue* style, and in particular, coexisting with the stamped pattern stoneware *Bu* pots, gourd-shaped kettles, and urns of typical *Min Yue* vessels. Therefore, the Zhuangbianshan Type was the remains of indigenized *Chu* or *Han* cultures, showing that the immigrated *Chu* or *Han* population were influenced by the local people and accepted the indigenous culture in the coastal area around Fujian (Wu, C.M. 1999a).

Fulingang Type of the end of Zhou, Qin, and early Han dynasties was the material cultural relics of the *Min Yue* and *Eastern Yue*, which were widely distributed around Fujian area. It contained not only the *Han* cultural elements such as bricks and tiles of *Qin* and *Han* style, seals and stamps with Chinese character, bronze and iron wares of the *Zhou* and *Han* cultures, pottery wares of *Han* cultures with the typical one of tripod pottery *Ding* cooker of imitated bronze ritual object, but also the connotation of local *Yue* culture as its main part. The stamped pattern pottery vessels composed of urns, pots, *Bu* pots, gourd-shaped kettles, bowls, *Fu* cauldrons and vessel supports, as well as indigenous piled-dwelling buildings, the tomb form with paved pebbles at bottom, most of which originated in the earlier bronze culture of Tieshan Type (Wu, C.M. 1988, 1999a).

The Fenglinshan Type of Eastern Han Dynasty changed greatly from its predecessor Fulingang Type. The indigenous pottery *Fu* cauldrons, urns, gourd-shaped kettles, pots, buckets, *Bu* pots, bowls, *Dou* plates with big ring foot and so on were the continuance of the similar vessels of the Fulingang Type, but the shapes of them changed respectively. The *Han* cultural elements of this type included the funerary object models of pottery barns, stoves, sacrificial utensils such as ears-shaped cups, incense burners, bronze coins of "Wuzhu" (五铢) and "Huoquan" (货泉) of Han Dynasties, and various kinds of *Han* style bronze and iron artifacts, indicating the stronger Sinicization of the local *Min Yue* culture after the indigenous state was perished (Wu, C.M. 1988; Wu, C.M. et al. 1998).

More than 100 brick tombs of the Six Dynasties have been found in Jianxi (建溪) basin in upper reaches of Minjiang River, the coast areas of the lower reaches of Minjiang River, and lower reaches of Jinjiang River. The shape, structure, brick decoration patterns, and burial objects of these tombs were basically consistent with the connotation of the middle and lower reaches of the Yangtze and Yellow rivers, indicating that the immigrated *Han* people to the south and sinicized *Min Yue*

indigenous people had become the main population around the Fujian area (Lin, Z. G. et al. 1990).

4.2.3.2 *Southern Yue* in Pearl River Basin

The content of successively developing Miziwen Pottery (米字纹陶) Type and Checkered and Sealed Pattern Pottery (方格纹戳印陶) Type (2400–2000 BP) in Lingnan region of Pearl River Basin reflects the development of indigenous *Southern Yue* culture and its sinicization during the end of Zhou, Qin, and Han dynasties (GZMCRAC et al. 1981; GXZMCRAT 1981; He, J.S. 1981; Xu, H.B. 1981, 1984).

Miziwen Pottery Type was developed on the basis of Kuiwentao Type of Zhou Dynasty. The basic compound of its pottery were the distinctively characteristic stamped pattern pottery urns, pots, *Lei* wine pots, boxes, *Yu* basins, jars, cups, and so on, with stamped patterns of Chinese character "米" (*Mi*, the rice)-shaped, checkered, cloud-thunder, and carved water wavy, comb dots, being a basic link in the series of indigenous stamped pattern pottery culture in Pearl River Basin. However, a large number of bronze and iron vessels of this type were mainly *Zhou* and *Chu* cultures, including bronze utensils such as tripods *Ding* vessels with beast-shaped legs, *You* wine pots, *Lei* pots, *He* kettles, *Fou* (缶) jars, *Jian* (鉴) plates, *Xi* (洗) basins, the bronze musical instruments such as *Zhong* bells, *Zheng* (钲) bells, *Duo* (铎) bells, bronze weapons such as spears, swords, dagger-axes, axes, arrows, sickle, as well as iron axes and shovels, which were identical or similar to those of *Zhou, Chu, Wu* and *Yue* cultures. Some bronze and iron artifacts had the characteristic decoration patterns of snake, frog, and Chinese character "王" (*Wang*, the king), beast or human head masks. These two groups of cultural elements generally continued the external and indigenous groups of cultural contents of Kuiwentao Type, reflecting the cultural continuance, assimilation, and change of Lingnan indigenous society under the influence of *Zhou* and *Chu* cultures since the late Warring States Period.

The Checkered and Sealed Pattern Pottery Type was represented by the first category of the burial objects in the tombs of early Western Han Dynasty excavated in Guangzhou, its compound of pottery artifacts were indigenous stamped pattern pottery urns, pots, *Bu* pots, double buttons pots, tripod pots, *Fu* cauldrons, basins, boxes, bowls, buckets, being mainly found in *Southern Yue* tombs with paved pebbles at the bottom. The second category of the burial objects in Han tombs of Guangzhou was the compound of both the basic pottery of *Chu* and *Han* style vessels such as tripod *Ding* cooking vessels, boxes, kettles, *Fang* (钫) square kettles, and incense burners in the imitation forms of bronze ritual objects, and the indigenous vessels as the first category, indicating that the immigrated *Qin* and *Han* population in Lingnan region and their indigenization in the indigenous *Southern Yue* society. After the middle and late Western Han Dynasty, the first category of indigenous culture gradually declined and then disappeared, and the second category of mixed *Han-Yue* compound developed much further, reflecting the continuous expansion of *Han* culture and the accelerated process of assimilation and sinicization of indigenous *Southern Yue* society.

4.2.4 Overall Stagnancy of Indigenous Social Evolution of Southeast Coast of China Before the Sinicization

Due to the geographical barrier of Wuyi-Nanling mountains, the hilly region on southeast coast of China was far away from the *Huaxia* civilization in Central Plains during the Neolithic Age to early Iron Age. Facing and adjacent to the "barbarian" *Island Yi* in the South Ocean, the sociocultural development of this coastal region receded far behind the plain region lying to the south of the Yangtze River and the civilization "Center" in the middle and lower reaches of Yellow River.

The geographically diverse environment in this mountainous coast region, the warm, humid climate in the tropics and subtropics, and ecological background provided ample food resources with abundant variants and great amount of wild animals, fruits, and edible plants, for indigenous societies with foraging patterns, delaying the emergency and development of productive economy of cereal cultivation for long time in prehistory. From about ten thousand to three thousand years ago, the Neolithic populations settled in caverns, mountainous front slopes, river side terraces of the inland area and the terraces, dunes along the coast and river estuaries in these hilly regions of southeast coast, mainly supported themselves by the foraging patterns of gathering, hunting and fishing for thousands of year (Chang, K.C. 1987b; Wu, C.M. 1996a). The small scale rice farming did not appear until the time of middle and lower layers of Shixia, the middle and upper layers of Niubishan and Tanshishan. Only in the last two or three thousand years ago had rice farming developed into a major source of economic life on limited plots in inland valleys, riverbanks, and coastal plains suitable for farming, receding far behind agriculture developed in the plain region beyond the north and west to Wuyi-Nanling mountain. The Neolithic sociocultural and economic patterns continued and lasted 3000 years ago in the Xia and Shang dynasties when the bronze culture and early civilization in the Central Plain was highly developed (Wu, C.M. 1997b).

The bronze cultures in these regions also appeared and receded later behind the plain region lying to the south of lower reaches of Yangtze River, far behind the Central Plain and North of China. The earliest bronze vessels in the Minjiang River basin were unearthed from the Tieshan Type in the Zhou Dynasty. Neither bronze vessels were found in the Pearl River Basin in the time of Middle Layer Type of Shixia, Hedang (河宕) and middle layer of Jinlanshi (金兰寺) site during the period of the Xia and Shang dynasties, nor did very small amount of bronze vessels were dated earlier than the Zhou Dynasty. Though some bronze vessels unearthed in the Fubin Type in the eastern Guangdong and southern Fujian had the features of bronze vessels of late Shang Dynasty, the general dating of their coexisting artifacts of pottery and other bronzes was also around the Western Zhou Dynasty. The archaeological data proved that this region entirely evolved into the bronze age around three thousand years ago during the Western Zhou Dynasty. Around the Zhou Dynasty, the burial objects in the tombs of Bronze and the early Iron ages included a series of ritual, musical, and weapon vessels with the styles of Central

Plain and North, such as the bronze tripod *Ding* cookers, kettles, *He* wine cookers, *Lei* wine pots, *Zhong* bells, dagger-axes, spears, *Qi* (戚) and *Yue* (钺) battle-axes, showing the rising of the early local kingdoms such as *Min Yue* and *Southern Yue* states (Wu, C.M. 1997b).

4.3 *Island Yi* Society: The Continental Connection of the Aboriginal Culture of Taiwan and Hainan Islands

Hainan, Taiwan, and other continental islands beyond the east and south of mainland China once were the ancient maritime "barbarian" regions of *Dan Er*, *Diao Ti, Island Yi* and other maritime ethnicities, where the cultural influence and infiltration from the Central Plain and North were extremely limited along prehistoric and ancient history. The semi-enclosed indigenous cultures developed for a long period in last thousands of years.

The prehistoric and early ancient culture of Hainan island was mainly distributed around its coast of west, south, and southeast. The Neolithic remains have gone through four stages, the earliest was the Yingdun (英墩) remains dating to 6000–5000 years ago, followed the Lianziwan–Xingjie (莲子湾-新街) remains about 5000 years ago, then the Yinian-Qiaoshan (移辇-桥山) remains about 4000–3000 years ago, the late stage was the Rongcun-Youba (荣村-右坝) remains dating to 3000–2500 years ago when it still not entered the Metal Age. Each cultural stage shared the same compound of simple material cultures, represented by the round bottom pottery *Fu* cauldrons cookers, pots, bowls, plates, together with usual square type and double shouldered axes and adzes (Qiu, G. 2008; He, G.J. 2012; FSCAT-IA-CASS et al. 2016; Fig. 4.9). This semi-enclosed prehistoric cultural series not only lacked tripod and pouch-shaped leg pottery wares of the Central Plain and North system but also stagnated the ring foot pottery wares that were commonly seen along the southeast coast of mainland China until the quite late period of time. These indigenous cultural series also shared a lot of commonness with the remains of Neolithic Xiantouling and Baojingwan cultures along the coast of Lingnan, showing the same indigenous cultural system of *Bai Yue* and their interactions across the Qiongzhou (琼州) strait.

The prehistoric cultures of Taiwan centralized on the west coast, and the Neolithic cultures developed temporally in early, middle, and late stages. The early stage was Tapenkeng (大坌坑) Culture (5500–4200 BP), varying spatially with the early stage of Xuntangpu (讯塘埔) Culture in the north, the early stage of Niumatou (牛骂头) Culture in the central and Guoye (菓叶) Type in the south. The middle stage (4200–3200 BP) also varied with three district types, they were the late stage of Xuntangpu Culture in the north, the late stage of Niumatou Culture in the central, and the Niuchouzi (牛稠子) Culture in the south. At the late stage (3200–1800 BP) were Yuanshan (圆山)-Botanical Garden (植物园) Culture in the north, Yingpu

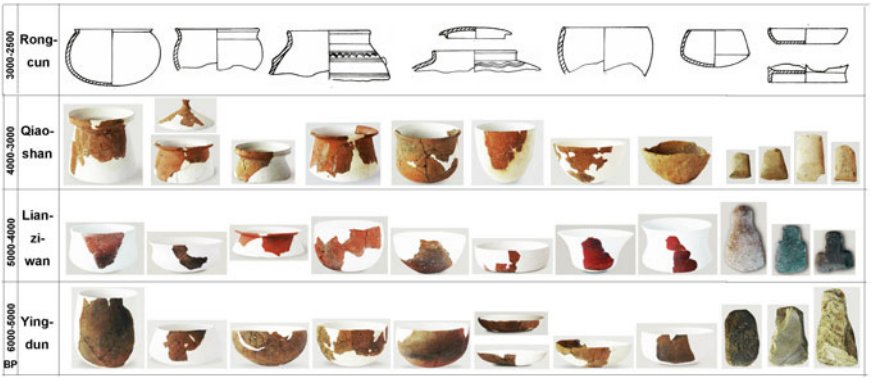


Fig. 4.9 The material cultural sequence of Neolithic Hainan Island

(营埔) Culture in the central and Tahu (大湖) Culture in the south. Closely following these Neolithic cultures were the regional variants of the Iron Age (1800–400 BP), including Shisanhang (十三行) Culture in the north, Fanzaiyuan (番仔园) Culture in the central and Niaoshong (莺萩) Culture in the south (Chang, K.C. 1969, 1987a, 1989; Han, Q. 1979; Li, J.T. et al. 1992; Tsang, C.H. 1999; Tsang, C. H. et al. 2013; Kuo, S.C. 2019; Fig. 4.10).

In the early Neolithic stage, the Tapenkeng Culture was mainly characteristic of sandy red pottery with stamped coarse corded patterns, carved, incised and nail engraved patterns, and the main vessel types were the high neck pots and bowls with round bottom. Tripod pottery wares were not found. The style of high neck globular belly and round bottom pots with circular ridged on neck was similar to the remains at Xiantouling, Dawan, Guye, Zengpiyan, Shiweishan-Fuguodun, and Keqiutou in the early Neolithic stage of Fujian and Guangdong. However, the dating of the Dapengkeng Culture was about 5000–2000 years respectively receding behind the same stage of Neolithic culture in the southeast coast of the mainland (Li, J.T. et al. 1992).

The cultures of late stage of the Xuntangpu, the late stage of Niumatou and Niuchouzi in the middle Neolithic stage were respectively similar to the remains in the lowest deposit remains of Shixia, lower layer of Jinlanshi and the Lower Layer Type of Tanshishan, in particular, their representative characteristics of polished red pottery, fine corded pattern pottery, red painting geometric pattern pottery, with the types of narrow neck and round bottom pots, *Fu* cauldrons cookers, straight high neck ring foot kettles, were very consistent. However, the dating of these spatial types of middle stage Neolithic culture on the west coast of Taiwan also receded about 3000–2000 years behind the same stage of those red pottery cultures on the coast of Fujian and Guangdong (Li, J.T. et al. 1992).

The remains of grey and black pottery in Yuanshan, Yingpu, and Tahu cultures in the late Neolithic stage were similar to those of Hedang, Shixia Cultures, and the Middle Layer Culture of Tanshishan along the mainland southeast coast in the

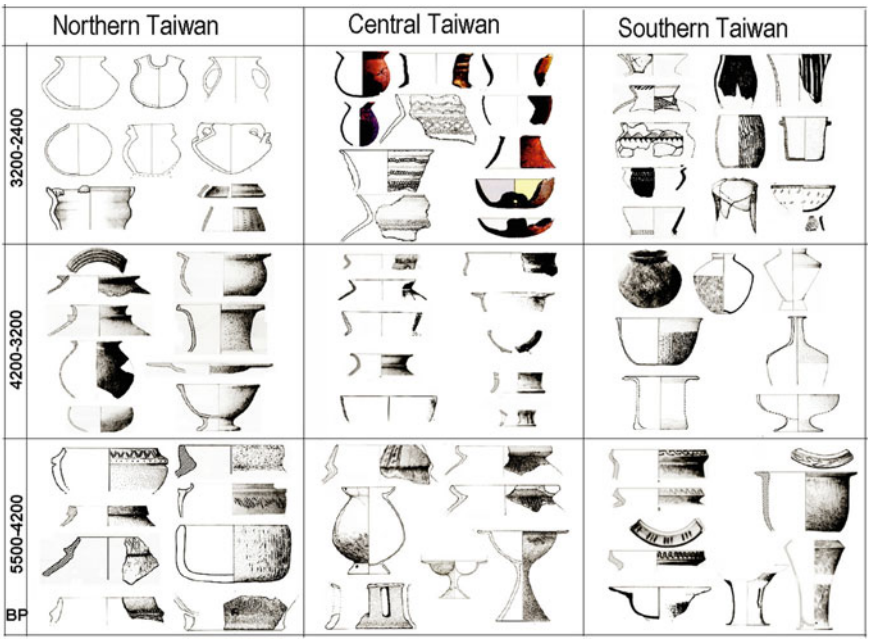


Fig. 4.10 The Neolithic cultural sequence in western coast of Taiwan (After Kuo, S.C. 2019)

Longshan period. The late Neolithic cultures in Taiwan also receded more than 1000 years behind the same stage of Fujian and Guangdong (Li, J.T. et al. 1992).

In spite of the acceleration of the cultural unification and assimilation of *Han* culture in the "Southeastern Direction" of mainland China for more than two thousand years, the main body of Taiwan ethnicities remained its indigenous identity of Iron Age in the long historical period. Judging from the material cultural heritage of the primitive pottery making of Taiwan Aboriginal Gaoshan ethnicity (高山族) lasting to the modern period, it inherited and continued in line with the indigenous cultural tradition of the stamped geometric pattern pottery in Fujian, Guangdong, and Taiwan from the Neolithic to early Iron ages (Wu, C.M. 1994b; Fig. 4.11).

4.4 Conclusion

The preliminary synthesis on the prehistoric cultural chronology and typology from the Neolithic to early Iron ages in the southeast of China, reveals that the common features of the stamped pattern pottery remains of variedly spatial and temporal types represent a regional indigenous cultural unity different from the cultural system of Central Plain in the middle and lower reaches of the Yellow River. These

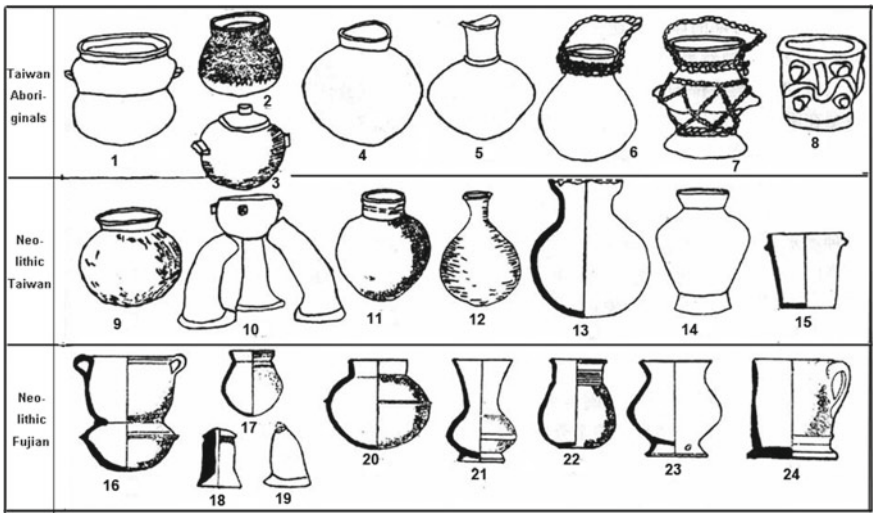


Fig. 4.11 A comparison of Neolithic and indigenous potteries of Fujian and Taiwan (1–8. Indigenous potteries of modern Taiwan; 9. Kending 垦丁; 10. Niaosong 鸟崧; 11, 13. Nantou 南投; 12. Hualian 花莲; 14. Fengbitou 凤鼻头; 16, 24. Huangtulun 黄土仑; 17–18. Keqiutou 壳丘头; 19. Tanshishan 昙石山; 20. Zhuangbianshan 庄边山; 21, 23. Xitou 溪头; 22. Baizhuduan 白主段)

archaeological types are the cultural heritage of the indigenous ethnicities of *Miao, Man* and *Bai Yue* in different stages on the "Southeastern Direction" of Central Nation, and an integral part of a wider and trans-boundary indigenous cultural system of "Maritime Region of Southeastern Asia". Due to the geographical barrier of mountains and seas, the different distances and locations in the geopolitical order of Center-Periphery in ancient Chinese civilization, these indigenous cultural types from Neolithic to early Iron ages obviously varied in series of spatial and temporal diversity, with three different sociocultural regions, namely the plain region lying to the south of the Yangtze River relying on *Huaxia* nationality and territorially connecting to the Central Plain, the hilly region along the southeast coast facing and connecting the maritime "barbarian" of *Islands Yi* and Austronesian in South Sea (Ocean), and the oceanic region of Taiwan and Hainan islands as a part of maritime island "barbarians" in broader Asia–Pacific region.

This indigenous cultural system with spatial and temporal variants of three regions and a number of sub-regions, presented differentially cultural interaction with the *Huaxia* system in Central Nation and maritime "barbarians" including Austronesian of the South Sea (Ocean). On the one hand, "Relying on Huaxia Nationality" in the ancient Chinese civilization characterized by the unity of the "Assimilation and Integration of Pluralistic Cultures" and the geopolitical order of "Central Nation-Various States in Four Directions-Gullied Boundary of the Four Seas", the variant of cultures in three regions were respectively influenced and assimilated in varying degrees, directly or indirectly by the *Huaxia* system. This

influence and assimilation had been continuously strengthened from the south to north, and the indigenous societies in mainland southeast had been generally assimilated into the *Han* culture system up to the time of Qin and Han dynasties. On the other hand, "Facing and Connecting the *Islands Yi* and Austronesian", the indigenous cultural features respectively in these three regions were gradually strengthened from the north to the south, from land to sea. In particular, the semi-enclosed situation, the indigenous culture connotation, the foraging patterns of gathering, fishing, and hunting economy, and the pre-state society of the Neolithic to early Iron cultures in coast region beyond the south and east of Wuyi-Nanling watershed, had continued and stagnated for a long period of time. The prehistoric and early cultures of this coast region had also been closely connected and interacted with the *Island Yi*, which is the important source for searching the origin of Austronesian in the "Maritime Region of Southeastern Asia".

Part III
Ethnographical Investigation of the Maritime Cultural Heritages of the Indigenous *Bai Yue* in Southeast of China

Chapter 5
The Inheritance of *Island Yi* and the Acculturation of *Maritime Fan* in the *Han* People on Southeast Coast of China

The *Han* (汉) people of southern China living in the coastal regions lying to the south of the lower reaches of the Yangtze River show a series of distinctive essences of physique, language or dialect, lifestyle and economic pattern, religion and worship of supernatural spirits, cultural orientations to the oceans and maritime character and so on. It is a special branch of the unity of the "Assimilation and Integration of Pluralistic Cultures" of the Chinese people, which is obviously different from the northern *Han* nationality centering on the Central Plains (Wu, C.M. 2004, 2007).

The maritime orientation of "living on boats as home, depending on sea as lifestyle, trading with *Maritime Fan* (诸番)" was the most prominent characters of the *Han* people in south of China, especially in the southeast coast in Zhejiang, Fujian, and Guangdong. Though the maritime culture was not originally the major feature of ancient Chinese civilization which was characterized in terrestrial farming culture, it was one of the cultural features of *Han* people in the southeast coast of China. These *Han* people were the main navigators of Junk and maritime merchants of ancient China since Tang and Song dynasties on, stubbornly constructing the cross-border maritime economy along the Maritime Silk Road in the Seas Surrounding China. They were the main force of the coastal maritime sociocultural community and the elite of the Chinese maritime civilization in the past two thousand years, being active as "upper class society" in the series of the node seaports along the Maritime Silk Road such as Guangzhou (广州), Quanzhou (泉州), Yangzhou (扬州) and Mingzhou (明州). Under the strict maritime ban of Ming Dynasty, "the maritime merchants turned to be illegal pirates when the sea trade was forbidden" (Deng, R.Z. 2007: 673). These private maritime merchants grouped in the southeast coast of China violated the ban policy of empire and traded with "barbarian" *Island Yi* (岛夷) and *Maritime Fan* "illegally". The more severely the government restricted the non-governmental maritime trade, the more powerfully these private merchants violated the restrictions, rose to be a lot of big and small armed smuggling gangs in the southeast coast, and spread into overseas in the East and Southeast Asia. Although they were regarded as "illegal", "pirates" and "Japanese pirates" by the officials of the Ming empire, objectively they were sea

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heroes promoting the progress of maritime social, cultural, and economic system in Seas Surrounding China. About five hundred years ago, with the arriving of the European navigators and the abolishing of sea ban system of empire since late Ming Dynasty, "the pirates turned to be legal maritime merchants when the sea trade was allowed" (Deng, R.Z. 2007: 673). The private merchants in the South China Sea had made great contributions to the early globalization of the social economy in East Asia, resulting the introduction and assimilation of modern sciences, technologies, and cultures from the West, through the cross-border trade between the mainland coast of southeast China and islands in East and Southeast Asia, and the maritime connection indirectly with Euro-American societies. Their striving enriched the connotation of the integrated pluralistic cultures of ancient Chinese civilization. Therefore, the maritime features of the *Han* people represented by the ancient private merchants of southeast coast of China have been the spiritual connotation of the maritime culture in Seas Surrounding China, and the indispensable treasure of the ancient Chinese civilization.

The formation of the maritime character of the *Han* people in south of China originated from the ecological shaping of oceanic environment in southeast coast of China and the assimilation of the diverse maritime ethnic cultures in last thousands of years. The accumulation and assimilation of the prehistoric and early indigenous *Bai Yue* (百越), *Island Yi* and proto-Austronesian of the Maritime Region of Southeastern Asia, as well as the immigration and acculturation of the overseas ethnic groups of foreign *Maritime Fan* since the medieval ages, were the two main sources of the formation and development of the unique maritime cultural character of the *Han* people in southeast coast of China (Wu, C.M. 2011b, 2017).

5.1 The Indigenous *Island Yi's* Origin of the Maritime Essence of the *Han* People in South China

Though the mainstream of the *Han* nationality was the lineal descendant of the *Huaxia* people of Central Plain, the predecessors of maritime essence of *Han* nationality in south China were the frontier cultures of *Island Yi* and *Bai Yue* in the geopolitical order of the "Central Nation-Peripheries Barbarians in Four Directions-Four Seas", in the discourse and records of ancient China. Relying on *Huaxia* of Central Plain, facing and territorially connecting with the maritime "barbarian" *Island Yi* and Austronesian on southern sea, the *Han* nationality living in the southeast coast, mixed and acculturated with local indigenous maritime "barbarian" *Islands Yi* and *Bai Yue* in long history of the "Assimilation and Integration of Pluralistic Cultures" of ancient Chinese civilization. They prominently presented the maritime characters and were the earliest maritime culture founders and sea heroes of ancient China. In the process of the cultural evolution of ancient China, from the complex and regionally pluralistic prehistoric cultures to the national unification in the Qin and Han empires, the maritime barbarians of *Bai*

Yue and *Island Yi* in the mainland southeast coast of China gradually assimilated and integrated into the unified nation with the core of *Huaxia* and *Han* nationality, setting the maritime cultural context of ancient population of southeast coast of China.

In the vision of *Huaxia* and the *Han* nationality, the ancient *Bai Yue* people were the "hetero-culture" and "totally different from ours" who lived along the coasts and islands, wore colorful straw and bark woven clothes, collected and ate marine shellfish, played and ate with snakes, and were good at using canoe and boats. Chapter of "Areas within the South Sea" (海内南经) of the *Classic of Mountains and Seas* (Shanhaijing 山海经) records: "The aboriginal people of both *Ou* (瓯) and *Min* (闽) live in the sea. It is said that the mountain of *Min* state is located in the sea, or next to the northwest of the sea" (Yuan, Ke 2014: 237). "Tribute of the Yu Period" (禹贡) in the *Book of Early History* (Shangshu 尚书) states that "The barbarians on the islands wear straw clothes, make and wear bark and straw woven clothes, weave bamboo, use marine shells as decorations, live along the rivers and seas, and reach as far as Huaihe (淮河) and Shishui (泗水) rivers" (Ruan, Y. 2009: 312–313). These records depicted the maritime landscape and coastal geography where *Islands Yi* and *Bai Yue* people dwelt, as well as ecological products of the tropics and subtropics regions such as their "primitive" dresses made of straw and barks, marine shell decorations (Shao, W.P. 1989; Wu, C.M. 2010). These indigenous *Yi* and *Yue* people were also characterized by enjoying sea food and good at sailing boats. The "Record the Kings Meeting (王会解)" of the *Lost Historical Literature of Zhou Dynasty* (Yi Zhoushu 逸周书) records: "The *Eastern Yue* (东越) people enjoy marine shell clams, *Ou* people like to eat snakes. The *Yu Yue* (于越), *Gumei* (姑妹), and *Gongren* (共人) people like to eat marine shellfish and crabs" (Huang, H.X. et al. 2007: 833–844). The chapter of "People Live in Five Directions (五方人民)" of the *Biography of the Things and Cultures* (Bowu Zhi 博物志) records that "People in the southeast ate aquatic products, while people in the northwest ate domestic animals. Southeast people eating aquatic products considered turtles, clams, snails, clam and alike as delicious food" (Zhang, H. 2012: 10). The chapter of the "Biography of the *Yue* Territory (越绝外传记地传)" of the *History of the Lost Yue Ethnicity* (Yuejueshu 越绝书) records that "The character of the aboriginal *Yue* is crude and rash. They live along mountainous coast and travel by water, taking boats with oar as their main transportation tool. They skillfully sail the boat as fast as the howling wind" (Yuan, Kang 1985: 57–58). The chapter "Master Strategy Research (主术训)" of the *Book of the Prince of Huainan* (Huan'nanzi 淮南子) records that "despite being a great lord, the wise emperor Tang (汤) of Shang Dynasty was incapable of sailing the boat on rivers and lakes as indigenous *Yue* people easily did" (Liu, A. et al. 2010: 126).

In the southeast areas of Zhejiang, Fujian, Taiwan, Guangdong, and Guangxi, densely coastal settlement sites of Neolithic and Bronze ages have been investigated, which reflect the marine adaptation and maritime cultural development of early indigenous people in prehistory and early history of China (Yuan, J. 1995; Jiao, T.L. 2012; Wu, C.M. 2019). In the lower reach of Qiantangjiang (钱塘江) River, Neolithic culture spread from the coast to the offshore islands, representing the occurrence and early development of the maritime culture along the coast of East

China Sea (Cao, J. 2012). The indigenous maritime cultures on the coast of Fujian occurred 8000 years ago, and hundreds of sites of Neolithic and early Metal age, being densely situated at estuaries and beaches around the lower reaches of the Minjiang (闽江) River, and on a number of nearshore islands, have been discovered, highlighting the development of the maritime settlements landscape of the early indigenous *Seven Min* (七闽) people as the record "*Min* lives in the sea" in the *Classic of Mountains and Seas* (Wu, C.M. 1995, 1996a; Wu, C.M. et al. 1998: 143–153).

Along the north coast of the South China Sea with the Pearl River (珠江) Delta as the center, more than one hundred shell mounds and dune sites dating back to 6000–3000 years ago have been found. The shell mounds were generally located in the delta and estuary, and the dune sites were usually found along the coast or on the islands of the estuary of the Pearl River, reflecting the occurrence and the early development of the maritime settlement of *Southern Yue* ancestors (Zhu, F.S. 1994; Yuan, J. 1999). Dozens of Neolithic coastal dune and shell mound sites have also been found in Hainan island, dating from 5000 to 2500 years ago with the features of dense distribution and marine fishing on the coast around the island, they were the prehistoric maritime cultural heritages of indigenous *Island Yi* and *Daner* (儋耳) (He, G.J. 2012; FSCAT-IA-CASS et al. 2016).

Archaeological discoveries have also proved that the prehistoric ancestors of *Bai Yue* were very active in early seafaring. Hundreds of continental islands are scattered along the southeast coast of China, and the Neolithic cultural contents unearthed on these islands are basically consistent with the those on the coast of mainland, reflecting the primitive maritime traffics between the mainland and islands. The Neolithic cultural series of Taiwan island presents successively the Corded Pattern Pottery Type, Red Fine Pottery Type, Gray and Black Stoneware Type, and Check Pattern Stamped Pottery Type. They have been dated from 5000 to 2000 years ago and studied as the result of several major cultural movements and indigenous emigrations from the mainland to the island in prehistoric times (Li, J.T. et al. 1992). Similar prehistoric cultural communications and the dispersal of maritime groups also took place in Bashi Channel between Taiwan and Luzon, and other numerous sea straits in southeast Asia and the Pacific archipelagos, forming the Proto-Austronesian cultural circle based on the dissemination and interaction of prehistoric cultures over the vast oceans (Lin, H.X. 1958b; Chang, K.C. 1987a; Bellwood, P. 1997: 201–202). This is a huge cross-border maritime cultural community between the indigenous peoples of *Proto-Bai Yue* system in southeast coast of China and Proto-Austronesian in southeast Asia and Pacific archipelagoes, showing the vitality of the indigenous maritime cultural tradition in the Seas surrounding China (Wu, C.M. 2003).

The *Han* people in south of China, being a distinctive regional group of the *Han* nationality in Chinese unity, had been the historical result of two-way cultural assimilation of both the indigenization of the *Han* population who migrated from the Central Plain and North to the indigenous regions of *Bai Yue* in the southeast of China, and the sinicization of local *Bai Yue* ethnicities (Wu, C.M. 2004, 2007). The military and political unification since the Qin and Han dynasties promoted the ethnic group's emigration of *Han* population in large scale from the Central Plain

and North to the original land of *Bai Yue* in southeast coast, and the two-way ethnical assimilation of *Han* and *Yue*. The sinicized *Yue* people preserved in different degrees the indigenous maritime essences of their prehistoric ancestors, while the indigenized *Han* population accepted and inherited a series of local *Yue* cultures in their resettling lands of southeast coast. This two-way assimilation of *Han* and *Yue* cultures made richly the cross-cultural inheritance and accumulation in southeast coast of China, of which the indigenous maritime culture was the most significant aspect.

Firstly, since the Han and Tang dynasties, the maritime population of *Han* nationality living along the coastal region and on the islands of southern China, whether the lower class of boat people *Dan* (蜑) in the fishing villages of countryside, or upper class of maritime merchants in the seaport metropolis, were directly or indirectly originated from the indigenous "barbarians" of *Island Yi* and *Bai Yue* who were "good at using boats".

The boat people *Dan* was the distinctively representative of the lower class of the maritime society of *Han* generally living in the fishing villages of the southeast coast since the Han and Tang dynasties, who was mainly originated from the indigenous *Bai Yue* (Chen, X.J. 1946; Han, Z.H. 1954; Huang, X.M. 1990). The "Biography of Southern Barbarian" (南蛮传) of the *History of Sui Dynasty* (Suishu 隋书) records: "The southern Barbarians *Man* (蛮) with diverse ethnicities live together with *Huaxia* people in south of China, such as the tribes *Dan*, *Rang* (獽), *Li* (俚), *Liao* (僚) and *Yi* (狶) who are without a chieftain. They live in the caverns of mountain, and their ancestors are the so-called *Bai Yue* ethnicity in the ancient time" (Wei, Z. et al. 1982: 1831). The boat people *Dan* had been a famous maritime ethnicity and the main force of maritime economy in southeast region of ancient China, known as a series of distinctive names with marine characteristics such as "Houseboat Guy (Youting Zi, 游艇子)", "Boat Family (Tingjia, 艇家)", "Water People (Baishui Lang, 白水郎)", and "Family on Boat" (Shuiju Chuan 水居船, Fig. 5.1). The section of "Lingnan Road First (岭南道一)" in the Vol. one hundred and fifty-seven of the *Geographical Record of the World in Taiping Reign* (Taiping Huanyu Ji 太平寰宇记) records: "The boat people *Dan* in Xinhui (新会) of Guangzhou were administrated by county municipal office, who were born, lived and fished on the seas and rivers, and sailed across the big waves. They would mostly die if they moved to live on land, just as the Water People in East Road of Southern Yangtze River (江南东道)" (Yue, S. 2007: 3021). The section "Record of Barbarian *Man*" in the *Records of Geography and Folkways in Guilin* (Guihai Yuheng Zhi 桂海虞衡志) states: "The boat people *Dan* are in fact the barbarians living on the sea water. They live on boats and make living by gathering and eating marine foot without cooking. Only these boat people are able to dive and see in the deep water, and catch clams underwater in the pearl ponds in Hepu (合浦)" (Fan, C. D. 1986: 118). The "Biography of Taiding Emperor (泰定帝纪)" in the *History of the Yuan Dynasty* (Yuanshi 元史) records that in the July of the first year of Taiding (泰定) Reign (AD1293), the office made "the boat people *Dan* who gathering pearls underwater in Guangdong and Fujian being civilian, and exempted them from paying tax of one year" (Song, L. et al. 1976: 649). The section "Method of

Fig. 5.1 Boathouse of the Chao Lae in Thailand (Cited from Princess Maha Chakri Sirindhorn Anthropology Centre in Bangkok 2007)

Gathering Pearls in the Sea (珠池采珠法)" in the *Diary in Eastern Coast of Water* (Shuidong Riji 水东日记) of the Ming Dynasty says: "The boat people *Dan* collected pearls by the boat. They anchored the boat on the sea around the pearl situs and set a short rope from the boat into water by stone weight. Then the *Dan* salvager bound the string on his waist, dived into the deep sea along the rope and collected the pearls underwater" (Ye, S. 1980: 54). The section of "East Road of Southern Yangtze River (江南东道)" in the Vol. one hundred and two of the *Geographical Record of the World in Taiping Reign* records: "The Water People, or Houseboat Guy, were the barbarians *Yi* (夷) in Quanzhou who live on the boats as permanent homes all year round. They moved constantly on the water with boat famous as Liaoniao Chuan (了鸟船), which was made in both sharp pointed stem and stern, and flat and wide midship suitable for sailing in rough wind and wave" (Yue, S. 2007: 2029–2031). The section of "Other Works (杂录)" in the Vol. thirty-one of the *Complete works of Cai Xiang (*Caixiang Quanji 蔡襄全集) also records that "the Family on Boat in Futang (福唐) county was the maritime people whose whole family lived on a boat all year round" (Cai, X. 1999: 691).

The ancient maritime merchant of southern China was originally active in the coastal seaports of southeast region since the Han Dynasty on and were the distinguished representatives of the upper class of maritime society in south of China for more than 2000 years. The chapter of "Annals of Geography" (地理志) of the *History of the Han Dynasty* (Hanshu 汉书) records: "Pangyu (番禺) was one of the metropolis cities where many merchants were attracted to trade rhinoceros, ivory, hawksbill turtle, pearls, silver, copper, fruit, and cloth there and got rich" (Ban, G. 1962: 1670). Vol. nine of "Chronicles of Locality" (方域) in the *Collected Important Administrative Statutes of the Song Dynasty* (Song Huiyao Jigao 宋会要辑稿) states:

"There were many foreign and Chinese merchants living together in Guangzhou where had no city wall" (Xu, S. 1957: 7472). The Vol. sixteen of the *Works Collection of Authority Wu Wenzheng* (Wu Wenzhenggong Ji 吴文正公集) of Yuan Dynasty records: "Quanzhou was the metropolis city in *Seven Min* region of ancient Fujian, where the exotic treasures and rare curios from remote foreign states were imported and stored. It was the biggest seaport in the world with many business tycoons and wealth merchants residing" (Wu, Cheng 1985: 300–301). These maritime merchants continued trading with foreign states around the South China Sea and even over the Indian Ocean during Song and Yuan dynasties, as the chapter of the "Foreign Barbarian *Fan* States (诸番国)" in the Vol. two of the *Interlocution on the History of South Coast of China* (Lingwai Daida 岭外代答) records, "The Chinese maritime merchants who wanted to trade with Arabian countries should sail to stop at Gulin (故临) state and change a small boat to go on the navigation in one month following the south wind. Their sailing of round-trip should take two years" (Zhou, Q.F. 1996: 37).

During the Ming Dynasty, these traditional maritime merchants were discontented with the private trading ban of the Ming empire, and were passively changed from legal maritime merchants of Tang and Song dynasties to "illegal" merchant group emerged and "violated" the law of sea ban under the "Tributary Trade" system of Ming Dynasty. This changing situation was recorded in historical documents of Ming Dynasty, "The pirates turned to be legal maritime merchants when the sea trade was allowed, and the maritime merchants turned to be illegal pirates when the sea trade was forbidden" (Deng, R.Z. 2007: 673). These maritime merchants who were charged as "Pirates" or "Japanese Pirates" by the officials of the Ming government were basically and objectively maritime heroes for trading over the seas surrounding China, with the adventurous and rebellious spirits and by armed "smuggling". There had been dozens of "illegal" maritime trade groups in the middle and late Ming Dynasty, among them, the largest, most powerful and influential was Zheng's maritime merchant group, that was Koxinga (国姓爷), which dominated and controlled maritime trade between the South Ocean, East Ocean, and Japan Sea for decades (Lin, R.C. 1987: 85–130). These maritime merchants with thousands of year's tradition of navigation trade were familiar with the sea routes and water channels over the "Four Seas" and "Four Oceans" in Seas Surrounding China, skillful with seafaring techniques, and brave in oceanic adventure, directly or indirectly inherited the prehistoric and ancient maritime cultures of indigenous *Island Yi* and *Bai Yue* people who were good at using boats (Fig. 5.2).

Secondly, the indigenized *Han* people in the coast of southern China inherited a series of cultural connotations of prehistoric and early historic *Islands Yi* and *Bai Yue,* including the indigenous sea gods worship, maritime folklores, and lot of other primitive maritime cultural features.

The well-developed primitive animism and broad worship of the supernatural ghosts were the distinctive feature of the ancient *Bai Yue* culture, which had been discriminated and recorded by *Huaxia* and *Han* literatures since Han Dynasty. Both the "Records of Sacrifice to Heaven and Earth" (封禅书) of the *Records of the Historians* (Shiji 史记) and the "Annals of Sacrificing" (郊祀志) of the *History of*

Fig. 5.2 A traditional junk of Fujian (*Min*) maritime merchant

the Han Dynasty record: "*Yue* people generally believed in ghosts and their temples were full of various ghosts" (Sima, Q. 1959: 1680; Ban, G. 1962: 1241). The Vol. Fifty-eight of "Temples (祠庙)" of the *General Chronicle of Eight Prefectures of Fujian* (Bamin Tongzhi 八闽通志) of the Ming Dynasty says: "The customs in *Min* people fashioned witching and trusted ghosts, and everywhere even the remote mountains were full of various temples and ghosts sacrificing" (Huang, Z.Z. 1991: 365). The section "Peoples (人部)" of the *Works Collection of Five Subjects* (Wu Zha Zhu 五杂俎) of Ming Dynasty records: "The worship of witches and ghosts were prevalent in the regions to the south of the Yangtze River, and were the most in Guangdong and Fujian" (Xie, Z.Z. 2019: 512). For the reason of acculturation of the indigenous *Island Yi* and *Bai Yue* and the cross-cultural acceptance and inheritance by the indigenization of immigrated *Han* nationality, people living along the coast of south China developed to be an animistic society with multi-ghosts sacrificing and remained to modern society. They commonly worship various kinds of witches and wizards for "life protection and disaster relief", of which the Mother Ancestor (Matsu 妈祖), Dragon Mother (Longmu 龙母), Waterfront Lady (Lingshui Furen 临水夫人) and so on are a few of the typical maritime focused goddesses.

The Matsu, the Mother Ancestor, which originated from Meizhou (湄洲) island in Putian (莆田) in the central coast of Fujian, was the most widely distributed sea goddesses of ancient China, and well known as oriental sea goddess all over the

world, spreading along the maritime silk road in last hundreds of years. Matsu's original name was Moniang Lin (林默娘), her life story was praised and commented in detail in historical documents. The memorial tablet of the *Record of Success God Holy Matsu Temple* (Shunji Shengfeimiao Ji 顺济圣妃庙记) of Song Dynasty records: "This daughter of Lin's family in Meizhou of Putian Prefecture could foresee the fortune or misfortune of people when she was a little girl. After she died people built a temple to memorize and sacrifice her. She was recognized as the super witch and dragon's daughter communicating the ghost (Qian-Shuo-You, 1970: 704)." Another tablet of the *Record of Bestowing God Holy Matsu Temple* (Linhui Feimiao Ji 灵惠妃庙记) in the Song Dynasty tells a similar story: "Miss Lin was born in Meizhou of Putian, where the earth was specially in purple color signifying that the super man will be born… She was recognized as the descendant of dragon and her spirit would cruise wherever like the dragon to protect people." Scholars researched that the "Dragon's Daughter" and "Dragon's Descendant" were in fact the snake totem people of the indigenous system of *Southern Man* (南蛮) and *Bai Yue*. According to the tablet of "*Record of Rebuilding the Success God Shengdun Ancestor Temple*" (Shengdun Zhumiao Chongjian Shunjimiao Ji 圣墩祖庙重建顺济庙记) and similar records in the previous two tablets, Moniang Lin "was said to be the super female witch capable of communicating with the heaven goddess", the family of Moniang Lin could be originally the hereditary wizard and the cultural heritage of indigenous *Bai Yue* where "the worship of witches and ghosts were prevalent in the regions to the south of the Yangtze River, and were the most in Guangdong and Fujian" (Wang, R.G.2003: 62-83,244-259)

Dragon Mother (Longmu) is another important water goddess in south of China and mainly worshipped by boat people of both the *Han* and *Zhuang* (壮) ethnicities along the Xijiang River Valley and the Pearl River Delta. In the Qing Dynasty, there were 352 Longmu temples and much more Longmu temporary palaces in the Xijiang River Basin, which were generally built in knot points and estuaries of rivers and streams (Huang, G.Q. 2006). Both *Han* people along the Xijiang and Pearl rivers in the territory of Guangdong and minority *Zhuang* ethnicity around Damingshan (大明山) mountain in Guangxi worshipped Longmu "Dragon Mother", who was recognized as the "snake mother" and a kind of snake totem worship, indicating their common source of indigenous *Bai Yue* culture (Fig. 5.3).

In addition, there are a number of other sea gods along the south coast of China originated from the ancient indigenous *Bai Yue* culture, such as "Water Front Lady" or "Lingshui Furen", "Yangyu God" (演屿神) and "Nagong God" (拿公神) in the estuary of the Minjiang River, Zhaoling Temple (昭灵庙) in Fuqing (福清) (Xie, C. G. 2002; Wang, R.G. 2012). The indigenous origin of these sea gods worships in the south coast of China indicates that the mainstream of the maritime culture of the *Han* nationality in south China have accepted and inherited the indigenous *Bai Yue* cultural tradition of prehistory and early history.

Thirdly, the nautical technology of the *Han* people in coast of southern China also originated from indigenous *Bai Yue* seafaring activities. Especially, a number of the most important medieval seaport metropolis have directly continued the oceanic capitals of *Bai Yue* states along the coast, showing the inheritance of regional

Fig. 5.3 Snake-shaped stone carving in the Dragon Mother temple at Liangjiang (两江) village of Wuming (武鸣) County, Guangxi (Photographed by Qin Fang覃芳 of GXICRCA)

navigation system. Furthermore, the traditional sea routes of the East Ocean and South Ocean of the middle ancient ages have also developed on the base of the indigenous seafaring of prehistoric and early historic ages (Wu, C.M. 2019).

Most of the capital cities of indigenous states of *Bai Yue* ethnicities in southeast coast of China during Pre-Qin and early Han dynasties were located in the largest river estuary with each state or the ethnic territory, which were the most convenient for seafaring exits. These coastal capital cities are not only linked to the vast hinterland of economy and resource in each state, but also the most convenient seaports for navigation trade of each indigenous society, highlighting the maritime nature of *Bai Yue* capital cities. They were absolutely different from those of the farming cultural states or kingdoms in the "Center of the World" (天下之中) or " Big Riverside" (大河之上) of the Central Plain (中原) and the North in pre-Qin to early Han dynasties (Wu, C.M. et al. 1998; Cao, J.2003). After the Han and Jin dynasties, all of these coastal capitals of the *Bai Yue* states continued and turned to be the main seaports cities and maritime metropolis. For example, Panyu (番禺), the capital of *Southern Yue* state in the Pearl River Delta developed to be the administrative center of Nanhai Prefecture of the Qin and Han dynasties after indigenous state was repealed, and the largest metropolis in the South China Sea from the Han and Tang to the Ming and Qing dynasties. The seaport capital Eastern Ye (东冶) of *Min Yue* state rising and developing in the estuary of Minjiang River,

developed to be the county town of the only one administration division Yexian (冶县) County under the Kuaiji (会稽) Prefecture since late of Han Dynasty, and one of the most important shipping centers along the southeast coast after the demise of *Min Yue* state. Hanoi as the largest coastal seaport of north of Vietnam, being situated at estuary of Red River, had been the capital city Co Loa (古螺城) of the indigenous of *Luo Yue* (骆越国) state and developed to be the administrative center of the Jiaozhi (交趾) Prefecture. The capital city Helv (阖闾) of the *Wu* state situated at the east coast of Taihu lake in the Yangtze River Delta turned to be the early Suzhou (苏州) city as the administrative center of Wu Prefecture since Qin and Han dynasties, while the capital city Shanyin (山阴) of *Yu Yue* state near the southern coast of lower reach of Qiantangjiang River turned to be the administrative center of the Kuaiji Prefecture after Qin and Han dynasties, both of them continued to be the flourishing seaport cities in early history around East China Sea. In a word, the maritime cultural nature of capital cities of *Bai Yue* coastal states laid the economic and cultural foundation of the most important seaport metropolises in southeast of China during the Han and Tang dynasties, which is an important illustration of the inheritance of the maritime culture and navigation system between the indigenous *Bai Yue* and the indigenized *Han* people.

Since the Han and Tang dynasties, the formation of the traditional sea routes of the East Ocean, the South Ocean, and the West Ocean, also generally inherited the indigenous *Bai Yue* seafaring practices between the mainland and islands in Seas Surrounding China, except for some restrictions of the geographical conditions, monsoon, ocean currents, and other environmental factors. In the East China Sea, the East Ocean sea routes carried out by boat people of ancient Minzhong (闽中) in central Fujian were recorded in the navigation guide books such as *Sea Routes with Successful Sailing* (Shunfeng Xiangsong 顺风相送) of late the Ming Dynasty, showing the round-trip navigation between mainland seaports of Meizhou, Quanzhou, Zhangzhou (漳州) and Nanao (南澳) and alike on the coasts of Fujian and Guangdong, and islands seaports of Penghu (澎湖), Luzon (吕宋), Sulu (苏禄), Boni (渤泥). The *Guide for Right Sea Routes* (Zhinan Zhengfa 指南正法) also depicted the seascape along the route from Zhangzhou via Penghu and Taiwan to Luzon in Philippines, the round-trip nautical routes listed in the book were more than that in the *Sea Routes with Successful Sailing,* constituting a complicated net of maritime routes of the East Ocean from mainland southeast of China to the Southeast Asian archipelago (Xiang, D. 1961: 87–99, 137–190). Archaeological investigations revealed that these historical sea routes had been started in the Neolithic seafaring of indigenous *Bai Yue* and proto-Austronesian from mainland southeast of China, across Taiwan Strait and Bashi Channel of Philippines, and into Southeast Asia and Pacific (Bellwood, P. 1979: 201–202; Rolett, B.V. et al. 2002; Rolett, B.V. 2007; Wu, C.M. 2019). In the South China Sea, from the "South China Sea Route via Xuwen and Hepu" (Xuwen Hepu Nanhaidao 徐闻合浦南海道) in the Qin and Han dynasties, to "Guangzhou Sea Route to Foreign States (Guangzhou Tonghai Yidao 广州通海夷道)" in the Tang and Song dynasties, the navigation practices on the West Ocean and South Ocean routes could also be traced back to the maritime cultural dispersal and connection of the Neolithic

ancestors of indigenous *Southern Yue* and *Luo Yue* along the north and west coasts of South China Sea to Indochina Peninsula (Wu, C.M. 2011a, 2019; Higham, C.F.W. 2019).

In short, the maritime cultural feature of the *Han* people in southeast coast of China, to a large extent, was formed on the foundation of the prehistoric and early historic culture of the indigenous *Island Yi* of *Bai Yue*, which had been deeply accumulated in the society of boat people of *Han* nationality, with the maritime cultural gene and navigation technologies. Therefore, we cannot analyze the origin of maritime culture of south China prejudicially from the viewpoint of *Huaxia* or *Han* centrism of the Central Nation and the North, which misunderstanding the maritime culture of the *Han* people in southeast coast of China since the Han and Tang dynasties as the "reestablishment" after their immigration from north to south, and the spatially shifting of the Chinese economic center from the north to the south. The cross-cultural foundation of the indigenous *Island Yi* should have been the major origin of the maritime cultures of Chinese *Han* people in the southeast of China.

5.2 The Acculturation of Foreign *Maritime Fan* in *Han* People Along the Maritime History of Southeast China

In the history of the past more than 2000 years, the development of *Han* people in south China also continuously accepted the acculturation of the foreign maritime ethnicities from South China Sea and the Indian Ocean along the Maritime Silk Road. These foreign maritime groups with "hetero-culture" and "totally different from ours" were generally recorded in Chinese history as maritime "barbarians" of *Hu* (胡), *Fan* (番), *Hui Man* or *Huihui Fan* (回蛮, 回回番, both the *Muslin*), *Devil Fan* (番鬼) and alike. In fact, most of them were maritime merchants from various foreign countries along the Maritime Silk Road, landing and trading in Guangzhou, Hepu, Quanzhou, Yangzhou, and other ancient seaport metropolises in southeast coast of China. They mixed and acculturated the local society of *Han* nationality in varying degrees. These maritime "hetero-cultures" enriched and developed the local maritime cultural connotation of the *Han* people in south of China, leaving us a large number of colorfully cross-cultural historical heritages (Wu, C.M. et al. 2011).

During the Han, Jin dynasties, and South Dynasties, there were various maritime merchants *Hu* and *Fan* from the South China Sea landing on the seaports of southeast coast of China, which were recorded in Chinese historical documents and witnessed by archaeological discoveries. They made a special cross-cultural exchange in the early development of the *Han* people in south of China. Guangzhou had been the largest seaport metropolis on the northern coast of the South China Sea and gathered many foreign missions and merchants from countries of the South China Sea and the Indian Ocean. According to the "Annals of Geography" of the *History of the Han Dynasty*, more than ten foreign maritime states in South China

Sea and Indian Ocean traded through "South China Sea Route via Xuwen and Hepu", including the Zhangsai (障塞) of Rinan (日南, now Vietnam) Prefecture, Duyuan (都元, now Sumatra), Ruhmi (邑卢没, now Myanmar), Chenli (谌离, now Myanmar), Fugandulu (夫甘都卢, now Myanmar), Huangzhi (黄支, now India), Pizong (皮宗), Yichengbu (已程不, locating to the south of Huangzhi (Ban, G. 1962: 1671). Historians stated that the kingdom of Huangzhi was the present east coast of India and the Yichengbu (已程不国) was Sri Lanka (Han, Z.H. 1958; Wang, Z.J. 1992). There were many maritime missions and merchants arriving to Guangzhou in the Han Dynasty along this sea route. The "Biography of Western Territory (西域传)" of the *History of the Later Han Dynasty* (Houhan Shu 后汉书) records: "During the time of emperor Huandi (桓帝) in the Han Dynasty, the king Andun (安敦) of Great Qin (大秦, Roman) empire sent a mission to present tributes of ivory, rhinoceros horns, and tortoise shells via Rinan state, and started the trade since then" (Fan, Y. 1965: 2920). The territory of the Roman empire had been extended to the Persian Gulf and the Red Sea during the time of the Han Dynasty, and the Roman merchants along the sea routes most possibly included a variety of ethnic groups from the south and West Asian coasts. The chapter "Biography of Southern Barbarians and Southwestern *Yi* (南蛮西南夷列传)" of the *History of the Later Han Dynasty* also records: "In the first year of Yongning (永宁) reign (AD120) of Andi (安帝) emperor in late Han Dynasty, the King Yon Youdiao (雍由调) of Shan (掸) state sent missions to the palace paying tributes and presenting hundreds of acrobat performers who were good at singing, dancing, spitting fire, self-dissecting, changing horse head with cow head lively, and ball skipping. These acrobats claimed to be from the West Ocean, where was the territory of the Great Qin. During that time, the Shan (掸) state connected and transported its southwest territory with the Great Qin…During the sixth year of Yongjian (永建) reign (AD131) of Sunidi (顺帝) emperor of the late Han dynasty, the King Bian (便) of the Yediao (叶调) state beyond the territory of Rinan state sent mission paying tributes, Shundi emperor granted him gold seal with purple belt" (Fan, Y. 1965: 2837, 2851). The "Biography of Shundi Emperor (顺帝纪)" of the *History of the Later Han Dynasty* also confirms: "During the time of the sixth year of Yongjian reign of Shundi emperor, the Yediao and Shan states sent missions to pay their tributes" (Fan, Y. 1965: 258). Yediao state was studied and identified as the present Java or Sumatra, the Shan state was present Burma, and the acrobat performers from Shan state claimed themselves the people from Great Qin. Therefore, the maritime communications with the ethnic groups from South and West oceans had been in a wide range and frequent.

Archaeologically, a series of cultural heritages of the immigrated maritime *Hu* or *Fan* people in Qin, Han dynasties, and Six Dynasties were unearthed in large amounts in southern coast of China. The green glazed pots of late eastern Han Dynasty recently unearthed from Liaowei (寮尾) cemetery site in Hepu county of Guangxi were studied and identified as the product in the *Parthia* empire (247 BC–AD 226), which were different from traditional Chinese pottery artifacts. This pottery pot had been an ordinary household vessel instead of a commodity or an inherited treasure, so it could be inferred that the owner of the tomb might have

been a maritime *Hu* or *Fan* merchant from *Parthia* in the Han Dynasty (Huang, S. 2012). In the tombs of the Han Dynasty and Six Dynasties along the southeast coasts of Guangdong, Guangxi, Jiangsu, and Zhejiang, many human figurines of pottery and bronze with short skull, prominent cheekbone, deep eye, high nose, and small stature, were respectively discovered, obviously different from those of local *Han* people or East Asian ethnicities. In Guangxi, the bronze human figurine excavated in the tombs of West Han Dynasty at Fengliuling (风流岭) site in Guixian (贵县) County was built with high nose, deep eye, full beards, and wearing hats. The human figurine shaped pottery lamp unearthed in the Han Dynasty tomb in Wangbu (旺步) site of Wuzhou (梧州) was built with high nose, deep eye, sticking tongue out of mouth, heavily bearded and dense body hair, naked and barefoot. Another human figurine shaped pottery lamp unearthed at High School campus site of Guixian county was built with prominent eyebrows, triangle eyes, high nose, sticking tongue out of mouth, heavily bearded and dense body hair, naked and barefoot. Similar pottery human figurines with hetero race features were also discovered in many sites along the coast of Guangdong, especially around Guangzhou, the original land of Panyu seaport of Southern Yue metropolis, such as pottery lamp from the tomb of Han Dynasty at No.5 of Xianlie Road (先烈路), with foreign *Hu* or *Fan* figurine shape of high nose, point chin, and full bearded. About ten pieces of this type pottery lamps have been discovered from the tombs of the Han Dynasty in Guangzhou including M3021:87, M3026:6, M4019:39, M5018:1, M5036:22, M5032:12, M5063:1, M5043:21, M5061:2, and M5046:16, with foreign *Hu* figurine shape of sticking tongue out of the mouth, heavily bearded, naked, and barefoot (Fig. 5.4a, b). Around Guangzhou, the human figurine shaped pottery lamps of the early Eastern Han Dynasty unearthed in Chencun (陈村) of Shunde (顺德) were usually built with square faced, high nose, thick eyebrow and the triangular eyes, two sideburns, naked and barefoot, dense body hair and exposing penis. At Wentougang (文头岗) site of Panyu, high-nosed and heavily bearded pottery figurines of foreign *Hu* or *Fan* people wore dresses in Chinese *Han* style (GXZMCRAT 1984; Deng, L. 2006; GZMICRA 2005a, b; Xiong, Z.M. 2000; GZMCRAC et al. 1981; GDPM et al. 1991). In coastal regions of Jiangsu and Zhejiang, similar burial figurines with foreign *Hu* ethnic features were also discovered in the tomb of Three Kingdoms period in Jiangning (江宁) and tombs of East Jin Dynasty at Fuguishan (富贵山) of Nanjing in Jiangsu (Fig. 5.4c). On the celadon burial jars unearthed from the tombs of the Six Dynasty in Jiangsu and Zhejiang were usual the sculptures of human figurines of *Hu* and *Fan* people. For example, in the tomb of the western Jin Dynasty in Pingyang (平阳) county of Zhejiang, there were a group of sculptures of music band including the figurine of the players of *Hu* ethnic with deep eyes, high noses wearing pointed hats (Xu, D.S. et al. 1988; Li, G. 1991).

Researchers presented opinions on the origin and identification of these foreign human figurines "totally different from ours". Some of them augured that these obviously hetero races were the foreign *Hu* who had been sold to Lingnan (岭南) coast to be the slaves of local family of *Han* nationality, they also considered that these foreign *Hu* "might be the native Indonesians, or primitive Malays in the South

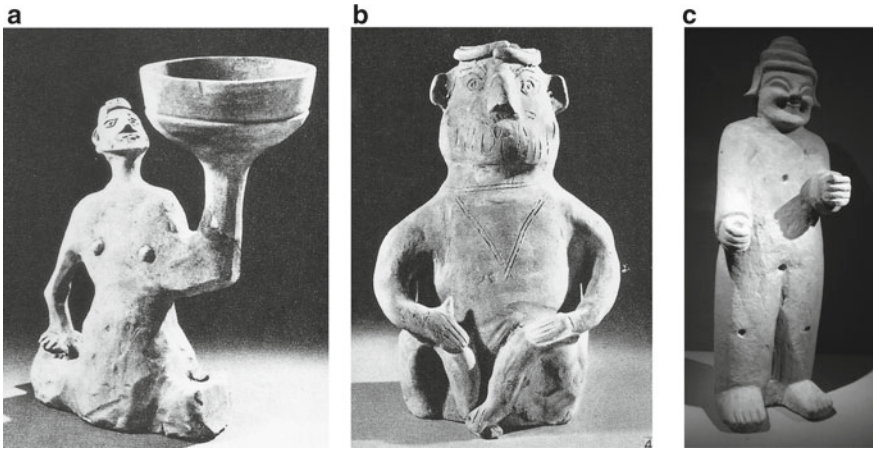

Fig. 5.4 Burial pottery figurines of *Maritime Fan* discovered in southeast coast of China (a. M3026:6, Western Han Dynasty in Guangzhou; b. M5046:16, Eastern Han Dynasty in Guangzhou; c. Tomb of East Jin Dynasty at Fuguishan 富贵山 of Nanjing in Jiangsu)

China Sea," or "probably from India", or "more likely from the east coast of the West Asia or Africa" (Hu, Z.C. et al. 1961; Huang, Z.Y. 1984; GZMCRAC et al. 1981: 478). Other scholars argued that "those pottery human figurines of *Hu* with naked and barefoot features unearthed from the tombs of the Han Dynasty in Guangzhou were clearly the images of *Jain* of southern Indian for their distinctive nudity worship" (Li, G. 1991). In any case, these pottery figurines of the hetero human races discovered in southeast coast of China during Qin, Han dynasties, and Six Dynasties vividly revealed the mixture and acculturation of the immigrated foreign *Hu* and local *Han* people during the early development of Maritime Silk Road around South China Sea.

During the Tang and Song dynasties, the coastal seaport cities in south of China continued to be the converging lands for foreign maritime merchants as Various *Fan* (诸番), *Huihui Fan*, among them, many were *Muslim* merchants. They landed and settled for bushiness in Guangzhou, Quanzhou and Yangzhou, and other seaport metropolis, mixed with the local people and were assimilated into Chinese societies, promoting the development of maritime culture of the *Han* nationality of south of China. The "Annals of Geography" of the *New History of the Tang Dynasty* (Xingtang Shu 新唐书) records, there were dozens of countries and seaport cities along the "Guangzhou Sea Route to Foreign States" in the South China Sea and Indian Ocean, where were supposed to be major sources of these foreign *Fan* merchants in the Tang and Song dynasties (Ouyang, X. et al. 1982: 1153). The chapter of the "Geography of Wang E (王鍔传)" of the same book records: "The great profits of foreign maritime merchants in Guangzhou were mostly deprived by Wang E family. His family sent more than ten commercial boats with rhinoceros, ivory and pearl shell exiting to trade overseas and became much more wealthy than other officials in

capital" (Ouyang, X. et al. 1982: 5169). The chapter of the "Geography of Wang Fangqing (王方庆传)" of the *Old History of the Tang Dynasty* (Jiutang Shu 旧唐书) records that "Guangzhou situated on the coast of the South Sea, merchants of *Kunlun* (昆仑) state come from West Sea by ships with treasure to trade each year" (Liu, Xu 1975: 2897). According to the records in *Old History of the Tang Dynasty* and *New History of the Tang Dynasty,* the foreign commercial boats converging to Guangzhou in the Tang Dynasty included the South Sea Boat (南海舶), Western Barbarian *Yi* Boat (西方夷舶), *Persian* Boat (波斯舶), Western Regions Boat (西域舶), Barbarian *Fan* Boat (番舶), Southern Barbarian *Fan* Boat (南蕃海舶), Barbarian *Man* Boat (蛮舶), *Kunlun* Boat (昆仑舶), *Boromen* Boat (波罗门舶), Lion State Boat (狮子国舶) and so on, showing the diverse origins of the foreign maritime merchants. *The Biographical Record of the Great Monk of Tang Dynasty* (Tang Daheshang Dongzheng Zhuan 唐大和上东征传) records what monk Jianzhen (鉴真) saw in Guangzhou, "There were countless boats from *Boromen* (波罗门), *Persia*, *Kunlun* (昆仑) and alike, with heavy loads of spice, medicine, and treasure. The boat was six to seven *zhang* (丈) deep. People from various foreign states of *Lion* (Shizi Guo 狮子国), *Dashi* (大石), *Gutang* (骨唐), 'white barbarian' *Bai Man* (白蛮) and 'red barbarian' *Chi Man* (赤蛮) lived there" (Oumino, M. 2000: 74). At the time, the Arabian businessman Sulayman (苏莱曼) wrote in his book *Voyage Du Marchand Asabe Sulayman Par Sutayman* that "The Kaufu (Canton, now Guangzhou) is the Chinese seaport where the Arabian merchants lived in China. There is a *Muslim* imam and a mosque. It is also the main entrepot for Chinese and Arabian merchants as well as their cargoes" (Sulayman 1937). In the "Chronicles of Locality (方域志)" of the *History of Min Kingdom* (Min Shu 闽书) written in the Ming Dynasty records that "two Arabian merchants were buried in Lingshan (灵山) mount of Quanzhou, who were the earliest *Muslin* merchants living there. The *Muslim* say that four *Muslim* missionaries preached in China during the time of Wude (武德) reign in the Tang Dynasty, one was in Guangzhou, one in Yangzhou, and two in Quanzhou" (He, Q.Y. 1994: 165–166) In addition to foreign merchants and envoys for tributes, a considerable number of foreigners at the time were sold there as slaves. After monk Jianzhen failed in sailing to Japan for the wrong current and drifted to Hainan island in the seventh year of Tianbao (天宝) reign (AD 748) in the Tang Dynasty, he stayed at the home of a chief Feng Ruofang (冯若芳) in Wangan (万安) Prefecture in Hainan. He knew that the chief Feng robbed two or three *Persian* merchant ships every year, took the cargoes and sold the people of the ships as slaves. These slaves sold by the chief distributed in many local villages around the prefecture (Oumino, M. 2000: 74).

Since Song and Yuan dynasties there were more and more foreign merchants living in China. According to the "Record of Food and Commodity (食货志)" of the *History of Song Dynasty* (Song Shi 宋史), "The governments established Shibosi (Foreign Commercial Boat Administration 市舶司) custom office in Guangzhou in the fourth year of Kaibao (开宝) reign (AD 971) and then again in Hangzhou and Mingzhou (now Ningbo) to superintend the foreign trade. During the time, these coast seaports opened trade for the diverse merchants from foreign states such as Dashi (Arab Empire 大食), Kalah (古逻, now south of Malay peninsula), Dupo (阇婆, Yavadvipa, now Java), Champa (占城, southeast

Vietnam), Burni (渤泥, now Borneo), Mait (麻逸, now Mindoro of Philippines) and Samboja (or Srivijaya, 三佛齐, now Sumatra)" (Tuotuo 1977: 4558–4559). According to laws of Song Dynasty in *Collected Important Administrative Statutes of the Song Dynasty*, "There were many foreign and Chinese merchants living together in Guangzhou where had no city walls. Despite the coastal guard patrolling in the sea, the pirates were active and the merchants were usually robbed" (Xu, S. 1957: 7472). Hong Kuo (洪适) also wrote in his *Panzhou Collected Works* (Panzhou Wenji 盘洲文集), "Guangzhou was a large seaport metropolis where the rich merchants from Dupo, Champa, Burni, and Samboja sailed to and settled down. Dozens of cargo ships reached very year loading with treasures of rhinoceros horns, ivory, pearls, incense and countless types of indescribable goods from the barbarian states in the southwest ocean" (Hong, K. 2004).

The landing and residing of a large number of foreign maritime barbarians *Fan* and *Huihui Fan* changed the demographic composition of coastal seaport cities such as Guangzhou, therefore a series of settlement communities *Fan* Fang (蕃坊) and cemeteries *Fan* Ren Zhon (蕃人冢) special for these foreigners was set up in these cities. Zhu Yu (朱彧) says in his *Record of Pingzhou Table Talk* (Pingzhou Ketang 萍洲可谈), "The foreign settlement communities *Fan* Fang in Guangzhou was exclusive for foreigners, being administrated by an official specially in duty to manage the foreigner affairs in the community" (Zhu, Y. 1985: 19). A lot of the local citizens in Guangzhou also used foreign *Fan* as slaves. Zhu Yu revealed more information in last book: "The rich families in Guangzhou usually hired foreign barbarian slaves who were strong and could carry heavy load. These slaves could not speak the local dialect and would not escape from their masters. They were from oversea mountainous regions, in black skin and with yellow curls hair, being regarded as wild men…It was said that there were wild men in the oversea coastal areas who could dive into water with open eyes and were called *Kunlun* slaves" (Zhu, Y. 1985: 20) Archaeologically, the foreigner's cemetery *Fan* Ren Zhon and *Muslim* cemetery Huihui Fen (回回坟) in Guangzhou were investigated in north-east of Liuhuaqiao (流花桥) Park in north of the city and the northwest foothill of Yuexiu (越秀) Mountain where *Muslim* sages, imam, Chinese and foreign *Muslims* had been buried since the Tang Dynasty (Zhong, Y.X. et al. 1989: 71, 13–117; Pan, G.P. 2015). The chapter "Other Record (杂录)" in the Vol. One Hundred and Sixty in the *Chronicle of Guangzhou Prefecture* (Guangzhou Fuzhi 广州府志) of Guangxu (光绪) reign records: "During the Tang Dynasty, the king of *Muslim* Modena (默德那) state in the western regions dispatched his mother's brother Suha Pesai (苏哈白塞) as the imam to trade in China, who built a Huaisheng (怀圣寺) minaret and mosque in Guangzhou and was buried in *Huihui* Fen cemetery after he died" (Shi, C. 1966: 783). But the earliest grave monument investigated here was "Hamad Tombstone" which was built up in the year 712 of *Muslim* calendar (AD 1312) with Arabian epitaph for the deceased of the Arabian Abdallah Hamad (Chen, H.J. 2005; Fig. 5.5). Another later one was set up in the year 727 of *Muslim* calendar (AD 1327) with an Arabian epitaph for the deceased Arabian soldier Aladdin Bi Kasimle (Yang, T. 2008).

Fig. 5.5 Grave monument of Arabian Abdallah Hamad dating to 712 of *Muslim* calendar (AD 1312) in Guangzhou

During Tang and Song dynasties, Quanzhou was another big seaport matching Guangzhou. According to the *History of Min Kingdom* cited in previous chapter, two of the four Muslim missionaries preaching China during the time of Wude reign in the Tang Dynasty arrived in Quanzhou, showing the importance of it in the oversea trade and international relationships. In the Tang Dynasty Quanzhou was an international metropolis with large number of foreign residents from Arab, Morocco, India, Sri Lanka, Persia and Syria, most of which were *Arabian*. With the arrival of many *Arabian* merchants Quanzhou developed into one of the world's largest harbors in the Song and Yuan dynasties, resulting the setting up of Shibosi custom office in the second year of Yuanyou (元佑) reign (AD 1087) in Yuan Dynasty. The *Biography of the Foreign Nations* (Zhufan Zhi 诸蕃志) states in the section of "Dashi State (Arab, 大食国)", "There was an *Arabian* merchant Shinawei (施那帏) who lived in the south of Quanzhou and built a cemetery to bury the dead foreign merchants in Quanzhou" (Zhao, R.S. et al. 2000: 91). In the Yuan Dynasty, Wu Cheng (吴澄) recorded in his *Works Collections of Authority Wu Wengzheng* that Quanzhou had been the metropolis city in *Seven Min* region of ancient Fujian, where the exotic treasures and rare curios from far foreign states had been imported and stored, with many residences of business tycoons and wealth merchants (Wu, C. 1985: 300–301). The great traveler Marco Polo also claimed that "Quanzhou was one of the largest seaports in the world, a large number of merchants came there to trade, and various kinds of cargoes piled up like mountains" (Komroff, M. et al. 1981: 192). The Vol. seventy-five of the *Chronicle of*

Quanzhou Prefecture (Quanzhou Fuzhi 泉州府志) published in Qianlong (乾隆) reign of Qing Dynasty recorded that "some foreign merchants coming by boats were very rich with millions of wealth and lived in the south of the city" (Huang, R. 2000: III 658). The south region of Quanzhou city had been the main settlement community of *Muslim* next to the Quanzhou Bay, where the dock region of Houzhu seaport, and the Shibosi custom office were located. Now there still preserves a *Muslim* mosque of Yuan Dynasty on Tumen (涂门) street (Fig. 5.6), *Muslim* missionaries cemetery of Yuan Dynasty at Lingshan (灵山) (Fig. 5.7). A large number of architectural connotations of *Brahmanism* culture in Kaiyuan (开元) Temple, and various stone tablet inscriptions or tombstones of *Islamism*, ancient *Christianity* (including *Nestorianism* or *Manichaeism*) and *Hinduism,* were discovered in the urban and suburbs of the city so far (Figs. 5.8 and 5.9). In Cao'an (草庵) Temple of Jinjiang a *Manichaeis*t heritage of the Yuan Dynasty has also been identified (Zhuang, W.J. 1989: 170–303; Salam, A.S. 2012).

A lot of scholars believed that in the Tang, Song, and Yuan dynasties there were tens of thousands of foreign merchants reached to southeast coast of China who played a key role in managing the maritime trade between China and foreign countries. "The role of foreign merchants in the history of China's long distant maritime trade before sixteenth century was more important than that of *Han* nationality in the south of China, only was replaced afterward by *Han* merchants, especially by the merchants from south of Fujian" (Zheng, Y.C. 2008). A significant proportion of these hetero-cultural maritime merchants resided in China, and in some densely populated areas even assimilated into new maritime ethnic cultures varying in two types. One was the assimilated *Muslim* immigrant

Fig. 5.6 *Muslim* mosque "Qingjing Temple" (清净寺) of Yuan Dynasty on the Tumen (涂门) street of Quanzhou

Fig. 5.7 The cemetery of *Muslim* missionaries of Yuan Dynasty at Lingshan (灵山) of Quanzhou

Fig. 5.8 A *Nestorianism* tombstone of Yuan Dynasty unearthed in Quanzhou

Fig. 5.9 A stone sculpture of dancing Shiva of *Hinduism* of Yuan Dynasty unearthed in Quanzhou

groups who sailed to the coast of China via South China Sea and Indian Ocean, and still relatively preserved a lot of their own original cultural features. A number of small groups of *Muslim Huihui Fan* scattering on the coastal areas in Fujian and Guangdong gradually formed new maritime ethnicities after thousands of years of cultural assimilation, such as the *Muslims* population of Chen Dai (陈埭) village in Jinjiang (晋江) and Baiqi (白奇) village in Hui'an (惠安), Fujian. Their predecessors sailed eastward along the Maritime Silk Road and landed on the southeast coast of China, preserving a distinct maritime cultural tendency, and living on the maritime collection and oversea trade. They were famous navigators and maritime merchants for generations, actively engaged in the maritime trading sailing along the upper-northward (上北) sea routes to reach as far as Tianjin and Tanggu (塘沽), down-southward (下南) sea route to mainland coast of Southeast Asia, and eastward to Taiwan and Philippines since Ming and Qing dynasties, enriching the maritime cultural connotation of the unity with Assimilation and Integration of Pluralistic Cultures of China (Huang, T.Z. 1990; Shiming 1993). Another type of cultural change has been the assimilation of those foreign *Maritime Fan* into the local *Han* nationality in south of China. A large number of ethnic groups of *Hu* and *Fan* with diversely cultural origins along the Maritime Silk Road, being continuously mixed and assimilated into the local *Han* nationality during last more than

two thousand years. This mixture and assimilation enriched the connotations of the *Han* nationality in south China. They did not preserve their original cultural memories and independent ethnic identification. The *Collected Important Administrative Statutes of the Song Dynasty* records that "in the fourth year of Zhenghe (政和) reign (AD 1111), the emperor decreed that those merchants of foreign *Maritime Fan* who had lived in China for five generations and their properties had no legal inheritors, or without legal wills and offspring, their properties should be detained by Shibosi custom office" (Xu, S. 1957). The Tablet Inscription of "*Introduction of the Rebuilding the Seagod Temple of South China Sea*" (Chongxiu Nanhai Shenmiao Bei 重修南海神庙碑) in the Song Dynasty records, "At that time people lived mixing together with foreign barbarians *Fan* and *Islands Yi* and maritime merchants from all over the world" (Zhang, W.Z. 2008). The main body of the ethnic groups of *Hu* and *Fan*, whose historical cultural heritages of the Han, Tang, and Song dynasties were investigated in Hepu, Guangzhou, Quanzhou, and Nanjing and discussed in previous paragraphs, have been most possibly assimilated into *Han* and other local nationalities in south of China. In last 30 years, more than 20 pieces of tombstone inscription of immigrated Shi (世) family cemetery were collected in the Dongyue (东岳) mountain in northern suburb of Quanzhou and other places, presenting a vivid example of cultural assimilation of foreign *Maritime Fan* with *Han* nationality. Referring to the genealogy Shi and Xu Shi (许世) families in Quanzhou and those emigrating to Changhua (彰化) of Taiwan, and the related local chronicles, it can be concluded that both groups of Shi and Xu Shi families were the descendants of ancient Sri Lankan envoys and merchants who immigrated to central Fujian and were Sinicized as a part of Han nationality (Wang, S.D. 1999; Wu, Y.X. 2005). Therefore, the foreign maritime *Hu* and *Fan* people coming from the South China Sea and Indian Ocean since Han, Tang, Song, and Yuan dynasties have been significant and constructive sources for the maritime essence of the *Han* culture in south China.

Furthermore, since the late Ming Dynasty, the geographical discoveries by Europeans, the opening of the global sea routes, the arrival of Portuguese, Spanish, Dutch, British, French, Swiss, Danish, German, American, and other Western merchants to East and Southeast Asia, not only brought profound cultural communications and changed the inherent composition of the coastal societies, but also brought the latest waves of foreign migration and ethnic assimilation in the southeast coast of China. Taking the example of Macau, after originally being settled by Portuguese, many colored people from Africa, Iran, Indian, Bengal, Malacca, and Timor were biasedly regarded as "*Black Slaves Heinu*" (黑奴), "*Ghost Slaves Guinu*" (鬼奴), "*Black Ghosts Heigui*" (黑鬼), "*Dark Ghost Wugui*" (乌鬼), "*Black Barbarian Fan*" (黑番) and "*Barbarian Ghost Fangui*" (番鬼), landed and lived in the city (Tang, K.J. et al. 2005). Then the ethnic miscegenation and cultural assimilation were a common phenomenon in Macau. Almost all Portuguese in Macao married Chinese women, not only the daughters of wealthy families but also the female slaves or common civilians. The Chinese-Portuguese half-blooded and Eurasian hybridized have been the main part of the native-born Portuguese population in Macau. Guangzhou was another bridgehead for the

importation of western cultures to China, leaving a great amount of historical relics of Euro-American migration. In the foreigners' cemetery *Fan* Gui Hill (番鬼山) at Shenjing (深井) mountain in Changzhou (长洲) street, Huangpu (黄埔) district of Guangzhou, there are still more than 200 foreigners tomb remains of dead British, Danish, Dutch, Spanish, Swedish and American of eighteenth century (Pan, G. P. 2015). These coming Euro-American influenced the *Han* people in southern coast of China, and further strengthened their maritime cultural essence.

5.3 Conclusion

As an instinctively regional ethnic community prominent with the maritime character in the unity of the "Assimilation and integration of Pluralistic Cultures" of Chinese nation, in the process of its formation and development, the *Han* ethnic population in coastal regions of southeast China grew up both on the inheritance and assimilation of the indigenous "barbarian" *Island Yi* of *Bai Yue* culture in prehistory, and respectively acculturation of the series immigrated ethnicities of foreign *Maritime Fan* since medieval age of ancient China. The Han nationality of southern or southeastern coast of China developed the unique sailing technology of Chinese Junk, promoted the formation and transition of the navigation sea routes in "Four Oceans" (四洋) and the traditional Maritime Silk Road, which have greatly and indispensably enhanced the excellent prominences of Chinese maritime culture and the integrated Chinese civilization.

Chapter 6
Ethno-Archaeological Investigation to the "Straw and Bark Woven Clothing" of *Island Yi* and *Southern Man* in South of China and Southeast Asia

The complex and variant patterns of costume were important parts of the human cultures in the history. Generally, the early dress of human beings started from the non-woven fabrics such as grass leaves, barks, beast coats and fur, and other natural resources, and developed into woven cloth products of fiber thread with warp and weft structure. The clothing variants are the cultural representation of ethnic groups, showing the different costume traditions and cultural features. In the ethnic cultural system of Asia–Pacific region, the ancient clothing made of cotton, hemp, silk, and wool fibers in the inland region of East Asia centered on the Central Plains has a long tradition since prehistory, represented by the so-called "Clothing and Dressing Civilization" of *Huaxia* and *Han* nationality in its sinocentrism, while on the coast of southern China, Southeast Asia, and the Pacific Islands, the non-woven bark cloth of the indigenous *Bai Yue* (百越) system and Austronesian presents another distinctive costume culture (Ling, C.S. 1963).

According to historical literatures of ancient China, in the centralism vision of early *Huaxia* and the *Han* nationality, the costume culture of the indigenous people in southern China specialized in non-woven series, was "primitive" and "uncivilized", and "hetero-culture" of the "Clothing and Dressing Civilization" of *Huaxia* nationality. The section of "Nine States" (九州) in the chapter of "Tribute of the Yu Period" (禹贡) of the *Book of Early History* (Shangshu 尚书) records that *Island Yi* in Yangzhou state "wear straw clothes, make use of bark weavings, weave bamboo, use marine shells as decorations" (Ruan, Y. 2009: 312–313). The chapter of "Biography of Southern Barbarian *Man* (南蛮传)" in *History of the Later Han Dynasty* (Houhan Shu 后汉书) records that the descendants of "barbarian" *Panhu* (盘瓠) "weaving bark, then dyeing with weed seeds" (Fan, Y. 1965: 2829). Since Tang and Song dynasties there were a number of records of "straw and bark weaving" of the early indigenous people in southern China and Southeast Asia, generally referring to their unique clothing culture. Besides, these cultural connotations and work craft of the indigenous bark cloth in southern China and Southeast Asia recorded sporadically in ancient Chinese historical literatures, they also remain in modern ethnographies of the indigenous minorities of southern China, Southeast

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Asia, and the Pacific, both of which are the important references for sketching the history of bark cloth costume since prehistory. This chapter will go through the historic outline of "straw and bark clothing" of indigenous peoples in Asia–Pacific region, by discussing the contents of "bark cloth" in the southern China and Southeast Asia in the Chinese historical records, comparing with the ethnographical investigation of bark-cloth weaving work craft in Adulan (都兰) tribe of *Ami* ethnic in Taiwan, and other related bark weaving heritages of *Dai* (傣) ethnic in Yunnan, *Li* (黎) ethnic in Hainan, *Bru-vankieu* people in Vietnam and Austronesian of Western Samoa, as well as complementing with the typological understanding on the bark cloth beaters of archaeological collections (Tang, C. 2000, 2003; Wu, C.M. 2009, 2010).

6.1 "Straw and Bark Woven Clothing" of *Island Yi* Recorded in the Chinese History

In the ancient geopolitical order of "Central Nation—Various States in Four Directions", the Central Nation of *Huaxia* continuously assimilated to the various "barbarian" states in "Four Directions" from center to periphery, including southward to its "Southeastern Direction" and from mainland to ocean. The cognition of "Southeastern Direction" and "Yangzhou" (扬州) in the centralism vision of the *Huaxia* and *Han* nationality was also gradually deepened and expanded, spatially from the south of the Yangtze River to south of Nanling (南岭) Mountain, the Lingnan (岭南), and even reached its "South of the South" in Southeast Asia. A series of "hetero" cultural landscapes of the "Straw Clothing and Bark Weaving" of ancient indigenous people of *Southern Man* or *Bai Yue* and *Bai Pu* (百濮) were recorded in the historical documents of *Huaxia* and *Han* nationality, from which we know the significant history of the dressing culture of indigenous peoples in the Asia–Pacific maritime region.

The chapter of "Tribute of the Yu Period (禹贡)" in the *Book of Early History* records varied landscapes and material cultures in the "Nine States" (九州) of the Nation, among them the "*Island Yi* wearing straw clothes" was the most unique one. "The Yangzhou region is located near the Huaihai (淮海)…The barbarians on the islands pay tribute of gold, silver, copper, jade, ivories, skin, feather artifacts, and alike to the central empire. The *Islands Yi* wear straw clothes Huifu (卉服), make use of the bark weaving, weave bamboo, use marine shells as decorations, live along the rivers and seas" (Ruan, Y. 2009: 312–313). A number of historians annotated that "Huifu is the clothes made of grass, that is straw clothes. For the tropical climate in south, the islanders there weaved grass into cloth" (Shao, W. P. 1989). That is to say, the ancient indigenous people in the southeast coast wore non-woven clothes made of straw and bark.

"Biography of Southern Barbarian *Man* (南蛮传)" in *History of the Later Han Dynasty* records the totem legend of *Southern Man* and "weaving bark" of them.

"In the early history, the Gaoxing (高辛) state was invaded by barbarian *Quanrong* (犬戎, the dog barbarian). Then the emperor posted a reward for getting the head of general Wu of *Quanrong* army by promising to award a great amount of gold, land, and betrothing the princess. At that time, emperor raised a dog with multicolored hair and was called Panhu (盘瓠). After the emperor's announcement, dog Panghu took the head of general Wu to report. All of the national ministers were surprised and the emperor was happy to marry his daughter to dog Panghu. Then dog Panhu brought the princess and left for the mountainous cave…The descendants of them wove bark then dyed with weed seeds to make use of multicolored clothes with a tail…They wore colorful clothes, spoke a different language, enjoyed staying in mountainous and cavern regions rather than the plain areas…Their descendants grew and were called barbarian *Man Yi* (蛮夷)" (Fan, Y. 1965: 2829). In this legend, the *Southern Man*'s "weaving bark then dyeing with weed seeds" share the same patterns with straw and bark clothes of the *Island Yi* of Yu period.

The chapter of the "History of Aristocratic Family of Gou Jian, the King of *Yue*" (越王句践世家) of the *Records of the Historian* (Shiji 史记) records: "The ancestor of Gou Jian, the king of the *Yue* state…where the local indigenous having the custom of cutting hair without hairpin, tattoo body and wearing straw clothes in the capital" (Sima, Q. 1959: 2099). "wearing straw clothes in the capital" obviously means that the culture of Gou Jian state was taken as very different from the "Clothing and Dressing Civilization" of *Huaxia* Nation.

Throughout the Middle Ages of ancient China, many indigenous peoples in the South were known for their "weaving" bark. The Chapter of "Cloth and Costume" (布帛部) in Vol. eight hundred and twenty of *Imperial Encyclopaedia in Taiping Reign* (Taiping Yulan 太平御览) cited from *Records in Guangzhou* (Guangzhou Ji 广州记) written by Gu Wei (顾微) states, "In Aling (阿林) county the local people half cut a kind of big tree to make it grew new branches, and peeled the log barks to weave into cloth, which was quite soft for wearing" (Li, F. et al. 2008: book 900: 313). The section of "Straw Clothes" (Huifu 卉服) in the *Nice Works of Southern China* (Chiya 赤雅) written by Kuang Lu (邝露) in the Ming Dynasty states, "The straw and bark that can be made to clothes in the South are called Huifu, that is straw and bark clothes. The clothes made of wood barks vary as Gou Mang (勾芒) cloth, Hong Jiao (红蕉 Musa coccinea) cloth and Ruo Xi (弱锡) cloth made of ramie" (Kuang, L. 1985: 4). This straw and bark clothes "Huifu" verify the essence of Huifu of *Island Yi* in Yu period recorded in *Book of Early History*.

The indigenous peoples of Hainan and Taiwan were the two most famous ethnic groups making use of bark cloth in ancient history. The ancient indigenous people in states of *Dan Er* (儋耳) and *Diao Ti* (雕题) in Hainan island belonged to one of the branches of *Luo Yue* (骆越), known as *Li* (黎) and *Li Dong* (黎峒) since the Medieval Age of ancient China. The section of "*Dan* (儋) State" in the Vol. One Hundred and Sixty-nine in *Geographical Record of the World in Taiping Reign* (Tai Ping Huang Yu Ji 太平寰宇记) records that "The (state) of *Dan Er* recorded in the *Classic of the Mounts and Seas* (Shanhai Jing 山海经) also called *Li Er* (离耳). The local people call the mountain as *Li* (黎) and the people living in the mountains are called wild barbarians, that is *Wild Li* (生黎). They like butchering and take the

tooth of the killed to make laces, wearing them on the heads to show their bravery…They weave wood bark into cloth. They esteem tattoos, the rich men have more tattoos and the poor men less, distinguishing the rich men from poor men by how much they have tattoos on the body" (Yue, S. 2007: 3233). The section of "Qiong (琼) State" in the same volume also records that "There are barbarians *Wild Li* (生黎) …There are no rites and social regulations and these barbarians should be ruled by force. They live in deep caverns, weaving wood bark clothes and using kapok as thick cotton cloth" (Yue 2007: 3236). The section of "*Li Dong* (黎峒)" in Vol. three hundred and thirty-one in *Textual Research on Historical Narration* (Wengxian Tongkao 文献通考) records that "The island of *Li Dong* is located in the great sea where can be reached in one day by boat, originally was governed by Qiong (琼) state during Tang Dynasty. There is a Limushan (黎母山) mountain where aboriginal *Li* people live in…The local woman wears Si Bian (缌缏) cloth made of mixture of hemp, wheat straw, and bark. They wove wood bark into cloth" (Ma, D.L. 2000: II-598). Gu Yanwu (顾炎武) said in the section of "Guangdong" in Vol. twenty-nine in his *General Analysis on the Foreign Countries of the World* (Tianxia Junguo Libing Shu 天下郡国利病书) that "The short bucked shaped clothes *Li* people wear are made of wood bark" (Gu, Y.W. 2012b: 3420).

The work craft of bark clothes making of Taiwan aboriginal was early recorded in literatures of the Sui and Tang dynasties. Vol. eight hundred and twenty of *Imperial Encyclopaedia in Taiping Reign* cited from *Collected Memorandum of Daye Reign* (Daye Shiyi Lu 大业拾遗录) written by Du Bao (杜宝) records, "Zhu Kuan (朱宽) returned after conquering the *Liuqiu* (留仇) state with more than one thousand captured population and other products which were quite different from that of China. People there collected wood bark to make white cloth…Another kind of local cloth was Xiban (细斑) cloth with fine spotted pattern decoration" (Li, F. et al. 2008: book 900–314). The almost similar records are seen in the chapter "*Liuqou* State (留仇国)" in Vol. four hundred and eighty-three of *Extensive Compilation of Narration in Taiping Reign* (Taiping Guangji 太平广记) (Li, F. 1961: 3973), it states that both the bark cloth and *Xiban* cloth Zhu Kuan saw in *Liuqiu* was different from the cloth of *Huaxia* in Central Nation. Professor Ling Chunsheng (凌纯声) said that both the "collected wood bark to make white cloth" and "*Xiban* cloth with fine spotted pattern decoration" Zhu Kuan saw in *Liuqiu* were bark cloth and *Xiban* cloth can be traced to what recorded in the section of "Yizhou" (夷洲) in *Biography of the Environment and Product of the Linhai Prefecture* (Linhai Shuitu Zhi 临海水土志) written by Shen Yin (沈莹) during the Three Kingdoms (AD 220–265) (Ling, C.S. 1963). Though his opinion taking the Xiban as bark cloth and tracing back to Three Kingdoms maybe not soundly based, the "collected wood bark to make white cloth" obviously is bark cloth work craft of indigenous people.

With the exploitation of Taiwan by the *Han* people who migrated to the island more and more, the culture of "straw and bark weaving" of aborigines *Fan* ethnic groups were more widely witnessed and recorded in the Chinese ethnographies since the Ming and Qing dynasties. Early migrants of *Han* people to Taiwan often saw the mountainous "barbarians" *Fan* wearing straw skirts and barks clothes, surprised by these "uncivilized" landscapes. Chen Di (陈第) wrote in his *Records of East Fan*

Barbarian (Dongfan Ji 东番记) that "Aboriginal people there do not wear clothes in summer and even in winter, women wear straw skirts just to cover their privates" (Chen, D. 1987). In his *Traveling Notes Across Taiwan Strait* (Bihai Jiyou 稗海纪游) Yu Yonghe (郁永河) recorded that the blankets which barbarians wrapped themselves in winter were made of wood barks. "Men and women are naked in summer with only a very small piece of cloth to cover their privates. In the winter people cover their bodies with blankets which are made of barks and mixing with dog furs" (Yu, Y.H. 1987: II-33). *Chronicle of Zhuluo County* (Zhuluo Xianzhi 诸罗县志) records in the Vol. eight "Custom and Mores" that "the aboriginal peoples in the uplands of Banxian (半线) generally made bark skirts as white ramie cloth… Peoples from Dagewen (达戈纹) to Shuiliansha (水沙连) also made white clothes by mixing bark and ramie decorated with reddish brown lines patterns. People in communities of southern areas generally made grey bark clothes. The aboriginal people used bark clothes as dresses while migrant *Han* people there used it as a bag for its solidness" (Zhou, Z.X. et al. 1962: 156–157). The third volume of *Albums of Minorities and Foreigners' Tributes in Qing Dynasty* (Huangqing Zhigong Tu 皇清职贡图) records the bark cloth cultures in a number of branches of the indigenous people in Taiwan, such as the *Civilized Fan* (熟番) in Zhuluo (诸罗) county. "Men wore bird feather on heads and long bark clothes on bodies, but usually were naked in summer." The *Wild Fan* (生番) in Fengshan (凤山) county, "the indigenous people lived in the slate huts next to the dangerous and difficult cliff area as caverns. Men and women were generally naked or covered with buckskins, while very few rich people wore foreign silk clothes. They also could weave wood bark into cloth." The *Wild Fan* in Shuishalian (水沙莲) village in Zhanghua (彰化) county, "were generally rich and mostly wore buckskins, bark clothes, and even textile cloth." Another mountainous *Wild Fan* village in Zhanghua, "aboriginals lived in mountainous caverns, ate raw foot and blooded meat. They were naked in both hot summer and cold winter. The aboriginal female tattooed their cheeks of net pattern and also made bark cloth blanket." The *Wild Fan* in Naiwu (乃武) village in the right of Tanshui (淡水) County, "the wild barbarian people lived next to the mountain, both man and woman were naked, or wore deer skin cloth and collected wood leaves to make dress" (Fu, H. 1991: 274, 292, 299, 306).

Furthermore, since the Han and Jin (晋) dynasties, the Chinese voyagers sailed from southeast coast of China southward along the Maritime Silk Road and also witnessed and recorded the bark cloth cultures of indigenous people in the Southeast Asia. In the Indonesian archipelago, Vol. one hundred and eighty-enght of *General Laws and Regulations* (Tong Dian 通典) of Tang Dynasty cited from the *Biography of Local Custom of Funan State* (Funan Tushu Zhuang 扶南土俗传) written by Kang Tai (康泰) and Zhu Ying (朱应) in the time of Wu (吴) state of Three Kingdoms, "Huozhou (火洲) Island is located to the east of Mawuzhou (马五洲) Island…people there strip wood bark and weave them into cloth…and in the states of Jiaying (加营国) and Zhubo (诸簿国), people also strip tree bark in mountains in March to weave them into Huowan (火烷) cloth" (Du, Y. 1984; Chen, J.R. 2006: 23). The *Imperial Encyclopaedia in Taiping Reign* records in chapter "Cloth and Costume" of Vol. eight hundred and twenty that "There is a Shuqiu (肃丘) island in

the sea where mountain fire often combusted in the Spring until Autumn. When fire burns local people strip the bark from the single species tree on the island and weave it as cloth. The bark cloth is brown and people dyed it in wood ash then weave it into coarse cloth, which is poorer than Chinese textile cloth but fire resistant" (Li, F. et al. 2008: book900: 314–315). Similar culture was recorded in the chapter of "Biography of *Funan* State (扶南国传)" in the *History of Liang of South Dynasties* (Liang Shu 梁书): "There is a big island in the east sea of Funan (Nokor Phnom), and Zhubo state is located on the island. To the east of Zhubo state…reach Huozhou island on which a species of tree is usually combusted. The island people usually strip the tree barks and weave them into clothes" (Yao, S.L. 1983: 787–793).

Though the indigenous peoples of Southeast Asia were complex and mixed in last thousands of years, they had been closely related to the ancient *Bai Pu* and *Bai Yue* cultures of Southern China, in the "South of the South" of the ancient Chinese civilization. The work craft of "stripping tree barks and weaving into cloth" witnessed by *Han* people in Southeast Asia were closely related to the indigenous bark cloth culture in Southern China, with connection in geographical distribution and the same craft technology in regional cultural history.

In a nutshell, the culture of the bark cloth of the indigenous people of *Southern Man* or *Bai Pu* and *Bai Yue* system in South of China and Southeast Asia was very different from the so-called "Clothing and Dressing Civilization" of *Huaxia* in the Central Plains in the North, described in Chinese historical literatures. For the lacking of their own historical records, the indigenous people had been recognized as "hetero-culture" in *Huaxia* and *Han* national discourse with strong Sinocentrism, and these non-woven cloths of "straw clothing and bark weaving" was usually listed together with the other "uncivilized" features in these records, such as "cutting hair without hairpin", "tattoo and naked body", "dwelling mountainous caverns" and "eating raw and blooding meat". But these records are important references for us to understand the long history of cloth culture of the indigenous people in Southern China and Southeast Asia.

6.2 Ethnographical Investigation to the Indigenous Straw and Bark Cloth Making Craft in Asia–Pacific

From the "straw and bark clothing" of *Island Yi* in early history of China, to indigenous Taiwanese "bark weaving" in the Qing Dynasty, as well as "stripping tree barks to weave cloth" of Southeast Asia, the historical information presents the preliminary distribution and recognition of bark cloth cultures in Southern China and Southeast Asia. However, these records of "straw cloth and bark weaving" of southern "barbarian" people on the hetero-cultural perspective of *Huaxia* and *Han* nationality presented only a word or two and lacking the detailed depiction of their bark weaving technology. The ethnographical investigation on the modern work craft of bark cloth making of *Amis* Tribe in Taiwan, *Dai* ethnic in Yunnan, *Li* in Hainan island, *Bru-van kieu* in Vietnam, Austronesian in West Samoan, and others in the Pacific islands, truly revealed the connotation of this historically distinctive heritage.

The cultural heritages of bark cloth of Taiwan aboriginals were commonly investigated in modern ethnographies. In the 1930s, Professor Lin Huixiang collected three kinds of aboriginal costumes in Taiwan, linen, beast coat, and barks. Among the barks included coconut bark, banana bark, and so on. In his researches on the material cultural history of Taiwan aboriginals, Professor Liu Qiwei (刘其伟) also recorded that "the clothes of aboriginal people in the past were mostly made of hand-woven linen or banana barks, and some others were made of leather" (Lin, H.X. 1930; Liu, Q.W. 2004: 124). In 1948, Ms. Ling Manli (凌曼立) made an investigation in Matai'an (马太鞍) village of Hualian (花莲) county, and the chief Unak Tabon (何有柯) of *Amis* tribe told her the bark cloth making skills he saw when he was young. That is, the aboriginal people chose the kind of tree *paper mulberry* (楮树), the *Broussonetia papyrifera*, as bark material, used large stone knives to cut the tree log, small stone knives and aboriginal knives to strip barks, oval stone hammers and wooden beaters of various shapes and sizes to beat the bark, then made products of headscarves, sleeveless coats, sleeves, long skirts, waist skirts, front coverings, quilts, cushions, straps and so on with the bark cloth. This is one of the most detailed cases of bark cloth making craft recorded in modern ethnography of Taiwan (Ling, M.L. 1963). In the summer of 2008, the author made a one-month ethnographical investigation of the aboriginal cultures in mountainous areas in Taiwan, visiting 35 tribes in 10 aboriginal societies of *Atayal* (泰雅), *Thao* (邵), *Bunun* (布农), *Tsou* (邹), *Paiwan* (排湾), *Rukai* (鲁凯), *Puyuma* (卑南), *Amis* (阿美) and *Saisiyat* (赛夏). Among a series of new ethnographic discoveries, the work craft of bark cloth of *Amis* ethnic in Adulan (都兰) tribe, Donghe Town, Taidong county was a significant one (Wu, C.M. 2009).

The name of Adulan or Etolan (都兰) tribe originates from '*atol*, meaning "piled stones", "stone wall" and "overlapping stone wall". It is on the east side of Adulan mountain with a population of nearly 1500 people and more than 400 families, a traditional big tribe of *Amis* ethnic. In the famous Adulan site between the eastern foot of the mountain and the west side of the village, 18 Megalithic stone carvings of Qilin (麒麟) Culture, including sarcophagus, stone walls, and figurine monolithic, were discovered. Adulan site is regarded as the birthplace of *Amis* ethnic culture, and the origin of the name of Adulan tribe. People of the tribe belong to *Puyuma* (卑南) group of *Amis* whose ancestors originated in Arapanay village in the south of Zhiben (知本), then successively migrated to Chulu (初鹿), Changbin (长滨), Xingang (新港) and other places, and finally settled in Adulan village.

The author witnessed the work craft of bark cloth making in Panay Talikong Fang, an indigenous craft workshop founded by Panay (巴奈), the chiefs of Adulan tribe, his Chinese name is Shen Taimu (沈太木), and his wife Ashao's Chinese name is Pan Xiuzi (潘秀仔). They set a traditional craft showroom in both the workshop and their home, and Panay showed us the whole process of bark cloth making and its products (Figs. 6.1 and 6.2).

The first step is to choose and collect the bark wood. *Amis* people often use a kind of tree called Rolang (落浪) as the raw material for making bark cloth, which grows everywhere in Taitung mountainous areas. Rolang actually is a kind of paper mulberry, with scientific name *Broussonetia papyrifera*, a deciduous tree of a

Fig. 6.1 The bark cloth making craft in Adulan tribe of *Amis* ethnic, Taiwan

variety of *moraceae* with some different local names at low and moderate elevations in south China, Southeast Asia, and the Pacific islands. *Amis* people also choose another kind of deciduous tree called Yono (约那) with scientific name *Ficus superba* and the native name Bird Banyan or Red Banyan. The fibers of these two kinds of trees are quite ductile, suitable for making bark cloth. After they found the trees for beating bark, they cut them into logs of right size.

The second step is to strip barks. A wooden hammer is used to tap the bark of the logs to loosen it so that it is easy to be stripped off.

Fig. 6.2 The bark cloth stone beaters of Panay Talikong Fang

The third step is to soak barks. The stripped barks are soaked in water to make them more ductile and softer for further beating.

The fourth step is to beat barks. The soaked bark is flattened out on the platform made of stumps and beaten repeatedly with iron and stone beaters of different shapes and sizes. The surfaces of these iron beaters are carved into different patterns such as gridding and concentric circles. The repeatedly beating works remove the resin from the barks, extending and compacting the fibers of the bark to form a larger and softer piece of bark cloth.

The last step is tailoring. After bark cloth is finished it becomes the materials for making dresses and hats. The bark cloth products of Panay's workshop include a variety of coats, pants, hats, bags, and so on. For the changing of ethnic culture, *Amis* people no longer wear bark cloth products in daily life, so they mainly sold them to tourists as ethnic handicrafts.

As an aboriginal ethnic group in the mountainous areas in the eastern coast of Taiwan, *Amis* is the only ethnic preserving the bark cloth culture seen so far in the aboriginal communities. The bark cloth making craft in the workshop of chief Panay is a very precious ethnographic heritage for understanding the connotation and development of the bark cloth cultural history of Taiwan and Asia–Pacific

regions. Anyway, Panay's work craft of "bark weaving" is in fact not a direct cultural inheritance from ancient times, but a case of traditional cultural revival and reconstruction of indigenous people in the background of "Aboriginal Movement" in the last half century. These indigenous cultural reconstructions including Panay' workshop aims at restoring the traditional cultures of the indigenous people which were lost in the Japanization in the first half of last century, and the sinicization of mountainous aboriginals after "Recovery of Taiwan". Nevertheless, Panay's reconstruction and imitation of the *Amis* bark cloth making craft was revived according to its deep historical and cultural background. Chief *Panay* memorized the bark cloth making and wearing story of his grandfather when he was a child, which coincides in line with historical records of "bark weaving" and "making bark for skirts" of aboriginal *Fan* in the Qing Dynasty.

In addition to *Amis* ethnic group in Taiwan, there are also a number of ethnographic heritages of bark cloth cultures in the south of mainland China. The southwest mountainous regions of Guangxi, Yunnan, and Guizhou plateaus have been the original lands of mixed indigenous ancestors of *Bai Pu* and *Bai Yue* people since the prehistory. *Bai Yue* people in this region varied in a few branches such as *Dian Yue* (滇越), *Yi Yue* (夷越) and *Teng Yue* (腾越), and the westward migration of the branches of *Western Ou* (西瓯) and *Luo Yue* (骆越) after the Han and Jin dynasties. With the movement of "Suppressing the Southwest Barbarians *Yi*" of Han Dynasty and the sinicization of *Bai Yue* and other indigenous peoples, the descendants of *Bai Yue* people in this periphery region of the empires had changed and evolved into a number of modern minorities of *Zhuang Dong* (壮侗, *Kam-tai*) language family, such as *Dai* (傣), *Buyi* (布衣), *Dong* (侗), *Shui* (水), *Zhuang* (壮) and so on, which accumulated a large number of unique cultural features of *Bai Yue*. The bark cloth culture of *Dai* people in Xishuang Banna (西双版纳) of Yunnan is one of these distinctive cultural heritages. The *Dai* people there preserve the complete work crafts of bark cloth making. After choosing the tree logs, they used a special wooden hoe to strip off barks, and then repeatedly beat the bark with a large wooden hammer and soaked bark in water until it was slapped into a piece of soft, stretched bark cloth. After that the bark clothes were sewn into hats, jackets, trousers, felts, carpets, cushions, quilts, and other products (Fig. 6.3).

The bark cloth culture of minority *Li* (黎) ethnic in Hainan island still exists in Sanya (三亚), Wuzhishan (五指山), Dongfang (东方), Qiongzhong (琼中), Baoting (保亭), Lingshui (陵水), Ledong (乐东), Changjiang (昌江), Baisha (白沙) and other counties. The bark cloth made by *Li* people is called Nabu (纳布), Chupi (楮皮布) and Gupi (谷皮布) clothes, the main steps to make are stripping, trimming and soaking the barks in water to remove the resin, rinsing, drying and beating the barks into clothes. Then the bark cloth can be cut to make pillows, quilts, hats, coats, skirts, and alike. The Ethnological Museums of *Li* in Lingshui, Baoting, Tongzha (通什), Baisha, Changjiang and other counties display bark cloth products made by *Li* people.

Vietnam is one of the few regions in Southeast Asia of ethnographically preserving the bark cloth cultural heritage. The vast majority among 50 ethnic groups in Vietnam are *Viet-Muong* (越芒) language family, of which the *Kinh* (*Viet*) people

Fig. 6.3 Bark cloth products of *Dai* ethnics in southwestern China (Xishuang Banna Museum of Yunnan)

composes nearly 90% of the population of the whole country, which are the descendants of *Luo Yue* branch of ancient *Bai Yue* indigenous cultural system living in the north and central Vietnam. In addition, in the south and central Vietnam are *Cham* (占) people of ancient Indonesian descendants who speak Austronesian language. The work craft of bark cloth making still exists in *Bru-van Kieu* ethnic group who live in the central mountain area and is identified as *Mon-Khmer* group in Austroasiatic language family. The bark cloth making process of *Bru-van Kieu* is very similar to that of the *Dai* people in Yunnan of China. After striping bark from the wood with the back of a knife, the bark is soaked in the water for 10 days, dried, beaten into soft barks cloth, and then was made into hats and costumes (BTDHVT 2006: 14–15; Nguyen, Y.H. 2004: 19–22).

So far the most exquisite and fully developed skill of bark cloth making craft in the world was the Austronesian bark cloth culture—the *tapa* of indigenous Melanesia and Polynesian in the Pacific Ocean. Austronesian craft of bark cloth

tapa making was preserved until quite recently, Roger Neich and Mike Pendergrast, the honored ethnologists at the Auckland Museum of New Zealand, surveyed in West Samoan Islands in 1980 and recorded fascinating scenes of the Samoan *tapa*, the Siapo making. Most West Samoan preferred using *Broussonetia papyrifera* to make *tapa* cloth and some chose breadfruit (*artocarpus*) and banyan (*wildfocus*) trees. In making *tapa* the indigenous woman stripped the bark off the tree log and scraped off the outer layer of the bark with blades and shells to preserve the inner fiber layer, then laid the bark flat on a wooden anvil, beat it hard with wooden club beaters with grooved or smooth facets until a piece of soft bark cloth was made. The decoration of Samoan *tapa* was made by either freehand painting on the cloth or imprinting on a wooden carved tablet Apeti with variant geometric patterns to make fine intricate decorations. The perfection and exquisiteness of the Pacific bark cloth *tapa* are fully reflected in the types and patterns of the *tapa* dress, which are based on natural elements such as parallel lines, squares, grids, twists, water ripples, turns, parallel lines with triangular filling, triangle with square filling, back filling rhombus, branch shape, banana leaf shape, four to eight petal pattern, four or eight leaf swirl pattern, solar pattern, as well as a small number of birds, animals, fish images and complex combination of patterns (Neich, R. et al. 1997: 12–15).

Before Euro-American navigators, missionaries and anthropologists arrived the Pacific Islands in the seventeenth century, the indigenous bark cloth *tapa*, hula straw skirts, feather, and shell decorations were the representative costumes of the Austronesian societies, lasting for hundreds or more than thousands of years. The upper society of indigenous Austronesian wearing and posing in nice *tapa* costumes were also shown in the works of European painters and photographers, presenting precious images for understanding the *tapa* culture in Pacific in the last hundreds of years. Honolulu Art Museum in Hawaii keeps a paint of Queen Kahumanu, the wife of the king of Hawaii Khamehamehai I, by Louis Choris between 1816 and 1817, on which Queen Kahumanu is elegant in her *tapa* apron with beautiful geometric patterns. Dunedin Museum in New Zealand keeps an old photograph, taken in 1859, of the young couple of Tonga Sheikh who also dressed in elegant geometrically patterned *tapa* skirts. A British publisher in London collected an old photograph of a late nineteenth century Fijian samurai in *tapa* suit holding a samurai stick in hand (Barrow, T. 1972: 31, 64, 83, 85). The old photo gallery in the city of Apia, the capital of Samoa, also keeps a beautiful portrait of a late nineteenth century Samoan girl in a *tapa* cloth dress with finely printed geometric patterns (Neich, R. et al. 1997: 11). Now a number suits of elegant *tapa* cloth garments of Pacific people are exhibited in Euro-American museums, such as Hawaii, Chicago, New York, Boston, and Wellington, showing exquisite craftsmanship of *tapa* making of Austronesian (Figs. 6.4 and 6.5).

It can be seen that historical indigenous bark cloth cultures in southern China, Southeast Asia, and the Pacific have sufficient "remnants" in contemporary ethnographies. *Amis, Dai, Li, Bru-Van Kieu*, Pacific Austronesian and other indigenous cultures share basic commonness of bark cloth making skills, including the bark material choosing and collecting, tool variants, bark stripping and beating, costumes tailoring, and other links. They are generally integrated within the

Fig. 6.4 Suits of *tapa* cloth apron garments of Pacific (Bishop Museum of Hawaii 2006)

Fig. 6.5 Bark cloth wedding dress of Austronesian (Field Museum of Chicago 2017)

indigenous cultures of ancient *Bai Yue*-proto-Austronesian, confirming the historical connection and cultural community in Asia–Pacific region. The considerable differences among these regional bark cloth cultures are manifested in the

simplicity, crudeness, and primitiveness of native bark cloth kills and products in South China and Southeast Asia, such as that of *Amis, Dai, Li, Bru-Van Kieu* peoples, and the complexity, exquisites, and maturity of Austronesian *tapa* in the Pacific islands, reflecting the potentially logical evolution of bark cloth cultures and its dissemination from the Maritime Region of Southeast Asia to the Pacific Islands.

6.3 Archaeological Investigation and Research on the Bark Cloth Beaters

As a special kind of material culture, bark cloth remains are very difficult to be preserved and discovered in archaeological sites. Therefore, archaeologists recognize and reconstruct the prehistoric and ancient bark cloth cultures in the Asia–Pacific regions mainly through the investigation of the tools for bark cloth making, especially the identification, typology, and chronology of stone beaters for bark cloth.

The earliest bark cloth stone beater was identified by French archaeologist M. Colani in a prehistoric site on the Indochina peninsula, and later American archaeologist H. Otley Beyer found similar stone beaters in late Neolithic sites such as Batangas, Rizal, Bulakan, Cavit, southern Cebu, and Cotabato in the Philippines. According to Beyer's research, there are three types of bark cloth stone beaters in the Philippines, the straight-backed handle type, the horned handle type, and the type lacking a stone handle. He also held that non-handle stone beaters appeared later than handle stone beaters. Among them, horned handle bark cloth beater was unique to the Philippines, known as "Philippine-type bark cloth beater" (Beyer, H. O. 1948: 58–61).

The discovery of the bark cloth stone beaters in southern China began with prehistoric archaeological investigation in Taiwan. As early as the time of Japanese occupation archaeologists N. Utsurikawa (移川子之藏) and N. Miyamoto (宮本延人) discovered a kind of slate beater with parallel-grooved in the sites of Keelung (基隆) and Su'ao (苏澳), known as "grooved beater" and "kitchen knife-shaped beater". Because these early discoveries were similar in shape to the wooden club used for making stamped pottery in the aboriginal *Bunun* (布农) tribe, they were once regarded as the pottery making stamper. Later, T. Kano (鹿野忠雄) compared these implements with similar ones in the Philippines and then identified them as bark cloth beater, the tool for making bark cloth (Kano, T. 1995: 313–321). After that Professor Ling Chunsheng also confirmed the functions of "stone bark cloth clubs" and "bark cloth stone beaters" found in prehistoric sites such as Kanding (嵌顶) in Tanshui (淡水), Yuanshan (圆山) in Taipei (台北), Shuiweixi (水尾溪) of Dajia (大甲) in Taichung (台中), Xiaogangshan (小岗山) in Kaohsiung (高雄), Beinan (卑南) in Taidong of Taiwan (Ling, C.S. 1963: 185–187). After the recovery from Japanese colonization more stone beaters of this type have been discovered in Taiwan's prehistoric sites, and professor Lien Chaomei (连照美) once collected 23 pieces of such "grooved stone beaters" in an early research,

including 13 handled beaters and 8 non-handled beaters, as well as 2 fragments, and made a typological research. However, she was quite cautious about their function and doubted the recognition of both "bark cloth beater" and "pottery making stamper" until the sufficient archaeological evidences (Lien, C. 1979).

In mainland China, the remains of bark cloth stone beaters have been discovered mainly in Zhejiang, Fujian, Guangdong, Hong Kong, and other coastal areas of southeast. Professor Ling Chunsheng pointed out that the bark cloth stone beaters respectively found in the "Neolithic" Liangzhu and Gudang (古荡) sites in Hangzhou of Zhejiang in the 1930s and in "Neolithic" sites in Guangze (光泽) and other places in Fujian in the 1950s, varied with the straight back handled type, the kitchen knife shape handled type and the non-handle composited type. He considered that all of these stone beaters were plain-faced without grooves, which should have been more primitive pattern and earlier than the same type of beaters found in Taiwan and the Philippines (Ling, C.S. 1963: 188–190). In Fujian, at Huangqianshan (黄乾山) site of Pinghe county, Tudigong Anshan (土地公垵山) site of Nanan (南安) county and other sites of Shang and Zhou dynasties in south of Fujian, the non-handle composited stone beaters of rounded square with carved grooves were collected. The coastal area of Guangdong is the most concentrated area of discovering the bark cloth stone beaters in the south of mainland China. At Wanjiaozui (万角嘴), Hudiwan (虎地湾), Yonglang (涌浪) sites in Hongkong, Dameisha (大梅沙), Dahuangsha (大黄沙), Xiangtouling (咸头岭), Caotangwan (草堂湾), Gongbei (拱北) sites in Zhuhai, Longcao (龙穴), Shuiyong (水涌) and Xiasha (下沙) sites in Zhongshan and other Neolithic sites of Tai Wan Culture (大湾文化) five or six thousand years ago in Guangdong, various kinds of non-handle composited stone beaters of rectangle, square, rhombus, round shapes and so on, with carved grooves, have been discovered (Tang, C. 2000, 2003; Tang, Maya, H. et al. 2019).

Furthermore, following the pioneering work of M. Colani at the beginning of the last century, there have been a lot of new discoveries of bark cloth stone beaters in the Neolithic sites of the Indo-Chinese Peninsula since the 1960s. In the Phung Nguyen Culture of north Vietnam about 4000 years ago, 19 pieces of non-handle composited stone beaters of rectangle shape with two facets-grooved were reported. These beaters have been misinterpreted as "grooved grindstone" before Vietnam's famous archaeologist Ha Van Tan (何文瑨) recognized them as beaters for making bark cloth (Ha Van Tan 2003). Besides, 8 bark cloth stone beaters of rectangular type with carved grooves dating from prehistory to historical periods were also discovered in Thailand (Amara Srisuchat 2003).

In short, in the archaeology of the Asia–Pacific region so far, there are further discoveries of bark cloth stone beaters, and their spatial distribution is basically consistent with that of the "Straw and Bark Woven Clothing" cultures of the indigenous peoples of southern China and Southeast Asia recorded in the historical and ethnographical literatures. Based on the morphological function of the bark cloth beaters recorded in the ethnographies of Southeast Asia and the Pacific, Professor Tang Chung divides the bark cloth beaters found in south China and Southeast Asia into two types: composite type without handle and club type with handle, proposing the evolving sequence of prehistoric bark cloth beaters in this region developed from

composite type to club type according to typological and chronological data (Figs. 6.6 and 6.7). Specifically, the earliest bark cloth stone beaters were the remains of Tai Wan Culture around the estuary of the Pearl River Delta dating to 6000–5000 years ago, and then the beaters of Phung Nguyen Culture of northern Vietnam from 40,000 to 3500 years ago. In Thailand and the Malay Peninsula, the Philippines, Taiwan, and other places, the prehistoric bark beaters were no more than 3500 years ago, and the Oceania Islands were later than 3500 years ago, which should be the result of prehistoric cultural spread along the coast of and across the South China Sea (Tang, C. 2000, 2003; Tang, Maya, H. et al. 2019). The archaeological discovery and chronology of bark cloth stone beaters recurs the origin of bark cloth culture in south China and its spreading to Southeast Asia and the Pacific islands, confirming the indigenous ethnic relationship between the ancient *Bai Yue* and proto-Austronesian.

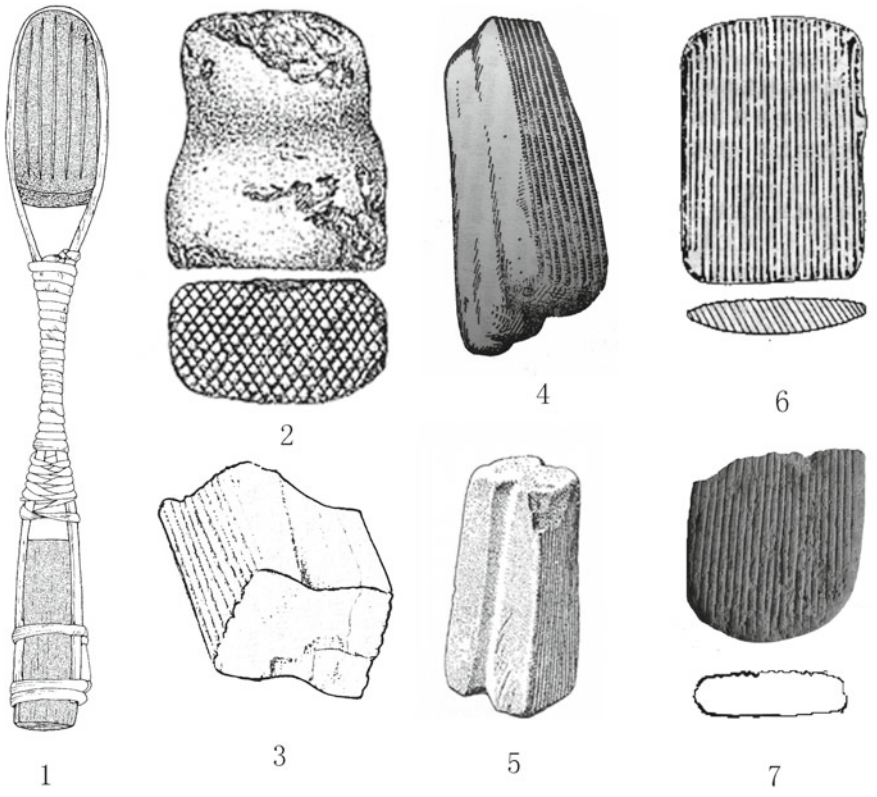

Fig. 6.6 Composite type (without handle) tapa beaters in South China and Southeast Asia (1. Sulawesi ethnography. 2. Surat Thani in Thailand. 3. Go Bong site of Phung Nguyen Culture in northern Vietnam. 4. Baishui 白水 in Tainan of Taiwan. 5. Cebu of Philippines. 6. Pearl River Delta of Guangdong. 7. Tudigong Anshan Mount 土地公垵山 in Nan'an 南安 County of Fujian)

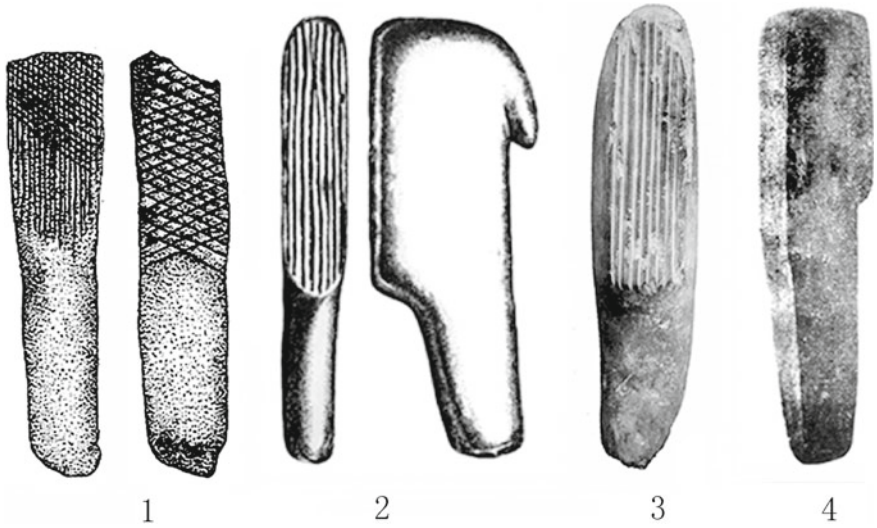

Fig. 6.7 Club type tapa beaters in South China and Southeast Asia (1. Nakhon Si Thammarat in Thailand. 2. Luzon of Philippines. 3. Tapenkeng of Taiwan. 4. Liangzhu of Hangzhou in Zhejiang)

The Pacific islands are the far reaches of bark cloth cultures along the land-sea dissemination of Asia–Pacific region. In contrast to the large number of bark cloth stone beaters in archaeological discoveries in southern China and Southeast Asia, the discovered and identified bark cloth beaters of the Pacific indigenous people are mostly made of hard wood, while their club shape and grooved pattern are similar to the handled stone beater in southern China and Southeast Asia. The oldest bark cloth cultural relic discovered in the Pacific Ocean is the wooden club beater on the Huahine island of Society Islands in French Polynesia, dating from 1100 to 700 years ago. The bark cloth wooden club beaters dating to 400–300 years ago were also found in Waikato of New Zealand (Neich, R. et al. 1997: 9–15). The Bishop Museum in Hawaii possesses a large collection of such club-shaped wooden bark cloth beaters emblazoned with geometric patterns of gridding, stripes, leaf veins, zigzag lines, and alike, which coincide fully in line with the exquisite stamped patterns of the *tapa* costumes of Pacific shown on the ethnographically painting and photographing of European since seventeenth century.

6.4 Conclusion

The non-woven bark cloth originated and early developed in southern China, Southeast Asia and spread in the Pacific Islands, was a distinctively cultural heritage of ancient *Bai Yue* ethnicities and Austronesian. The sporadic records of "Straw and Bark Woven Clothing" of "Barbarian" *Southern Man, Island Yi*,

Bai Yue and *Maritime Fan* in Chinese historical documents, the ethnographical heritages of bark cloth making crafts of minorities ethnicities of *Amis, Dai, Li, Bruce-van Kieu* and Austronesian, and the archaeologically discovered bark cloth beaters, have contributed together in depicting the cultural circle of indigenous straw and bark clothes in the maritime region of Asia–Pacific, revealing again the cultural connection between *Bai Yue* ethnicities and proto-Austronesian during prehistory and early history.

Chapter 7
Searching for the Prehistoric Seafaring Craft Between Southeast Coast of China and the Pacific Islands

The historical documents and archaeological discoveries inform that a sophisticated maritime culture had been developed thousands of years ago along southeast coast of China and adjacent Southeast Asia. The indigenous *Bai Yue* (百越) ethnicities carried out early navigation between the coastal region East and Southeast Asia since Neolithic age, that is earlier before than the migration of *Han* people from North to South 2000 years ago (Chang, K.C. 1989; Rolett, B.V. 2007; Wu, C.M. 2019). These Neolithic seafaring groups have also been taken as the origin of the Pacific Austronesians (Chang, K.C. et al. 1964; Chang, K.C. 1987a; Rolett, B.V. et al. 2002; Wu, C.M. 2012a). By what kind of craft did they take on the great sea thousands of years ago? Archaeologists, historians, ethno-historians, and maritime culture researchers argued with different viewpoints.

Due to the close cultural relationship between the prehistoric indigenous people of southern China, Southeast Asia, and the Pacific Austronesians, the capability and seaworthy of the composite canoes of both outrigger and double-hulled canoe of the Austronesians enlightens us in the searching for the seafaring tool of the ancient *Bai Yue*. Recently, we researched a number of ethnographical and archaeological heritages of composite canoes discovered in southeast of China, such as the double-hulled "Fang Zhou" (舫舟) in ancient China, "Mother-Son Boat" (子母船) outrigger of *Miao* minority, and "Mangka" (蟒甲) outrigger in Taiwan aboriginal society, presenting a new clue for understanding the prehistoric seafaring craft between southeast coast of China and the Pacific Islands (Wu, C.M. 2008a, 2012b).

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7.1 The Exploration for Seafaring Tools of the Ancestor of *Bai Yue*

In the humanistic vision of *Huaxia* in Central Plains, the *Island Yi* (岛夷) and *Bai Yue* in the peripheries of "Southeastern Direction" were famous for maritime culture and "being good at using boats". The section of "Tribute of the *Yu* Period" (禹贡) of the *Book of Early History* (Shangshu 尚书) records that "The Yangzhou region is located near the Huaihai (淮海) ocean", "the barbarians on the islands wear straw clothes, make and wear the bark…live along the rivers and seas", depicting the coastal and maritime landscape of *Island Yi* and *Bai Yue* ancestors (Ruan, Y. 2009: 312–313). The chapter of "Master Strategy Research (主术训)" of the *Book of the Prince of Huainan* (Huai'nanzi 淮南子) records that "despite being a great lord, the wise emperor Tang (汤) of Shang Dynasty was incapable of sailing on rivers and lakes as indigenous *Yue* people easily did" (Liu, A. et al. 2010: 126). The chapter of the "Biography of the *Yue* Territory" of the *History of the Lost Yue Ethnicity* (Yuejueshu 越绝书) records that "The character of the aboriginal *Yue* is crude and rush. They live in mountainous coast and travel by water, taking boats with oar as their main transportation tool. They skillfully sail the boat as fast as the howling wind" (Yuan, Kang 1985: 57–58). The theories of "Maritime Region of Southeastern Asia" (Lin, H. X. 1937) and "Asian Mediterranean" (Ling, C.S. 1954a) respectively proposed by Professor Lin Huixiang and Ling Chunsheng identified the maritime cultural tradition of the indigenous peoples along the southeast coast of China before the unification of Central Nation and the *Han* people migration to the south.

Archaeological investigations have shown that the ancestors of the indigenous *Bai Yue* were very active in Neolithic seafaring ranging from the coastal shipping to the oceanic voyage, showing in a large number of prehistoric maritime settlement patterns along the coast of mainland Eastern Asia since at least 7000 years ago. Such as, on the east coast, the Neolithic Hemudu (河姆渡) and Liangzhu (良渚) cultures dating from 7000 to 4000 years ago extended across the strait to the Zhoushan (舟山) archipelago, illustrating the successful development of Neolithic seascapes and the extension of oceanic exploration and maritime traffic of the prehistoric ancestors of *Yu Yue* (于越) (Wu, Y.X. 1983). In the west coast of Taiwan Strait centering around the lower reaches of Minjiang (闽江) River Basin, hundreds of densely packed Neolithic shell midden sites were discovered along the coast and on nearshore islands such as Mazhu (马祖), Pingtan (平潭), Jinmen (金门), Dongshan (东山), and etc. sharing the same Neolithic cultural series of Keqiutou (壳丘头) —Tanshishan (昙石山) —Huangguashan (黄瓜山) —Huangtulun (黄土仑) cultures, reflecting the rising and subsequent prosperity of the *Min Yue* (闽越) maritime culture from 8000 to 3000BP (Lin, C.C. 1973; Xu, Q.H. 1988; FJPM 1991; FZMCRAT et al. 1995; Wu, C.M. 1995, 1996a; Wu, C.M. et al. 1998: 143–153; Chen, C.Y. 1999, 2012; Chen, C.Y. et al. 2012; FJPM et al. 2003). Along the north coast of the South China Sea and on the islands around Pearl River Delta, more than 100 shell midden and dune sites were investigated and respectively dated between 6000 and 3000 BP, illustrating the successive development of

Neolithic near shore navigation and cultural diffusion of indigenous *Southern Yue* (Ou, J.F. et al. 1988; Li, Z.W. 1991b; Liang, Z.X. 1991; ZHMM 1999; Huang, C.Y. et al. 1990; GDPM 1990; Tang, C. et al. 1996; Shang, Z.T. et al. 1990). Around the Hainan island, dozens of Neolithic coastal dune and shell mound sites have also been found along the coast, dating from 6000 to 2500 years ago with the features of marine fishing and similar connotation with Pearl River Delta, presenting the prehistoric maritime culture of indigenous *Island Yi* and *Daner* (儋耳) (He, G.J. 2012; FSCAT-IA-CASS et al. 2016).

The navigation activities of these prehistoric *Island Yi* and *Bai Yue* were not limited in the calm nearshore water between the mainland coast and continent islands, but also crossed hundred or even hundreds of kilometers on the blue water, making their way from southeast China to Southeast Asia and eventually the Pacific archipelagos. Professor Lin Huixiang argued that the Neolithic cultures of Taiwan had been part of the cultural system of mainland southeast of China, and the result of frequent sea voyages across the Taiwan Strait (Lin, H.X. 1955, 1958b). Professor Chang Kuang-Chih also took Neolithic Fuguodun (富国墩) Culture of Jinmen island near the mainland southeast coast as the source of Tapenkeng (大坌坑) Culture of Taiwan dating to 6000–5000 years BP (Chang, K.C. 1989). The typological comparison of the Neolithic cultures from both sides of the Taiwan Strait revealed their synchronous sequences, and the rising and early growth of Neolithic cultures of Taiwan as the result of the successive emigrations of indigenous peoples from mainland to island (Li, J.T. et al. 1992). The similar Neolithic maritime cultural disseminations respectively across the Bashi Channel of the Philippines and a series of sea straits in the southeastern Asia and Pacific archipelagoes have also been reconstructed by archaeologists, presenting the prehistoric seafaring stories of proto-Austronesian and their successive emigration 5000–1000 years ago (Lin, H.X. 1958b; Chang, K.C. 1987a; Bellwood, P. 1997: 201–202; Rolett, B.V. et al. 2002).

So, for thousands of years, what were the stable and seaworthy crafts, as well as the sustained sailing force of the prehistoric indigenous *Island Yi*, *Bai Yue* and proto-Austronesian taking for their voyages across the vast ocean of the Asia–Pacific? The dugout canoe was the first candidate being considered by historians as the tool for primitive seagoing. The dugout Canoe with its lightness, singleness, and easiness to make had been created by most of the water peoples as the main prehistoric seafaring vehicle in the world. Though the dugout canoe remains of Neolithic and ancient age have been discovered in southeast China and archaeologists speculated the possibility of their applying in primitive seagoing, these single and light canoes were inherently unstable, instinctive swinging and capsizing under bad weather conditions, and obviously difficult to meet the far distant navigation on the blue waters.

The composite canoe of the Austronesian in the Pacific and adjacent areas, including both the double-hulled canoe and outrigger canoe, have been the unique and superior creation in the world nautical ethnography, which solved the difficult problem of unstableness and swinging of the single canoe in continuous sailing on the far open sea. Both the double canoe and outrigger canoe well-developed by Austronesian not only display the characteristics of lightness, flexibility of a single float acting as air chamber even submerged into water, but their composite

structures also come into the significant lateral damp of resisting transverse swinging and capsizing for safeness. Ethnologists found that the Polynesian indigenous people could sail 145 miles a day by either double canoe or outrigger canoe, showing the strong adaptability and effectiveness of this composite seagoing boat on the violent Pacific water (Haddon, A.C. et al. 1938: 43). These composite canoes of the Pacific ethnography provide us valuable inspiration for researching the content of prehistoric seaworthy craft of indigenous *Bai Yue* or proto-Austronesian in the southeast coast of China.

7.2 A Comparison of Double-Hulled "Fang Zhou" in Ancient East Asia and Double Canoe of Austronesian

Since the seventeenth century, European navigators of Spanish, French, Dutch, British, and so on successively "discovered" the Oceania islands as a part of "Geographical Discovery", then ethnologists, artists, missionaries, colonial officials, and common travelers recorded a great amount of material cultural ethnographies of indigenous islanders, including a lot of depictions and images of the double canoes and outrigger canoes sailing in the Pacific. When the British navigator James Cook arrived at Polynesia, J. Webber, W. Hodges and other artists who accompanied James Cook voyage painted many precious sketches of indigenous sailing canoes. The most systematical investigations of indigenous sea crafts in the Pacific were carried out by A. C. Haddon and James Hornell of the Bishop Museum in the United States in 1924–1925, their records were compiled into three volumes of *Canoes of Oceania* (Haddon, A.C. et al. 1936, 1937, 1938). After then, Horic Horridge of the same museum conducted another specific investigation in the Indonesian archipelago and finished the book of *Outrigger Canoes in Bali and Madura Indonesian* (Horridge, H. 1987). These maritime ethnographies of Pacific canoes recorded in detail geographical distribution and variations in the designs, shapes, structures, and construction skills of a large number of sailing crafts as single canoe, extended canoe, outrigger canoe, double canoes, catamaran, and sea rafts, providing us the valuable information to understand the superior navigation techniques of Austronesian.

7.2.1 The Double Canoe as a Kind of Seaworthy Boat of the Pacific Austronesian

The double canoe of the Pacific Austronesian was the main type of composite boat lashing two dugout canoe hulls close together or a short distance apart in parallel by a number of horizontal cross beams or booms, or developed from a two-logged raft,

on which a broad deck was usually laid, and the upper building as cabin, mast, and the sail were set.

As a kind of capable seaworthy boat in Pacific, double canoe combines both the advantages of lightness, portability of canoe, and the structural performances of stability of resisting transverse swing and capsizing of the composite and extended hulls, as well as the increasing of carrying capacity. These composite hulls made the simple canoe great seaworthy for maritime transportation across the open sea, which could be a seagoing passenger boat and fishing vehicle with spacious platform and roof built on connective booms, or a war fleet with thin and long hull equipped with horizontal deck for warriors and sails for oceanic fighting.

After arriving to the south Pacific islands, the western navigators met different types of double composite canoes. One was equal-sided hulls double canoe craft which composited two symmetrical hulls of equal size and lashed together by means of cross beams or booms, usually with the mast stepped at forward position of the amidship forming definite head and stern, mostly discovered in the Polynesia and south of Micronesia Islands. The second type was the disparate-sided hulls double canoe which composited two hulls with different form and size, the small hull was usually made fine and pointed functioning as a float of the whole raft, with the mast stepped at the amidships and able to sail either end forward, mostly developed in south of Melanesia Islands.

The equal-sided hulls double canoe were usually sketched in the early Pacific ethnographies of seventeenth and eighteenth centuries. The *tongiaki* was a kind of famous double canoe used in Tanga till the end of eighteenth century before it was substituted by disparate-sided hulls one of Fiji. W. C. Schouten and A. J. Tasman successively came across this craft and made a drawing record (Fig. 7.1a and b). In Tasman's work, a *tongiaki* under full sail in the Gulf of Tongan in 1643 was illustrated, two fine dugout canoes were connected in parallel at an adequate distance under a broad deck, on which a round roof cabin was set, a bonfire pile was made in front of the platform, and an Oceanic lateen sail with sprit mast was stepped at fore part (Haddon, A.C. et al. 1936: 267). In 1778, J. Webber, the painter accompanying Jame Cook's voyage depicted a sketch of a double canoe of war fleet sailed by the Hawaiian indigenous warriors. The shape of the two dugout hulls was slender and soundly strong, connecting together with certain intervals by a few of booms. The mast was vertically stepped above the second boom at the midway between hulls and a typical crab-claw spritsail was set, getting strong pulling power for speedily going (Haddon, A.C. et al. 1936: 6; Fig. 7.2).

The double canoe with disparate-sided hulls was typically developed in Fiji island of south Melanesia represented by the *ndrua*. The craft usually consisted of two unequal dugout hulls, lashed horizontally in parallel by crossing booms on which a large platform was set. The sailing mast was stepped at the amidship of a large hull, while the small hull was made in reduced size with pointed ends, enabling the craft sail forward on either end (Haddon, A.C. et al. 1936: 321).

Since 1970s, Pacific anthropologists and navigators engaged in reviving the original sailing techniques of Polynesian composite canoes. The Polynesian Voyaging Society successfully organized the non-instrument sailing of the double

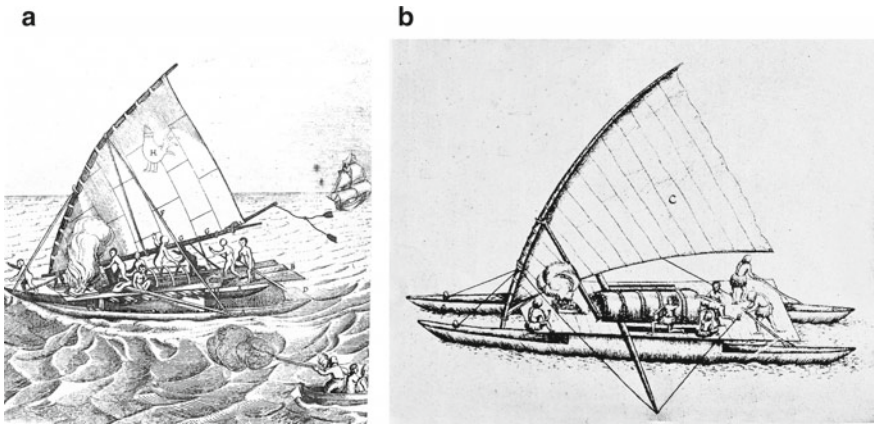

Fig. 7.1 Early double canoes *tongiaki* of seventeenth century in Tongan (after A.C. Haddon, et al. 1936: 266–267, Fig. 189–190). **a** A *tongiaki* seen off Tafahi Island of Tongan in 1616 recorded by W.C. Schouten. **b** A *tongiaki* seen in the Gulf of Tongan in 1643 illustrated by A. J. Tasman

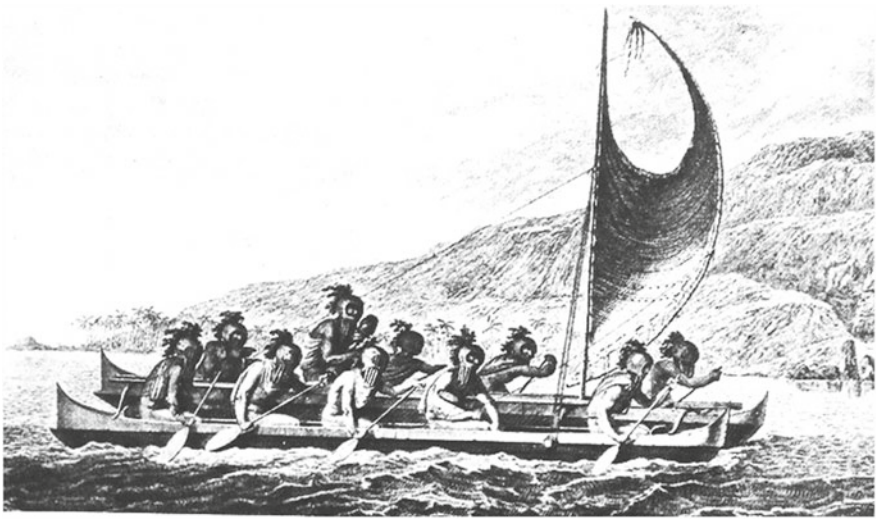

Fig. 7.2 The war fleet of Hawaiian double canoes depicted by J. Webber on Jame Cook's voyage (after A.C. Haddon, et al. 1936: 6, Fig. 1)

canoe Hokule'a between Hawaii and Tahiti island and several other Pacific voyages, stressing the prominence of double canoes in Indigenous community of Pacific (Finney, B. 2003: 9–14, 110–130; Finney, B. et al. 2007'; Fig. 7.3).

Double canoe with both of its portability and the stability met the long distance sea crossing under the prehistoric shipbuilding technology of dugout canoe. It was regarded as a distinctive creation of Pacific islanders. "A contrivance so simple and

Fig. 7.3 A poster of Hawaiian double canoe voyage in the Hunauma Bay Nature Preserve of Hawaii, 2007

practical for procuring stability and increased carrying capacity would have been adopted everywhere, but as matter of fact, it belongs almost exclusively to Indo-Pacific area" (Haddon, A.C. et al. 1938: 43). Nevertheless, along the coast of East and Northeast Asia, the same cultural heritages were also recorded in historical literatures and archaeological records, showing potential maritime cultural interaction in Asia–Pacific region since prehistory.

7.2.2 The Historical Records and Archaeological Discoveries of Double-Hulled Craft "Fang Zhou" in Eastern Asia

In the regional comparison research, A. C. Haddon and J. Hornell noticed that the indigenous *Eskimo* along the coastal region of Northeast Asia occasionally tied two kayaks together as a temporary means of ensuring stability in their seafaring (Haddon, A.C. et al. 1938: 43). Another case of ethnographical double-hulled boat was recorded along the Hokkaido coast of Japan, the ancient indigenous *Emishi* boat man, the *Ainu,* also developed and used the double canoe "Fang" (舫) in their

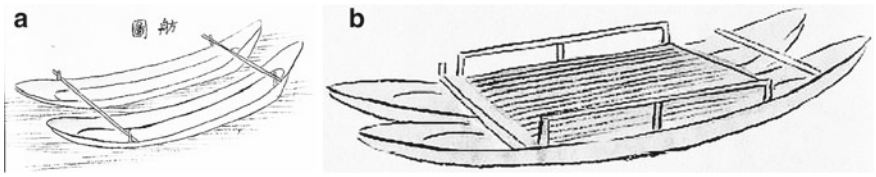

Fig. 7.4 The double canoe "Fang" (舫) of indigenous *Ainu* along Hokkaido coast of Japan (after T. Matsuura, 1845:舫图)

offshore navigation (Fig. 7.4). According to their historical literature of *An Illustration of the Wealth and Material Culture of Ainu People* (Xiayi Jiacai Tushuo 虾夷家财图说), the *Ainu* Fang was sketched as composition of two dugout canoes connected by two cross boom on which the platform and side rail were set (Matsuura, T. 1845). The *Ainu* islanders as the main indigenous population in ancient *Emishi* region was identified as the Malay-Polynesian branch of Austronesian. Therefore, the Fang of the *Ainu* people are of great significance in understanding the distribution and intrinsic interaction of the early seafaring boat of double canoe in broader Asia–Pacific region.

The using the double-hulled boat "Fang" in ancient China was also recorded in historical documents. The Chinese character of 舫 (Fang) is a polysemous word and generally referred to a building on water imitating the boat shape in ancient times. However, the original meaning of Fang was not the boat-shaped house on the water, but the "parallel boats" which was quite common from Zhou to Han dynasties 2000–3000 years ago. "Biography of Zhangyi" (张仪传) of the *Records of the Historian* (Shiji 史记) states: "A Fang boat can carry fifty warriors with food enough for three months and float down the stream with the speed of about three hundred *li* (one *li* is about five hundred meters) a day." This Fang was interpreted by Sima Zhen (司马贞) of Tang Dynasty in "Annotation" (索隐) of the book as "two boats connected in parallel" (Sima, Q. 1959: 2783).

The section of "Explanation of Water (释水)" in *Literary Expositor* (Er Ya 尔雅) describes the rules on using boats in the ritual hierarchy of the Zhou Dynasty. "The emperor uses a floating bridge connected by seven boats, a duke or prince (诸侯) uses a ship connected by four boats, a senior official Dafu (大夫) uses a double-connected boat, a junior officer Shi (士) uses a single boat, and a common people uses a raft" (Ruan, Y. 2009: 5697).

The similar double-hulled boat ethnographical heritages were also witnessed and recorded along the coastal of southern China. The Long Chuan (泷船, 泷舡) boat employed in the coast area of Guangdong during the Qing Dynasty was one of this important legacy in Chinese maritime ethnography. The section of "Boat" (船语) of *A New Introduction to Guangdong* (Guangdong Xinyu 广东新语) by Qu Dajun (屈大均) of the Qing Dynasty records: "The Liulong (六泷) River was also called Wuxi (武溪) River in the ancient time, in which the water was running very fast and dangerous, and was regarded as unfavorable water for sailing by disciples of general Mayuan (马援) of Han Dynasty. For the current of it was rapid and

rushing, the boats were usually stranded and the single boat capsized, the composite double-hulled boats were usually employed…This kind of composite double-hulled boat was made by two dugout canoes being connected together as a floating raft… The local people called this composite double boat as Long Chuan boat, or Xialai Chuan (下濑船) boat which originated from the navy boat of general Xialai who defeated *Southern Yue* state in early Han Dynasty" (Qu, D.J. 1985: 484–485). This type of double-hulled Long Chuan (泷船) boat were continuously employed in Lingnan (岭南) region for a long time and commonly recorded in ancient literatures from Tang to Qing dynasties. For example, "Long Chuan (泷船) boat anchored beach" in Yuanzhen (元稹) poem "Accompanying Friends Touring to Lingnan" in Tang dynasty, "Getting off the Long Chuan boat in Autumn day" in Feng Yinqi (凤尹岐) poem "Presenting Bless to Friend Yinggui (应奎) to Be Official to Guangdong" in the Ming Dynasty, and "Long Chuan boat came from an area beyond the Nanling in early Autumn season" in Du Jie's (杜岕) poem "Blessing Friend Huangzi (黄子) Leaving Off Chaozhou in Guangdong" in Qing Dynasty, all indicating that this type of Long Chuan boat has a long history of development along this coastal region of southern China.

Although there has still no definitely remains of seafaring double canoe of prehistory and early ancient history in China, a double-hulled boat of Sui Dynasty (AD581–618) was discovered in 1975 on the beach of the east bank of Zehe (泽河) River in Pingdu (平度) county of Shandong Province, providing the significant clue of utilizing the seagoing double canoe along coast region of ancient China (Fig. 7.5). This double-hulled boat with a remnant of 20.24 meters long was connected in parallel with two longitudinally extended canoes, the bow and stern lost a bit and was reconstructed to 23 meters. The two canoe hulls were respectively the extended canoes with U shape cross section and were longitudinally connected by three sections of bulky trunk dugout canoes. The two paralleled extended canoe hulls were connected by 20 pieces of crossbeams across the symmetric hole on the two sides of the hulls, which were covered by deck board. On the rear board remained 3 pairs of symmetric stakes as the component of the boat house. The carrying capacity of this double canoe was evaluated to 23 tons. Referred to the sailing practice of double canoe of Austronesian, the size and structure of Pingdu double-hulled boat would be a qualified seagoing craft if it was equipped with sailing facilities. Interestingly, this double canoe found on the ancient beach was made of *Cinnamomum camphora* and *Liquidambar formosana* hance, both are typical varieties of endemic tree special of environment in the southern China, indicating that it might be the remains of northward seafaring boat along the coast of China (SDPM et al. 1979).

Another large canoe of Song Dynasty excavated in 1991 in Jindo (珍岛) county, South Jeolla Province (全罗南道) of South Korea, was speculated to be a part of the remnant of double-hulled seagoing boat. It was a longitudinally extended canoe and composited by three dugout canoes made of camphor connecting together by mortise-tenon joint and iron nail, with residual length of 16.85 meters. Eight pieces of Chinese copper coins of the Song Dynasty were placed in the "longevity hole" at the joint of the canoes, identified as the southern Fujian shipbuilding custom, and

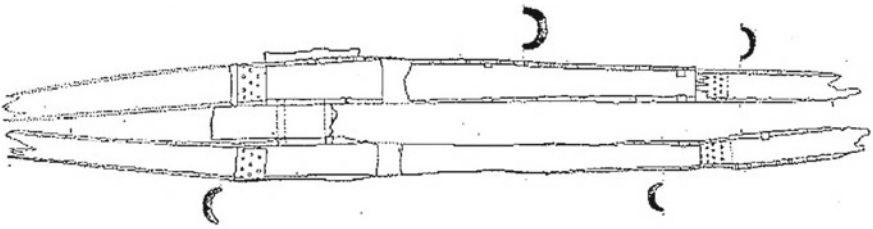

Fig. 7.5 A double-hulled boat of Sui Dynasty (AD581–618) unearthed in Pingdu (平度) of Shandong

two-hole mast step was set at the amidships of the canoe (Fig. 7.6). It is determined by the C^{14} dating to 710 ± 30 BP, and might come from the south of China in the Song Dynasty (Yuan, X.C. 1994).

The asymmetrical plan with longitudinal curve of outboard of two sides of this Jindo canoe remnant, that is the straight stroke-side and the normal arc shape starboard is notable. This asymmetrical shape in water line is quite different from the normal form of a single canoe, but a part of composite boat of double canoe or single outrigger canoe, which is consistent with some cases of double canoe in Pacific, such as the asymmetrical plan of the starboard of Fijian double canoe *ndrua* (Haddon, A.C. et al. 1936: 321). So Jindo canoe is speculated as the starboard hull remnant of a composite double canoe or a single outrigger canoe with float connecting in the left of the hull.

In a word, as an excellent contrivance and well-developed seafaring craft of Austronesian, the double canoe might also be employed in East Asian seas in medieval age. These historical heritages of double-hulled boat in Japan, Korea, and coast of China are most likely related to the maritime history of the prehistoric *Island Yi* and *Bai Yue* and closely connected to the Pacific Austronesian, with considerable historical value in research of maritime cultural relationships in Asia–Pacific.

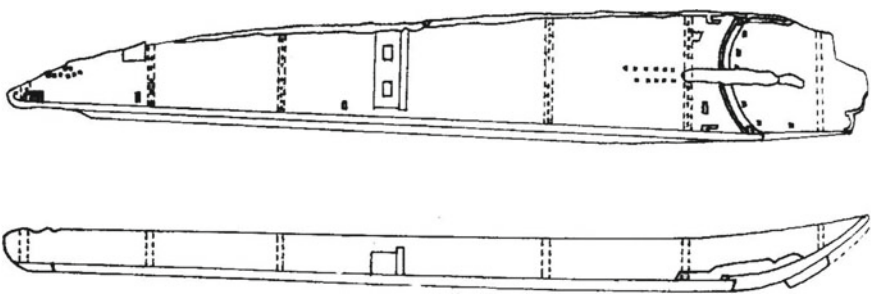

Fig. 7.6 The remnant of a suspected double-hulled seagoing boat in Jindo of South Korea

7.3 The Heritage of "Mangka" and "Mother-Son Boat" in South China and Pacific Outrigger Canoe

According to modern ethnographical literatures, the outrigger canoe with the sail has been another seaworthy craft of the indigenous navigators on the Indo-Pacific oceans for hundreds or even thousands of years. Further investigations in southern China revealed a number of similar cultural heritages of outrigger boats, such as the "Mangka" canoe in Taiwan, "Mother-Son Boat" in the minority *Miao* (苗) village in Guizhou (贵州), and the Neolithic canoe remains in Kuohuqiao (跨湖桥) site in Zhejiang. They are the valuable "cultural fossils" for us to redraw the new blueprint of prehistoric outrigger distribution in the south coast of China.

7.3.1 The Variants of Austronesian Outriggers in Indo-Pacific Region

An outrigger canoe is a canoe joining "outrigger" of small canoe-shaped float(s) on one side or on both sides, respectively being a single outrigger or double outrigger (Haddon, A.C. et al. 1938: 15–19; Fig. 7.7).

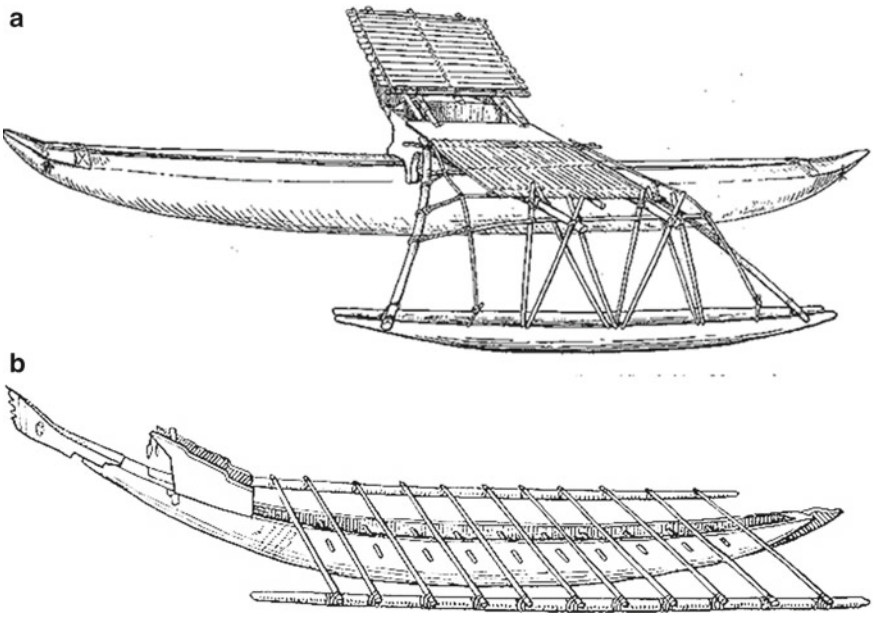

Fig. 7.7 Sketches of two types of the Pacific outrigger canoe (after A.C. Haddon, et al. 1937: 47, 326, Fig. 30, 188). **a** A model of single outrigger *tepukei* of San Cruz Islands (Cambridge Museum collection). **b** A model of double outrigger *tababeri* of Ansus Island in New Guinea (originally provided by De Clerq and Schmeltz, 1893)

As composite seagoing canoe by boomed out floating outriggers to be the balance on each side of a dugout, the double outrigger of Pacific was detailed in Euro-American ethnographical literatures. In Indonesian, the double outrigger was highly developed and varied in sizes, styles, structures, and functions in different areas of different periods, for example, the large outriggers as the Indonesian coastal trading vessel *vlerprauw,* Sulawesi and Moluccas warrior carrier *kora kora*, large Javanese fishing boat *perahu payany*, the Sulu island houseboats *Bajau*, and the Balinese heavy goods carrier *Jukung Gede* (Horridge, H. 1987: 19–23). Most of the Indonesian double outriggers are distinctive in bent curves or spliced booms directly lashed or inserted into float.

A single outrigger canoe is a type of composite canoe joining the dugout hull in one side with a float by booms, forming the light, balance, and stable seagoing boat. As the recordings of early ethnologists in Fiji, the single outrigger canoe *thamakau* was composited with a wide platform between the wooden dugout and the float on one side of the hull to accommodate the crew, passengers, or cargo, equipped with a great lateen sail to provide tremendous driving power for the light canoe, which fully demonstrates the excellent performance of the Pacific single outrigger (Haddon, A.C. et al. 1936: 315; Fig. 7.8). In Marquesas of Polynesia, both double canoe and single outriggers canoe were highly developed. In 1774 W. Hodges drew indigenous single outriggers on Vaitahu island in Tahuata, Marquesas Islands, showing the early style of single outriggers with projecting flat prow and curved backward, which were equipped with lateen sails (Haddon, A.C. et al. 1936: 35).

The types of attachment were the important technological connotation of outrigger construction, which varied greatly in different areas of the Pacific. The float of outrigger was a log of wood or length of bamboo with shape of round log, round or flat canoe shape boomed out on one or both sides of the hull as a counterpoise. Two, three, four, or more booms were used to connect the hull and outriggers, with the shapes of straight or various kinds of curved pieces such as bent curve, elbowed, arc, or S shape. The booms were lashed horizontally across the holes on the upper board or the wash strake of the hull, or bound with inserted ribs and bulkhead frame of interior hull, connecting with onboard deck and platform structure. The outrigger attachment also varied regionally, the indirect connectives lashed or inserted into the vertical or slanting sticks on the float, which mainly applied in three Pacific archipelagoes, and the direct connectives by bending the distal extremities of booms curved or elbowed shape and lashing or inserting into float, which mainly applied in Indonesia and Indian Ocean (Haddon, A.C. et al. 1937: 47, 1938: 23–26, 28, 31–32).

For the historical reasons of cultural change and indigenous migration, the two types of outrigger canoes presented different distributions in Indo-Pacific region. Double outrigger mainly distributed in most of Indonesian islands, the adjacent west of Melanesia, the northern coast of Australia, Madagascar, and Comoros of east Africa, while single outriggers are widely distributed in Polynesia, Micronesia, Melanesia, New Guinea, and some places of Indonesia, Madagascar, Comoro of east Africa, south Indian, Ceylon, Maldives, Andaman, Nicobar of south Asia, almost in all indigenous Austronesian societies. A. C. Haddon and James Hornell believed that

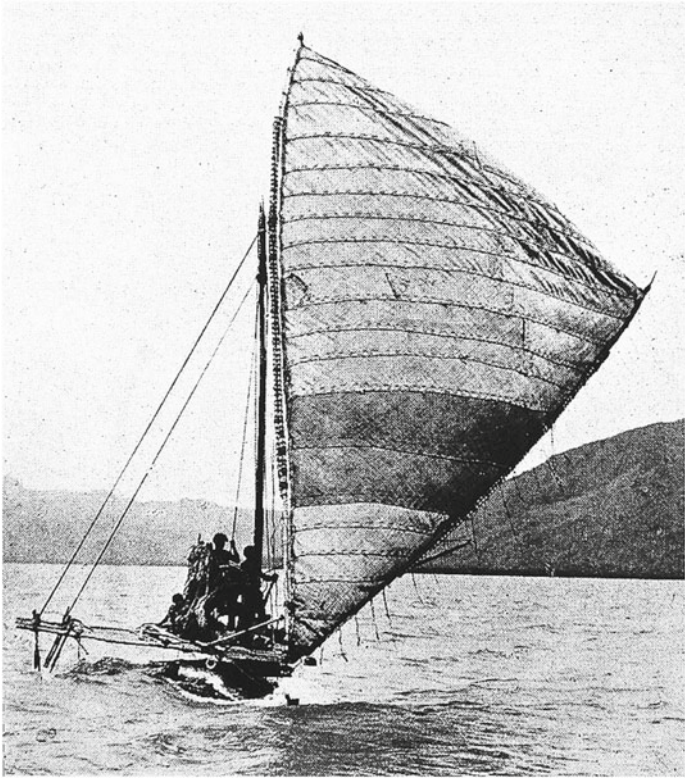

Fig. 7.8 The single outrigger canoe *thamakau* in Fiji (photograph by A. M. Hocart, after A.C. Haddon, et al. 1936: 315, Fig. 232)

the emergence of double outriggers was logically earlier and far less seaworthy than single outriggers, and double outriggers had been the original form of outrigger canoes (Haddon, A.C. et al. 1938: 15–21; Kapitan, G. 1987). Though there is no archaeological shipwreck of early outrigger to show its origin, the Barabudur stone sculptural relics in Java provide the oldest evidence of the outrigger canoe in Indonesia. Eight sailing boat carvings including five outriggers, all in double, were carved in this early Buddhist shrine dating to the beginning of the Christian era to the tenth century. So the double outrigger might originate at least two thousand years ago in Indonesia (Haddon, A.C. et al. 1938: 17; Kempers, A.J.B. 1959: 47, plate 78). The single outrigger may have been the developed form and subsequent modification of the double outrigger by eliminating one outrigger of it to get an easier and safer vessel. Practically, a single outrigger not only had enough stability to resist transverse damping force but also had better structure and lightness in seagoing performance. It is generally considered that indigenous people of Polynesia and Micronesia have not developed double outriggers in the late historic times. The differentially spatial distribution of the single and double outriggers reflects the

process of the spreading and dispersal of double outriggers from the Indonesian eastward to Melanesia at early stage of their oceanic migration, and outgrowing into new stage of single outrigger in Micronesia and Polynesia Islands.

7.3.2 The Ethnographical Discovery of the Double Outrigger Mangka and Mother-Son Boat in South of China

For more than half a century, the composite canoe recorded in the Pacific ethnography, especially the double outrigger as the early and primitive stage of the outrigger canoe has attracted a lot of attention of ethno-archaeologists in Eastern Asia. Through the comparison of ancient historical documents and Pacific ethnographic records, Professor Ling Chunsheng searched for a number of outrigger canoe materials in ancient Chinese literature. He noted that in the Qing Dynasty, the Mangka in the aboriginal ethnography of Taiwan was the double outrigger. In the Vol. six of "Custom of Aboriginal *Fan* (番俗考)" in the *Records of Mission Trip to Taiwan* (Taihai Shichai Lu 台海使槎录), Huang Shujing (黄叔璥) recorded that "Mangka is the dugout of the single log and joined with planks on two sides by lashing with rattan" (Huang, S.J. 1936: 130). Chen Shujun (陈淑均) also recorded in the Vol. five of "Custom of Aboriginal *Fan* (番俗考)" of his *Chronicle of Kavalan County* (Gamalan Tingzhi 噶玛兰厅志) of Qing Dynasty that "the Aboriginal *Fan* use ferrying canoe called Mangka or Mengxia (艋舺), Mangge (蟒葛)…which is dugout a single log and joined with planks on two sides by lashing with rattan" (Chen, S.J. 1984: 167). We agree that these depictions of the dugout canoe with lashed planks on its two sides might be the outrigger canoe. Furthermore, the ethno-linguistic investigation proves the similarity and connection of Taiwan aboriginal Mangka with the Pacific outrigger. The *Mangka* in Taiwan aboriginals as a branch of Austronesian is similarly pronounced with the outrigger in the Pacific Austronesian, such as the outrigger canoe in Indonesia, the Philippines, Micronesia, Melanesia, and Polynesia were also commonly pronounced *wangka*, *waka*, and slightly changed in the New British Isles as *haka*, in the Bougainville Islands as *vakas*, *vakati*, *hakas*, and in the New Hebrides as *angge, wanga, nawangk* and so on (Haddon, A.C. et al. 1938: 71). This important witness of linguistic further indicates that Mangka of Taiwan aborigines in the Qing Dynasty was not a small single canoe but the composite double outrigger similar to that of the Indonesian and Pacific Austronesian, which is of great significance in exploring the maritime cultural integration of the Asia–Pacific since prehistory.

The most typical heritage of outrigger canoe remained in the south of China is the "Mother-Son Boat" of minority *Miao* village in Shidong (施洞) town of Taijiang (台江) county, southeast Guizhou. From May 24 to 26 in the lunar year of 2008, during the annual Dragon Boat Festival of *Miao* ethnic, the author made a special trip to Shidong town, surveying the shape, structure, and building technique

of the *Miao* dragon boat known as the "Mother-Son Boat". We realized after that this "Mother-Son Boat" was definitely a unique double outrigger similar to that of Austronesian in Indonisian, and the cultural fossil of the prehistoric "outrigger canoe" in south China. It provides the solid evidence for exploring prehistoric seafaring craft tools of proto-Austronesian and *Bai Yue* indigenous people in south China (Wu, C.M. 2008a).

During the Dragon Boat Festival, most of *Miao* villages around Shidong participate in paddling dragon boat competitions (Fig. 7.9). The shapes and scales of these dragon boats from each village are largely identical but with minor differences, characterized by the composite feature of "Mother-Son Boat" which consisted of one big and two small canoes lashed together. These composite dragon canoes mostly were built after the 1980s, and the big Mother canoe no longer was constructed with a whole log for the reason of lack of big tree but composed of several sections of logs still maintaining the characteristics of a dugout canoe. They were consistent with what was recorded in the *Accounts of My Experience in the Miao Territory* (Miaojiang Wenjianlu 苗疆闻见录) that "the boat is dug out of a large log…with the bow of a dragon head and stern of a phoenix tail shape. The hull is capable of containing more than twenty persons who row with short paddles to make the canoe going fast as flying" (Xu, J.G. 1997: 171). All of the Mother-Son Boats were moved to the Qingshuijiang (清水江) River to participate in the festival, and after then were taken apart and kept in specific dragon canoe sheds of their own village (Fig. 7.10).

Taking the dragon canoe of Pingdiying (平地营) village as an example, the length of the Mother canoe is 23.6 m, the cross section of the amidships hull approximately round shaped and the widest part of it is 0.6 m, the depth of inboard of the bow is 0.54 m, and that of the amidships 0.46 m and the stern 0.38 m, with the undivided inboard of the hull. The Son canoes on both sides are 14 m long, 0.38 m wide, and 0.37 m deep in the middle. Five rows of horizontal booms are set

Fig. 7.9 The dragon boat competition of *Miao* villages around Shidong during the Dragon Boat Festival

Fig. 7.10 One "Mother" hull and two "Son" floats of a "Mother-Son Boat" preserved in the boat shed of *Miao* village in Shidong

up across the upper board of the middle section of mother canoe, connecting two canoes on both sides by tenon-mortise joint or bamboo strip lashing. No metal bolt, nail, and perforation in the hull are used for the connection of Mother hull and Son floats, highlighting its primitiveness and originality. The bow of the Mother canoe is ornamented with carved wooden dragon heads with horn-shaped ears by bolts and strip lashing (Fig. 7.11).

The shape, size, and structure of the dragon canoe of Baiziping (柏子坪) village is similar to that of Pingdiying, except for the little difference of the connectives

Fig. 7.11 The "Mother-Son Boat" of Pingdiying Village

between the Mother canoe and the two Son canoes. The length of the Mother canoe is 23.26 m, the cross section of the amidships hull is almost round shaped and the widest part of it is 0.67 m, the depth of inboard of the bow is 0.53 m, and that of the amidships is 0.44 m, with undivided inboard of the hull. The Son canoes on both sides are 14.53 m long, 0.28–0.37 m wide, and 0.36 m deep inboard of the amidships. Five rows of horizontal booms are set up across on upper board in the middle section of the Mother canoe, jointing with Mother canoe by full tenon-mortise structure, and with two Son canoes by steel bolts. The flat iron hoops are applied to strengthen the hull of the Mother canoe around outboard at positions of each boom. The bow of the Mother canoe is also ornamented with carved wooden dragon heads with horn-shaped ears by bolts and flat iron hoop (Fig. 7.12).

Compared with double outriggers in Southeast Asia and the Pacific, the Mother-Son Boat of Shidong shares basic structural commonalities and the same

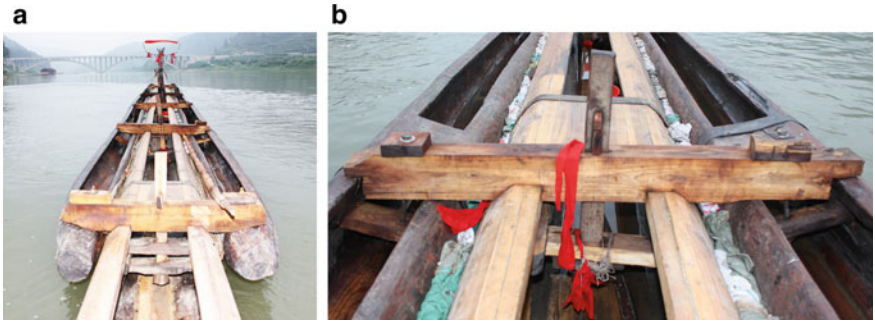

Fig. 7.12 The "Mother-Son Boat" of Baiziping Village

designing motivation of stability for resisting transverse swinging primitive dugout canoe. They are the same type of primitive watercraft in the shipbuilding history of the world.

Firstly, Both the Mother-Son Boat of Shidong and the outrigger canoe of Pacific applied the similar composite form and structure of canoe, which connecting one or two small canoes or float to one or both sides of a large canoe. This lateral composite form of canoes was designed to increase the horizontal damping force and vertical stabilities of the hull to resist transverse swing of the craft underway. They exactly share the same designing concept of the composite layout with main hull and side float(s). The Mother-Son Boat of Shidong is actually a special kind of double outrigger, forming a composite form of one "Mother" and two "Sons", while Austronesian outrigger canoe includes both double outriggers with one large canoe hull joining two small floats or simplified canoes and single outrigger with a large canoe joining a small float or simplified canoe. According to the previous analysis on the historical development of Pacific outrigger from the double outrigger mainly distributing in Indonesia islands and adjacent regions of the Southeast Asia to the single outrigger widely distributing in Indo-Pacific region, the Mother-Son Boat of Shidong is consistent with the original and early stage of the outrigger canoe. The prominent difference of Shidong "outrigger" is that the Son canoes on both sides are closely clinging to the Mother canoe by the short booms, while the outriggers of Pacific are generally arranged an adequate distance between the main hull and the side float(s) with connectives of long booms. These two forms of composite boats are respectively adapted to different environments of the inland river and the open sea. The Mother-Son Boat of Shidong with relatively small lateral damping force is more suitable for narrow and somehow stable river environment, while Pacific outrigger canoe with greater lateral damping force is undoubtedly more suitable for the vast, windy, and wavy oceanic environment.

In fact, as early as more than half a century ago, Austrian archaeologist Heine-Gelden also found that in the Mekong River and the upper reaches of the Irrawaddy River of the Southeast Asian Peninsula, the river boats usually attached double outriggers to their sides to keep balance and to increase buoyancy, and the floats of the side canoe were made of several bamboo rods or bundled reeds lashed to the hull by very short booms (Haddon, A.C. et al. 1938: 21). He argued that these inland boatmen as the proto-Austronesian had lengthened the booms of the primitive outrigger on the rivers and innovated a new form of seaworthy double outrigger to meet the seafaring after they migrated into the coast of Malay Peninsula. The Mekong River originates from the plateau of southwest China, it is quite possible that the outrigger canoes on the Mekong River share the same source with the heritage of prehistoric canoes in south China as Mother-Son Boat in Shidong.

Secondly, Both Mother-Son Boat of Shidong and outrigger canoe of Indo-Pacific region attach floats to the main hull with a number of laterally connecting bars or planks. On Mother-Son Boat of Shidong, there are generally five booms directly connecting the Mother and Son canoes with tenon-mortise structure or lashed with ropes of bamboo strip, which are similar with various ways of

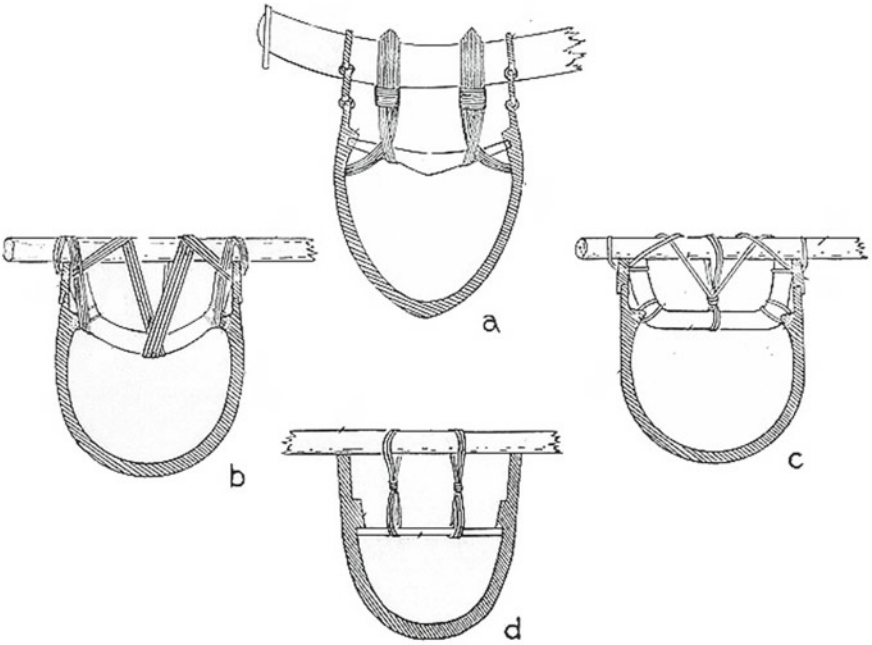

Fig. 7.13 The connective ways of lashing booms into the hull of a composite canoe in Pacific region (After A.C. Haddon, et al. 1936: 11, Fig. 5)

connective used for Pacific outrigger, including both the directly lashing or inserting booms into the hull and float, and the indirectly lashing or inserting booms into the vertical or slanting sticks on the float (Figs. 7.13 and 7.14).

Lastly, both the interior hull of Mother-Son Boat of Shidong and most of the Pacific outrigger canoe are in the form of open hold without subdivision, constituting the early and primitive feature of the ship technology as the most dugout canoes in the world. The hold of Shidong's Mother-Son Boat is narrow and long relating to the special function of the dragon boat competition. According to oral story of local *Miao* people of Tanglong (塘龙) village, the interior hold of Mother-Son Boat in ancient times were relatively large inboard capable of carrying passengers, cargoes, and livestock, similar to the Pacific composite canoe which the open platform was usually built on the booms for crew and passenger accommodation, carrying cargo or even keeping livestock.

The identity of Shidong Mother-Son Boat and the Pacific outrigger canoe provides a valuable perspective on investigating and searching the prehistoric seagoing crafts between south of China and the Pacific via Southeast Asia. The Taijiang is located in Leigongshan (雷公山) district, southeast Guizhou, one of the important watershed between the Duliujiang (都柳江) River of upper reach of Xijiang (西江)

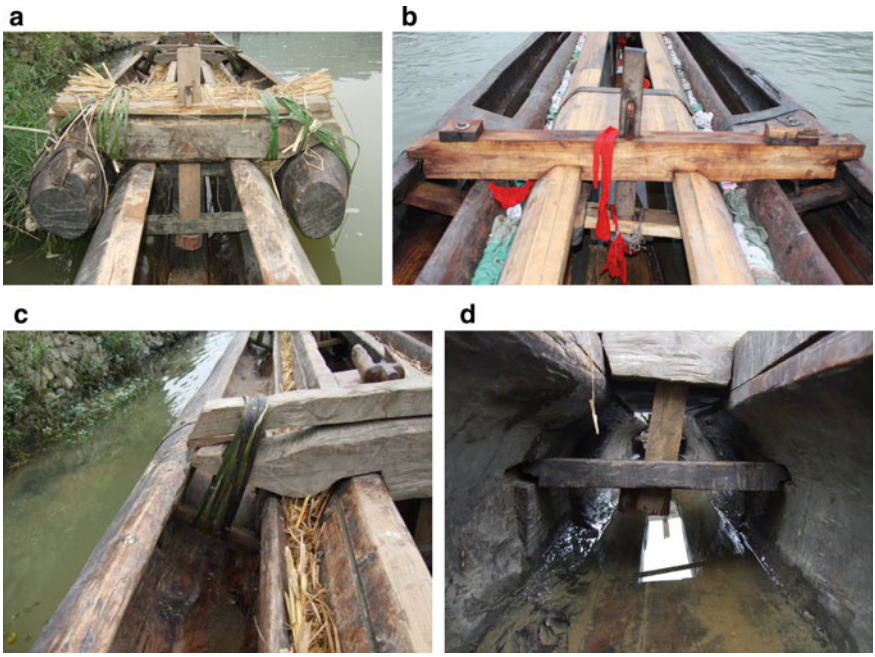

Fig. 7.14 The connective ways of lashing booms into the hull and floats of a "Mother-Son Boat" in Shidong

of the Pearl River system, and the Qingshuijiang River of the upper reach of Yuanshui (沅水) River in middle reaches system of the Yangtze River. Shidong wharf was still the transportation and trade center along the water route from Guizhou to the middle and lower reaches of the Yangtze River not long ago. The upper Duliujiang River Valley had been the important water route for the migration of *Shui* (水), *Dong* (侗) as the lineal descendant of *Western Ou* (西瓯), *Luo Yue* (骆越) of two main branches of *Bai Yue* in the west region of Lingnan, who migrated westward after the demise of *Bai Yue* during Han and Tang dynasties. The upper Qingshuijiang River Valley had been the water route for the early *Miao* people moving upstream along the Xiangjiang (湘江)—Yuanshui—Qingshuijiang rivers into mountainous Guizhou. In a word, The ethnic cultural composition in southeastern Guizhou between the Qingshuijiang and the Duliujiang river basins has been very complicated and multivariate since the prehistory and early history, with closely and deeply cultural exchanges between *Bai Yue* and *Bai Pu* (百濮) ethnicities. Therefore, as a special type of outrigger canoe, the Mother-Son Boat of *Miao* ethnic in Shidong is really possible the cultural fossil of the composite canoe employed by the prehistoric *Bai Yue* people in the southern coast of China.

7.3.3 The Archaeological Discoveries of the Suspected Outrigger Canoes in Southeast Coast of China

The discoveries of and comparisons between Mangka, Mother-Son Boat of the indigenous ethnics in southern China, and the outrigger canoes of Pacific Austronesian, provide us valuable references for the further researching of a number of important Neolithic and historic canoes which had been discovered as suspected outrigger remains in the Zhejiang, Fujian and Guangdong provinces in southeast coast of China.

Kuahuqiao canoe (8200–7500 BP) in Xiaoshan (萧山) county of Zhejiang is one prominent example. The canoe was dug into a pine log with residual hull of 5.6 m long, 0.52 m wide. The stern and upper board of the hull are lost. The maximum depth of hull inboard is less than 0.15 m. On both sides of the hull remnant scattered some of "stake timbers" and "pieces of wood", with at least six long recumbent logs parallel to the hull, ranging in length from 2.5 to 2.8 m, and with some other short pieces of wood roughly perpendicular to the hull and long logs (Fig. 7.15). Obviously, the layout of hull remnant and its parallel "long logs" and crossed "short wood" present the horizontal structural characteristics of a double outrigger canoe, including the floating "long logs" paralleling to canoe and the connective "short wood" booms. A piece of bamboo mats of 60 cm long and 50 cm wide suited at 6 m northeast of the canoe was inferred to be the sail remain. Therefore, the site excavator Jiang Leping (蒋乐平) speculated the remains of this canoe as an "outrigger canoe" of ancient China (ZJPICRA et al. 2004: 50).

The canoe of the Western Han Dynasty unearthed on the riverside of Aojiang (鳌江) River at Pukou (浦口) town of Lianjiang (连江) in Fujian, was dug into a

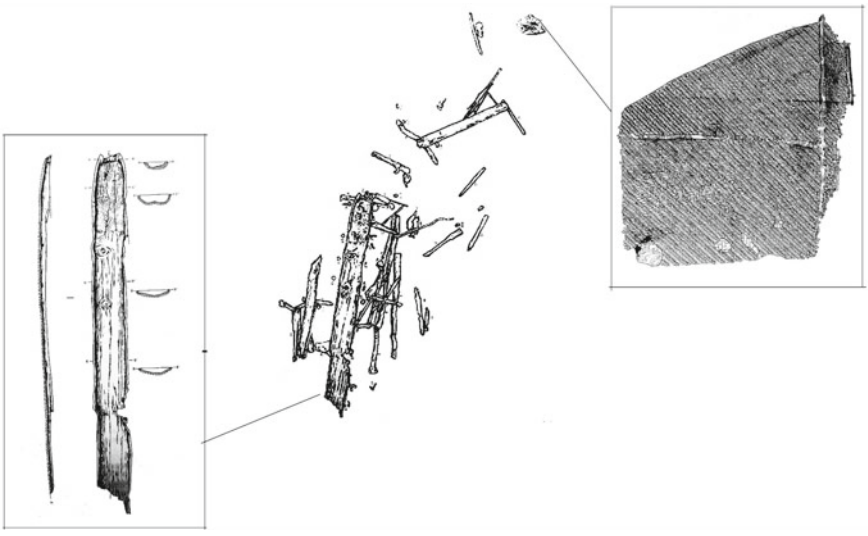

Fig. 7.15 The layout of a canoe remnant in Neolithic Kuahuqiao site of Zhejiang

whole camphor log, with remnant of 7.1 m long, square-shaped board of its bow and stern, and flat and a little arced bottom in the cross section. Both sides of the hull washboard are much damaged. On both sides of the front washboard remain a pair of symmetrical grooves (Fig. 7.16). This structure is similar to the feature of upper inboard groove or perforated connectives for lashing booms of outrigger canoes in Pacific and Indonesia. At the bottom of the stern, more than a dozen log fragments about 6.5 cm in diameter have been excavated, coinciding with the float and booms of an outrigger (Lu, M.C. 1979).

Among the six canoes of Eastern Han Dynasty unearthed in the east bank of Jianjiang (鉴江) River at Shining (石宁) village in Huazhou (化州) County of Guangdong Province, the No. 2 canoe is basically undamaged, with remaining hull of 5 m long and 0.5 m wide at amidships. There are seven pairs of symmetrical bulged marks on each side of inboard with an interval of 0.23–0.6 m. The right side of the inboard hull from the top to bottom has seven small round holes with a diameter of 1 cm. These tenon and perforation are also consistent with the features for the related booms connectives of outrigger canoes shown in Pacific (ZJDM et al. 1979).

Besides, three canoe remains respectively with lengths of 9.2, 7.8 and 9.2 m were discovered from the Maolingjiang (茅岭江) River in Qinzhou (钦州), Guangxi, together with the collection of bronze shouldered axes dating to Zhou and Han dynasties. All three canoes have well-preserved 1–2 square or circular holes, or grooves on bow board or sterns board, being consistent with the booms connectives structures of an outrigger canoe. Another extended canoe joined by two sections of dugout hull was also collected in the lower reaches of Nanliujiang (南流江) River in Hepu (合浦) County of Guangxi, with a residual length of 6.2 m and a width of 1.05 m. The perforation and groove structures on the two sides of washboard also fit well with the boom connectives of outrigger.

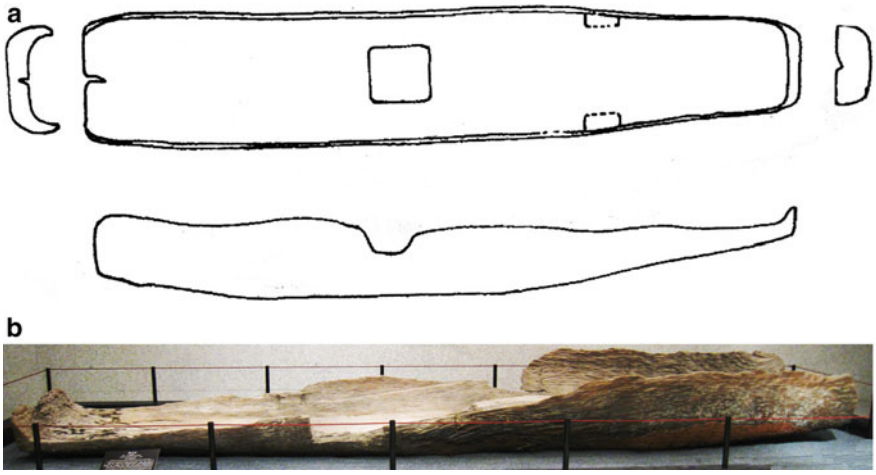

Fig. 7.16 The canoe of the Han Dynasty from Aojiang River of Lianjiang in Fujian

Obviously, there are a number of canoes remains discovered in the southeast coast of China, with distinctively structural features related to the connectives of the float and booms of outrigger canoe in the prehistoric and early historical periods. They are very likely a kind of composite boat similar to the outrigger canoes of southeast Asia and Pacific. In particular, the remain of Neolithic Kuohuqiao canoe might be the oldest double outrigger, with the main body of hull, suspected apparatus of log floats, and connective booms. These suspected outrigger canoe remains, together with the ethnographical heritages of Mangka and Mother-Son Boat of southern China, provide evidences for the restoration of prehistoric seafaring craft of *Bai Yue* and Proto-Austronesian in southeast of China.

7.4 An Investigation of the Boat Sail in Early Seafaring of Southeastern China

The variant sails have generally been employed as main seagoing driving power in almost all prehistoric and early navigation in the world. Because most archaeological sites do not preserve the relics of prehistoric and early sails of the boat, scholars generally discussed the origin of Chinese sailing boats according to a few simple and vague records in ancient literature and then inferred that early boat sails might have been used in Three Dynasties, Qin or Han dynasties (CGHSBSHJTU, 1977; Lin, H.D. 1986; Wen, S.G. 1983; Yang, C. 1989). For instance, Luo Qi(罗颀) said in the *Material Origin* (Wuyuan 物原) of Ming Dynasty: "Suiren (燧人) clan took dry gourd as float, Fuxi (伏羲) clan started to use raft, Emperor Xuanyuan (轩辕) made canoe, Emperor Zhuanxu (颛顼) made pole for boat, Emperor Yu (禹) of Xia Dynasty invented rudder, and further invented cabin, anchor, sail, and mast for the boat" (Luo, Q. 1985: 32). Liu Xi (刘熙) said in the section of "Explanation of Boats" (释船) of the *Explanation of Names* (Shi Ming 释名) of Han Dynasty that "A sail is a sheet of curtain released on boat in front of the wind, which pulling the boat going forward fast" (Liu, Xi. 1939: 129).

The sail is one of the most important seafaring apparatus of indigenous composite canoes in the Pacific, by which the Austronesian extended and disseminated to the far and open Indo-Pacific oceans. The characteristic sail of Pacific seafaring crafts is typically triangular sail made of coconut palm leaves, thin bamboo stripe mats, or plant fibers. These triangular sails mainly varied as two developing lines of spritsail and lateen sail respectively with evolving series. The spritsail included the simple or primitive spritsail with an inverted triangular sail bound to two long and straight spars used in New Zealand of Polynesia and Marquesas Islands, the crab-claw spritsail with the vertical mast spar and curled sprit throughout the length used in Hawaii, and the boom sprit sail used in Society islands (Haddon, A.C. et al. 1938: 45–47). As another evolving series, oceanic lateen sail varied as proto-lateen sail limited in the area of Indonesia, the primitive Oceanic lateen sail developed in Polynesia, and the true Oceanic originated and developed in Micronesia and Polynesia (Haddon, A.C. et al.

1938: 48–52). In addition, in the New Britain of Melanesian islands, Siassi, the coast of New Guinea, the Torres Strait, and some other places, there was a small distribution of the original square sail (Haddon, A.C. et al. 1938: 52–54). Seafaring sails of Austronesian may have originated from the primitive double canoes and outrigger canoes used by proto-Austronesian or indigenous *Bai Yue* since the Neolithic age. The varieties of triangular sail of Pacific provide specific reference for investigating prehistoric seaworthy sail in southeast China.

In the Kuahuqiao site where the suspected outrigger canoe was unearthed, a few pieces of mat remains woven with bamboo strips were found together with the canoe. At 6 m northeast of the canoe hull is a piece of mat (artifact No. 30) of 60 cm long and 50 cm wide. Though the purpose of this woven bamboo mat has so far not been identified, its coexistence with the canoe hull and the speculated floats and booms of an outrigger, and its shape of the plan, directed to remains of the primitive sail of a boat. And, besides the layout of the outrigger apparatus, a cluster of stake woods obliquely lying to the northeast of the canoe hull and next to No. 30 bamboo mat could also be mast spar for the boat sail, which is similar to mast spar for spritsail or mast pole for lateen sail in the Pacific. Interestingly, the residual mat is trapezoidal plan with three damaged sides, and a T-shaped wooden frame crossing interior of the woven and slantingly connecting the intact side, showing the possibility of its triangular plan. This is exactly consistent with the triangular feature of both the sprit sail and lateen sail of the Pacific. The bamboo strip woven sail mat was also discovered in the shipwreck site of Song Dynasty in Quanzhou of Fujian, showing the long tradition of bamboo sail making on junk of southeast of China (QZMMFJ 1987: 45–46; Fig. 5.2). The section of "Boat" of *A New Introduction to Guangdong* of the Qing Dynasty also records that the boat sails of Guangzhou were mostly woven straw mat (Qu, D.J. 1985: 476). Therefore, it is quite possible that the Kuahuqiao canoe is a double outrigger with triangular sail suitable for prehistoric seafaring, which is consistent with the role of the Kuahuqiao Culture as both one of the early Neolithic cultures in southeast China and potential origins of maritime culture in the Asia–Pacific regions.

The sailing raft and catamaran investigated and recorded in the ethnographies of southern China and Southeast Asia provides more proof for the seafaring sail of the primitive canoe. The rafts made of floating logs, reeds, and bamboo poles lashed together in parallel, were still in use by the boatman until recently in south of China, such as the fishing rafts, bamboo rafts, and the floating cargo platforms commonly witnessed along the coast and rivers in Fujian and Guangxi. The sailing rafts and catamaran were also found from Taiwan to the Polynesian islands. For example, in 1826, large sailing rafts and catamarans were investigated on Mangarevan island, on which the paddles and spritsail were combined (Haddon, A.C. et al. 1938: 14). In 1954, Professor Ling Chunsheng recorded a large bamboo raft on Kaohsiung beach of Taiwan, which was bound with 11 bamboo poles and used a large trapezoidal sail in amidships of the board (Ling, C.S. 1970: 78). Researchers believed that such kind of sailing rafts had also been the seafaring craft carrying the Proto-Austronesian from the mainland southeast of China to Southeast Asian archipelago (Rolett, B.V. 2007).

7.5 Conclusion

The Pacific double canoes and outrigger canoes had been the prominent seaworthy crafts with stabilizing structure for thousands of years, which had been connected technically in composite layout with significant lateral damp. According to analysis and summary of A. C. Haddon and J. Hornell's, a double canoe may be made by connecting two dugouts or increasing in size of the float of a single outrigger canoe, a double outrigger may be made by developing a boomed out balance on two sides of a dugout or duplicating another outrigger for a single outrigger, a single outrigger may be made by eliminating one outrigger of a double outrigger canoe or diminishing one hull of a double canoe, and a two or three logged raft may develop into a double canoe, single outrigger canoe or double outrigger canoe (Haddon, A.C. et al. 1938: 44–45).

The common features of these composite Austronesian canoes in the Indo-Pacific region, with double canoe and outrigger canoe as the main feature, are very distinctive. They not only overcome the weakness of a single canoe of being easy transverse swing and even capsizing by unique lateral damp of its composite layout, but also keep the advantage of lightness and flexibility of canoe and even acting as positive buoyancy in seafaring. These composite canoes with Oceanic spritsail or lateen sail were stably seaworthy crafts of Austronesian seagoing in the Pacific. For the close cultural relationship of the prehistoric indigenous *Bai Yue* and the Proto-Austronesian, the double-hulled boat Fang or Fangzhou, the double outrigger Mangka and Mother-Son Boat in ethnographical records and a number of suspected outrigger canoes in the archaeological remains along coast of Eastern Asia were consistent with the content of the composite canoes in Indo-Pacific oceans. They might be historical fossils of the similar composite canoes of prehistoric seafaring of indigenous *Bai Yue*, or the logical prototype of Austronesian double canoe and outrigger canoe, which is of great significance in the cultural history of the Asia–Pacific region.

Chapter 8
A Comparative Study of the Astronomical Navigation Between Ancient China and Pacific Austronesian

Astronomical navigation was a kind of sea route orientating and steering practice the ancient seamen used to judge the direction, relative position, and track of ships in the blue water of deep sea by observing the stars, other celestial bodies, and their regular occurrence in the sky, as one of maritime piloting methods employed by ancient Chinese navigators. The comparative study of ethno-archaeology revealed that the representative astronomical navigation practices recorded in the ancient Chinese literatures are highly consistent with the "star observation method" and "star measuring method" used by both the local seamen in south coast of China and the Austronesian navigators in Pacific, showing the close cultural connection between them.

8.1 A Brief Summary of the Steering Methods in Ancient Chinese Navigation

According to various books and charts of sea route orientation, there were three different kinds of steering methods in ancient Chinese navigation, the near shore terrestrially geographical guiding navigation, offshore astronomical navigation, and magnetic compass navigation. All of them roughly matured and synchronically developed in the navigation practice as early as in the Song and Yuan dynasties.

In the Vol. two of "Jia Ling (甲令)" of the "*Record of Pingzhou Table Talk*" (Pingzhou Ketan 萍洲可谈) of the Song Dynasty, Zhu Yu (朱彧) said: "The boatmen sail on the sea and guide the vessel by reference of geographical sights of land, observing the stars at night and the sun in the day, or relying on the compass in the cloudy days" (Zhu, Y. 1985: 18). His words concluded three different kinds of boat guiding methods of "geographical sights reference", "stars observing method" and "relying magnetic compass" in ancient navigation of China. In addition, Xu Jing (徐兢) wrote in the Vol. thirty-four of "Reef on the offshore

C. Wu, *The Prehistoric Maritime Frontier of Southeast China*,
The Archaeology of Asia-Pacific Navigation 4,
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Ocean (半洋焦)" of his *Illustrated Record of an Embassy to Koryo in the Xuanhe Reign* (Xuanhe Fengshi Gaoli Tujing 宣和奉使高丽图经) of the Song Dynasty, "At night the boat's position in the ocean could not be tracked by the terrestrially geographical sights, so it could only be steered by observing the stars in the sky. In the cloudy days, the boat could be piloted by floating compass for direction" (Xu, J. 1985: 120). In his preface of *Records of Countries in the Western Oceans* (Xiyang Fanguozhi 西洋番国志), Gong Zhen (巩珍) wrote: "The boatmen have to observe the rising and setting of the sun and moon to track the direction of the navigation, to measure the height of stars above the horizon to reckon the position of the boat, to make a magnetic floating compass signed the 'Ten Heavenly Stems *gan* (干) and Twelve Terrestrial Branches *zhi* (支)' indicating the direction of the voyage" (Gong, Z. 1961: 5). Both of them recorded the usage of "observing stars" and the "magnetic compass directing" in ancient navigation, besides method of the geographical sighting.

The terrestrially geographical guiding navigation is to determine the position of the boat by referencing the geographical sights along the coast, such as mountains, river estuaries, reefs and tower buildings, and so on, which is logically the most primitive and fundamental steering method for navigation in human history. In ancient China, most of the waterway orientation books described these geographical sights along the nearshore sea routes in the chapter of "Landscape Sights of Mountain and Water (山形水势)" as the guides for navigation. Six sections in *Sea Routes with Successful Sailing* (Sunfeng Xiangsong 顺风相送) marked the features of mountains and the depth of waters, sands, and rocks composition of the seabed, and *The Guide for Right Sea Routes* (Zhinan Zhengfa 指南正法) included eight sections such as the "landscape sights of mountain and water along the sea route of Eastern Ocean" and the "landscape sights of mountain and water along the sea route from north Taiwu (太武) mountain to Guangdong." The ninety-six illustrations in the *Ancient Nautical Charts* (Gu Hanghaitu 古航海图) marked the important landscape features of mountain and river estuary along the route from Liaodong (辽东) bay in Bohai (渤海) Sea to estuary of Pearl River. The *Charts of Zheng He's Voyages* (Zhenghe Hanghaitu 郑和航海图) drew the sketches of the important mountains, reefs, river estuaries, castles, and temples along a more than 20,000 km nearshore sea route from empire shipyard Baochuan Chang (宝船厂) in Nanjing of lower reach of Yangtze River to Mombasa in East Africa, which was the most important terrestrially geographical guiding navigation chart of ancient China (Xiang, D. 1961, 1981; Zhang, Xun 1980).

The magnetic compass navigation relies on the marine magnetic device which always pointing to the north and indicating the direction of the voyage. After the invention and application of magnetic compass during Song and Yuan dynasties it became an accurate instrument for measuring the direction of the voyage of an offshore boat. The ancient seamen summed up the navigating experiences of long-term voyages, including the origin seaports, destination directions of the sea route (the position of the compass needle), and distances (counted by sailing time along the specific directions) between them of the different voyages, forming a series of "Nautical Compass Orientation" (指南针经) as the core content of the

ancient sea route orientation books and charts. All of the nautical orientation books in Ancient China include various "Boatmen's Waterways Book", "Boatmen's Secret Waterways", "Compass Navigation Book" and "Compass Needle Navigation Book", as recorded "all boatmen who navigate to different oceans respectively have their own orientation secret books…which are briefly called Yang Geng (洋更, meaning Oceanic Compass Navigation)" (Huang, S.J. 1936: 13). For instance, there are ninety-nine sections of magnetic compass needle routes including the one from Fujian to Cochin (Jiaozhi 交趾) of North Vietnam in *Sea Routes with Successful Sailing,* and fifty-five compass needle routes in the *Guide for Right Sea Routes,* covering the sea routes from mainland southeast China to Eastern Ocean, Western Ocean, Southern Ocean islands, Japan, and Ryukyu (Xiang, D. 1961: 49–99, 152–195). Taking example of the "compass needle route from Fujian to Cochin", the route from Wuhumen (五虎门, Five Tigers) gate in Fuzhou to the destination seaport at Jichangmen (鸡唱门, Cock Crowing) gate in Vietnam was accurately arranged fourteen sailing courses (directions) including Yi Chen (乙辰), Bing Wu (丙午), Jia Yi (甲乙), Ding Wu (丁午), Kun Wei (坤未), Kun Shen (坤申), single Shen (单申), Kun Shen (坤申), Kun Wei (坤未), single Kun (坤), single Shen (申), Geng Shen (庚申), single Hai (亥), Qian Hai (乾亥) successively changed along the voyage, respectively corresponding different length of time *gengs* (更, 1 *geng* of ancient Chinese time unit equals 2 hours) during each course (Xiang, D. 1961: 51–52). Besides the terrestrial guiding navigation sights as previously talked in *Charts of Zheng He's Voyages* and *The Ancient Navigation Charts*, there were also compass navigation guiding covering the directions of the magnetic needle and the length of time, such as the segment of "the boat set sail from Taicang (太仓) port with single Yi (乙) needle taking 1 *geng* to get Wusongjiang (吴淞江) port" and "from Baoshan (宝山) port with Xin You (辛酉) needle taking 3 *gengs* back via Wusongjiang port and dock to Taicang port", quite accurately recorded the compass needle guiding routes along the tens of thousands of kilometers voyage forward to East Africa and back to Taicang port across the east and south China Sea and Indian ocean.

The premise of astronomical navigation is to observe and know well the constant and regular bearing of the stars and constellations in the sky, which can be the reference for seamen in the open sea to determine relative position of the boat and its voyage direction by measuring the angle or rising height of the specific star or celestial body above the horizon. From the Zhou and Han to the Ming and Qing dynasties, the Chinese historical books had kept the continuous records of astronomical navigation practice in the seas surrounding China. In addition to previous quoted *Record of Pingzhou Table Talk, Illustrated Record of an Embassy to Koryo in the Xuanhe Reign,* and *Records of Countries in the Western Oceans* respectively written in the Song and Ming dynasties, in which the three steering methods of terrestrial, astronomical, and magnetic compass were recorded, *The Book of the Prince of Huainan* (Huinan Zhi 淮南子) also recorded that "a boatman is easily lost and confused in open sea, but he will know the position of the boat oriented on the Polaris" (Liu, A. et al. 2010: 171). The section of "Outer Writing (外篇)" of the *Book of the Master Baopu* (Baopu Zhi 抱朴子) said that "those who were lost in a

great lake should employ the magnetic compass while those in the open sea should orient on the Polaris to get the way back home" (Ge, H. et al. 2018: 816). All of these records indicate the importance of the sun, moon, stars, and constellations in the sky for the navigation steering in ancient China. It can be seen that ancient boatmen of China have mastered the method of astronomical navigation since Han and Jin dynasties, far earlier than the technique of marine magnetic compass.

8.2 The Astronomical Navigation Practice of Star Orientation and Course Steering in Ancient China

From monk Faxian's (法显) experience on the sea, the "navigating by observing the sun, moon and stars" in South China Sea in the Eastern Jin Dynasty, to the "orienting on stars across the ocean (过洋牵星)" along the sailing of Zhenghe's fleet, we can see the development of astronomical navigations of both "observing stars" and "measuring stars" in ancient China.

The ancient Chinese books of sea route orientation, such as the *Sea Routes with Successful Sailing, Guide for Right Sea Routes* and *Charts of Zheng He's Voyages* and so on, records two types of astronomical steering methods of blue water navigation, the "star-observing orientation" and "star measuring orientation". Among them, "star-observing orientation" is the basic while "star measuring orientation" is the key for course steering. On the one hand, because of nearly constant relative positions of distant stars and constellations in the sky associating with the earth's rotation, most of the stars including the sun accurately rise in the east of the earth in the morning and set in the west, by which the boatmen guide the direction of navigation and get the star-observing orientation for direction. On the other hand, because of the earth's rotation axis respectively pointing to the North Star (Polaris) and South Star (Antarctica), the relative positions of these stars above the south and northern poles are not affected by the rotation of the earth and appear to be almost motionless above the horizon at a specific location on earth, therefore *The Guide for Right Sea Routes* says that "the North Star and zenith stars sit motionlessly" (Xiang, D. 1961: 126). But these stars above the south and northern poles are respectively seen at different heights upon the horizon at different latitudes, just on the sea level at equator and the higher above the horizon at a higher latitude location, which is regarded as the most important clues for navigators to accurately estimate the latitude position of the boat and get the method of star measuring orientation for the navigation. So the North Star (Polaris) and South Star (Antarctica), not only can locate the north-south direction, but also the heights of them above the horizon can respectively show the different latitude position of the boat, and is what ascertained in *Records of Countries in the Western Oceans* as "reckoning the position of the boat by measuring the height of stars above the horizon" (Gong, Z. 1961: 5).

8.2.1 *Observing Stars for Direction: "Navigating by Observing the Sun, Moon, and Stars"*

There are a series of records about the open sea navigation methods for steering direction of the boat, including the "observing stars", "surveying the positions of the rising and setting of sun or moon", "observing the sun bearing", "observing the moon bearing", "observing the length of the day and night", and the changing of these bearings in different the seasons, in *Sea Routes with Successful Sailing* and *The Guide for Right Sea Routes* (Xiang, D. 1961: 28–30, 110–112). Among these methods, the nine constellations or star clusters of the *Big Dipper* (Beidou 北斗), *Cassiopeia* (Huagai 华盖), *South Cross* (Denglonggu 灯笼骨), *Aquarius* (Shuiping 水平), *Aries* (Liangshang 凉伞), *Vega* (Zhinu 织女), *Altair* (Niulang 牛郎), *Little Dipper* (Xiaobeidou 小北斗) and *Sagittarius* (Nangdou 南斗), were listed with images of their appearance and positions of their rising/setting in Chinese coordinates "compass" with 24 scales signed Ten Heavenly Stems (天干) and Twelve Terrestrial Branches (地支) (Fig. 8.1).

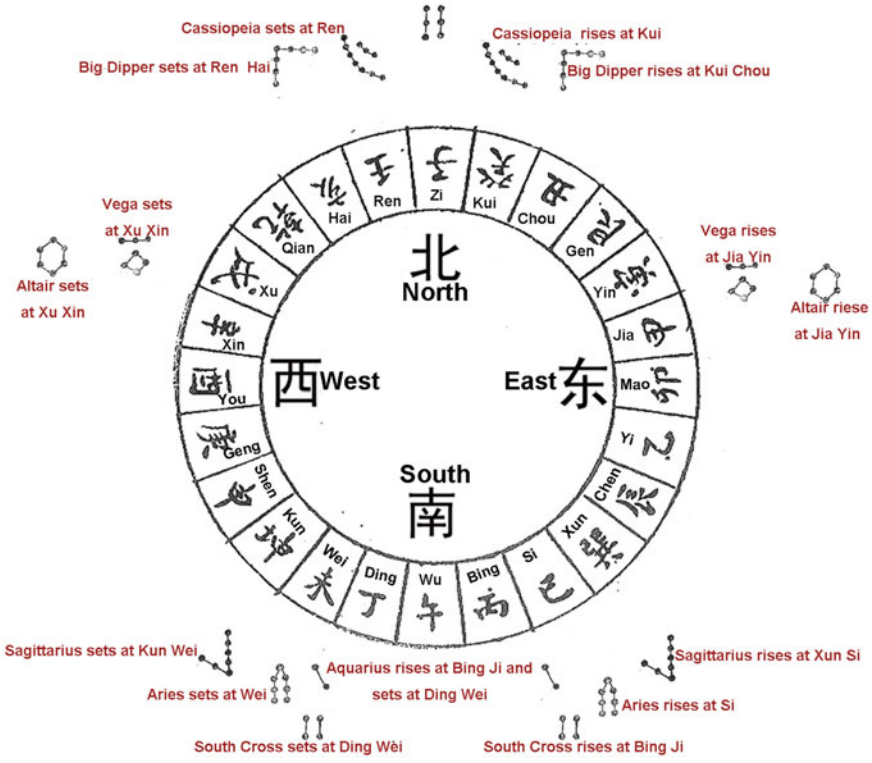

Fig. 8.1 The star rising-setting compass in ancient Chinese navigation

The "Star-Observing Orientation" surveyed and defined the position of the rising and setting of different stars, providing boatmen alternative stars with different heights in sky as the reference for judging the direction of the boat sailing. In addition to the constellations of *Altair* (Niulang 牛郎) and *Vega* (Zhinu 织女), the stars' rising/setting positions are distributed in two groups respectively above the North and South Pole. There are three constellations of *Cassiopeia* (Huagai 华盖), *Big Dipper* (Beidou 北斗), *Little Dipper* (Xiaobeidou 小北斗) in the sky of north pole, and four stars of *Sagittarius* (Nangdou 南斗), *South Cross* (Denglonggu 灯笼骨), *Aquarius* (Shuipin 水平) and *Aries* (Liangshang 凉伞) in the sky of south pole. For example, the section of "Star-Observing Orientation" in *Sea Routes with Successful Sailing* said: "The *Big Dipper* rises at *Kui* (癸) *Chou* (丑) in the northeast and sets at *Ren* (壬) *Hai* (亥) in the northwest. The *Cassiopeia* rises at *Kui* (癸) in the northeast and sets at *Ren* (壬) in northwest. The *South Cross* and *Aquarius* rise at *Bing* (丙) *Ji* (己) in the southeast and set at *Ding* (丁) *Wei* (未) in the southwest" (Xiang, D. 1961: 28). Except for their heights above horizon, their rising and setting points in the vast ocean above either side of the equator are fixed, providing a permanent reference for the orientation of east and west, north and south of the boat.

The methods of "surveying the position of the sun and the moon rising and setting", "observing the sun bearing", "observing the moon bearing", "observing the length of the day and night" fix the changes of the rising and setting position of the sun and moon in the four seasons of the year. *The Guide for Right Sea Routes* even listed the locations of the rising and setting of the sun and moon month by month, providing a detailed basis for determining the direction of the boat in the open sea (Xiang, D. 1961: 110–111).

However, star-observing orientation is the basis of astronomical navigation, which can only assist in judging the course direction of sailing, rather than provide the determination or estimation of the specific location of the boat in the blue water ocean.

In 411 AD, the eminent monk Faxian of the Jin Dynasty returned to China from India by boat. The *Biography of Monk Faxian* records this journey "returning home by floating on the sea" and "navigating by observing the sun, moon and stars" which consisted of two segments of voyages:

The first voyage was in the Indian Ocean from the "The Lion kingdom *Simhalauipa* (师子国, now Sri Lanka) to *Yavadvipa* (耶婆提, now Sumatra)", during which "The sea was vast and boundless without terrestrial guiding for direction and only way was to navigate by observing the sun, moon, and stars. When it was cloudy and raining the ship floated with the waves losing direction guiding. When the day was dark we saw billows only…and regain the direction until the sunny day…we sailed ninety days to reach the kingdom of Yavadvipa."

The second voyage was in the China Sea from *Yavadvipa* to *Changguang* (长广) Prefecture of Shandong Peninsula, during this course he was onboard a big merchant ship with more than two hundred passengers. He brought with him the food enough for about fifty days which was normally taken for sailing to Guangzhou.

Unfortunately, the boat lost the way and the journey was delayed because of bad weather, so they had to spend more than seventy days to get to Changguang Prefecture (Zhang, Xun 1985: 167–171).

In the vast and boundless Indian Ocean without terrestrial sights for guiding directions, Faxian's boat obviously relied on the astronomical method of "navigating by observing the sun, moon and stars", while during the voyage from Sumatra to China they went off course for the bad weather and losing the stars observing orientation. However, the basic method of star-observing orientation used in Faxian's voyage from the Indian Ocean to the South China Sea was as an example of successful practice of astronomical navigation in early history of China.

So far, in the modern maritime ethnography along the coasts of Zhejiang, Fujian, and Hainan, the practice of stars observing orientation was still in use to guide the direction of the sailing, which is the cultural heritage of historical astronomical navigation. In Ningbo (宁波), Zhoushan (舟山), Wenzhou (温州) of Zhejiang Province there are proverbs of "observing the sun bearing" and observing the moon to fix the direction of the voyage. Zhoushan boatmen also guided the course direction of voyage by observing the rising/setting of the *Venus* (金星) that following the sun and called it "morning star" (启明星) and "night star" (长庚星). Fishermen along the coast of Fujian and Hainan have proverbs for remembering the seasonal variant of the rising/setting positions of the sun and the moon, such as the Hainan's proverbs "the sun rises in summer at *Jia* (甲) of east and sets at *Xin* (辛) of west, rises in winter at *Yi* (乙) of east and sets at *Geng* (庚) of west, rises in spring and autumn at *Mao* (卯) of east and *You* (酉) of west" (Liu, N.W. et al. 1984: 8–11). This seasonal variant of star bearing orientation is consistent with the method of observing the sun, moon, and stars for orientation recorded in the *Guide for Right Sea Routes.*

8.2.2 *Star Measuring Orientation: From "Measuring the Height of Stars" to "Orienting on Stars Across the Ocean"*

The method of "star measuring" in navigation has been mentioned sporadically in ancient Chinese literature since the Han and Jin dynasties. *The Book of the Prince of Huai'nan* records "A boatman is easily lost and confused in open sea, but he will know the position of the boat oriented on the Polaris" (Liu, A. et al. 2010), which means estimating the position of the sailing boat by watching the Polaris Star in the north of the equator. Judging from this depiction, it is infered that the ancient navigators of China knew how to define the boat position by measuring the height of the Polaris above the horizon. The *Book of the Master Baopu* also mentions that "those who were lost in the great lake should employ the magnetic compass, while those in the open sea should orient on the Polaris to get the way back home" (Ge, H. et al. 2018: 816).

Except the method of stars observing orientation discussed previously, the series books of sea route guiding, such as *Sea Routes with Successful Sailing, The Guide for Right Sea Routes*, *Charts of Zheng He's Voyages, General Survey on the East and West Oceans* (东西洋考) and *Records of Countries in the Western Ocean,* also record another astronomical navigation methods of "reckoning position of the boat by measuring the height of stars above horizon" (Gong, Z. 1961: 5) in different ways. The method of "star measuring orientation for position" is based on the method of stars observing orientation for direction, relying on measuring the height above horizon of the North Star and South Star to determine the latitude position of the sailing boats. China situates in the northern hemisphere therefore the ancient Chinese navigators mainly depended on the North Star (Polaris) for measuring its height above the horizon to get the boat latitude position (Fig. 8.2).

In the Yuan Dynasty, the Italian traveler Marco Polo left Quanzhou southward for going back to Europe, then traveled from the coast of the Indochina, Java island in Southeast Asia, via Nicobar-Andaman island to the east African coast of the Indian Ocean. On his voyage from Java the Lesser in Southeast Asia to western India the navigators continuously observed and measured the height of the North Star above horizon as the coordinates for determining the ship's position. In Marco Polo's book, he mentioned six times of measuring the North Star heights on horizon respectively in Java the Lesser, Samara, Komari (now Cape Comorin) and Malabar (now Kerala) of south India, Guzzera (now Gujarat), and Cambay (now Kambai) of west India. These places are distributed from Java island in the south of the equator to Cambay of western India near the Tropic of Cancer, roughly from southeast to

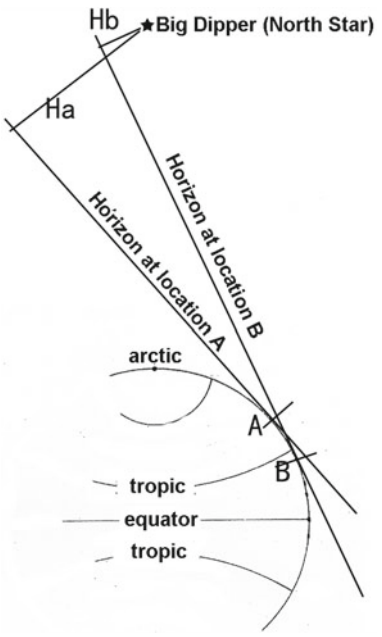

Fig. 8.2 The method of "Star Measuring Orientation" in ancient Chinese navigation (Ha, angular height of big dipper at location A; Hb, angular height of big dipper at location B)

Table 8.1 The angular height above horizon marking the coordinates of latitude and longitude of Marco Polo voyage from Java to Cambay (Kambai)

Locations	Latitude coordinates	Heights of the North Star above horizon
Java the Lesser	5° S	0
Samara	0° N	0
Komari (Cape Comorin)	8° N	45–55 cm
Malaba (Kerala)	12° N	450 cm
Guzzerat	21° N	1250 cm
Kambai	22° N	Higher than 1250 cm

northwest, where the heights of Polaris above horizon reflected the difference of latitude position of the ship, which was also the first practice of stars measuring orientation with definite quantitative facts related to the navigation history of East Asia (Table 8.1).

The voyage of Zheng He's fleet sailing to the West Ocean organized by the empire office of early Ming Dynasty was a feat in the navigation history of the world. Zheng He's navigation condensed the various achievements of nautical technology in the past dynasties, combining near shore terrestrial guiding, magnetic compass, and astronomical orientation. According to *Charts of Zheng He's Voyages*, during a number of segments of voyage from the island of Longxianyu (龙涎屿 now Pulau Breueh) in northwest Sumatra to Cape Guardafui (葛儿得风) of Somalia in east Africa, and the voyage along the west coast of India peninsula, a compound method of near shore terrestrial guiding, magnetic compass, and star measuring positioning was employed. Among them, "Orienting on Stars across the Ocean (过洋牵星)" had been the classic practice of the astronomical "star measuring orientation" in the navigation history of East Asia. The so-called "orienting on stars" was that the navigators "searched" and "defined" the *Big Dipper* (North Star 北斗星), *Cassiopeia* (Huagai 华盖星) and other stars over the south and northern poles, and measured their height above horizon in unit of finger *zhi* (指) and angle *jiao* (角, 1 *jiao* equals to a quarter of *zhi*) to mark the different latitude positions of the boat along the voyage.

Along the long voyage in the main course from Longxianyu (龙涎屿, now Pulau Breueh) island in West Sumatra to the west via Ceylon (锡兰, now Sri Lanka) and Calicut (古里, now Kozhikode in south of India) to Hulumosi (忽鲁谟斯, now Hormuz in Iran) and Aden (阿丹) in West Asia, then to Manbasa (慢八撒, now Mombasa of Kenya) and Malindi (麻林地) in East Africa, Zheng He's fleet oriented thirty-two astronomical coordinates of islands, reefs and coastal places and respectively measured star heights above the horizon from East to West as following : Yilongliu (已龙溜, now southeast of Sri Lanka) oriented *Cassiopeia* with five *zhis* and two *jiaos*, Shachiliu (沙剌溜, now Suvadiva of Maldives) oriented *Cassiopeia* with six *zhis* and one *jiao*, *Guanyu* (官屿, now Male of Maldivian) oriented *Cassiopeia* with seven *zhis* and two *jiaos*, Jiapingnianliu (加平年溜, now one of Maldivian islands) oriented *Big Dipper* with one *zhis*, Anduliliu (安都里溜, now one of Maldivian islands) oriented *Big Dipper* with four *zhis*, Cochin of India

oriented *Big Dipper* with three *zhis*, Calicut (卡利卡特, now Kozhikode) of India oriented *Big Dipper* with four *zhis*, Hahaweidie (哈哈迭微, now the north point of Calicut of India) oriented *Big Dipper* with four *zhis* and one *jiaos*, Xieli (歇立, now another north point of Calicut of India) oriented *Big Dipper* with four *zhis* and two *jiaos* to the North Star, Manggenuer (莽葛奴儿, now Mangalore of India oriented *Big Dipper* with s five *zhis*, Azhediao (阿者刁, now another point in Mangalore of India) oriented *Big Dipper* with six *zhis*, Chandawuer (缠打兀儿, now the other point in Mangalore of India) oriented *Big Dipper* with six *zhis* and two *jiaos*, Poerya (破儿牙, now a point between Mangalore and Cambay of India) oriented *Big Dipper* with six *zhis*, Boerya (跛儿牙, now another point between Mangalore and Cambay of India) oriented *Big Dipper* with eight *zhis*, Qierweier (起儿未儿 now another point between Mangalore and Cambay of India) oriented *Big Dipper* with eight *zhis*, Mahayin (马哈音, now another point between Mangalore and Khambhat of India) oriented *Big Dipper* with nine *zhis*, Malou (麻楼, now a point in south Khambhat in India) oriented *Big Dipper* with ten *zhis*, Kanbayecheng (坎八叶城, now another point in south Khambhat in India) oriented *Big Dipper* with twelve *zhis*, Keshi (客实, now Karachi of Pakistan) oriented *Big Dipper* with thirteen *zhis*, Mashiji (麻实吉, now Muscat of Oman) oriented *Big Dipper* with twelve *zhis*, Dawan (大湾, now a point of Dhofar port in Oman) oriented *Big Dipper* with nine *zhis* and two *jiaos*, Ahuna (阿胡那, now another point of Dhofar port in Omen) oriented *Big Dipper* with nine *zhis*, Zufar (佐法尔, now Dhofarin Oman) oriented *Big Dipper* with eight *zhis*, Luofa (罗法, now the west of Dhofar in Oman) oriented *Big Dipper* with seven *zhis*, Shilier (失里儿, now the west of Dhofar of Oman) oriented *Big Dipper* with six *zhis*, Aden of Yemen oriented *Big Dipper* with five *zhis*, Muerlihabier (木儿立哈必儿, now one point of northeast of Somalia) oriented *Big Dipper* with four *zhis*, Heier (黑儿, now another point of northeastern Somalia) oriented *Big Dipper* with three *zhis* and one *jiaos*, Mugudushu (木骨都束, now Mogadiscio of Somalia) oriented *Big Dipper* with two *zhis* and one *jiaos*, Muluwang (木鲁望, now a place in Somalia) oriented *Cassiopeia* with eight *zhis*, Manbasa (慢八撒, now Mombasa of Kenya) oriented *Cassiopeia* with seven *zhis*, Menfeidong (门肥东, now north of Malindi in Kenya) oriented *Cassiopeia* with seven *zhis* (Xiang, D. 1981: 54–62).

Besides, the *Charts of Zheng He's Voyages* also records a few other astronomical coordinates with star-observing and measuring orientations along the branch segments of voyage in the Indian Ocean. The four illustrations of the "Orienting on Stars across the Ocean" in Zheng He's charts are illustration of two round-trip courses of Calicut-Hulumosi and Sumatra-Ceylon, depicting graphically the types and heights s of the oriented stars above the horizon. Among them, the first and fourth illustrations are the round-trip courses between Calicut (古里, now Kozhikode in south India) and Hulumosi (忽鲁谟斯, now Hormuz in Iran). The first illustration is "orienting on stars across the ocean from Calicut to Hulumosi", successively presenting from right to left, Calicut in the southeast via Dingdebaxi (丁得把昔, now Dandi Bandar in west India), Shamagushan (沙马姑山, now Jabal Sham mount in Oman) to Hulumosi in the northwest, with their different star orientations. Specifically, Calicut ellipsis (another illustration of the charts showed

Calicut orienting *Big Dipper* with four *zhis* as quoted previously), sailing to Shamagushan by orienting *Big Dipper* with eleven *zhis* and *South Cross* with four and half *zhis*, at Dingdebaxi orienting *Big Dipper* with seven *zhis* and *South Cross* with eight and half *zhis*, at Shamagushan orienting *South Cross* with four and half *zhis,* sailing to Hulumosi by orienting *Big Dipper* with fourteen *zhis.* The fourth illustration is "orienting on stars across the ocean from Hulumosi to Calicut", successively presenting from right to left, from Hulumosi in the northwest via Shamagushan, Dingdebaxi to Calicut in the southeast, with their different star orientations. Specifically, Hulumosi and Calicut ellipsis for being signed in first illustration, Shamagushan orienting *Big Dipper* with eleven *zhis* and *South Cross* with eight and half *zhis,* Dingdebaxi orienting *Big Dipper* with seven *zhis.* The third illustration is "orienting on stars across the ocean from Longxianyu (龙涎屿) to Ceylon", and the second illustration is "orienting on stars across the ocean from Ceylon to Sumatra", in which the sea route crossing a small range latitude, and Longxianyu orienting *Big Dipper* with one *zhi* and *South Cross* with fourteen *zhis*, Ceylon orienting *Big Dipper* with three *zhis* and *South Cross* with seven *zhis* (Xiang, D. 1981: 63–66).

In *Sea Routes with Successful Sailing* there are also four round-trip magnetic compass needle routes along which star measuring orientations were attached in Indian Ocean. On the needle route from Aceh (阿齐, now north of Sumatra) to Calicut of India, the boat orients *Cassiopeia* with eight *zhis* when leaving Mount Canaanmao (伽南貌山), and orients *Cassiopeia* with seven *zhis* and three *jiaos* when approaching Ceylon. On returning voyage from Ceylon, boat orients *Cassiopeia* with eight *zhis*. On the needle route from Calicut to Hulumosi, the boat orients *Big Dipper* with four *zhis* and *South Cross* with eleven and half *zhis* when leaving Calicut, orients *Big Dipper* with seven *zhis* and *South Cross* with seven and half *zhis* at Dingdebaxi, orients *Big Dipper* with four and a half *zhis at* Mount Meizhina (美之那山), when the boat approaching Hormuz orients *Big Dipper* with fourteen *zhis* and *South Cross* with one and half *zhis.* On the returning voyage, the boat orients both *Big Dipper* and *Cassiopeia* with twelve *zhis* and *South Cross* with four and half *zhis* at Mount Shaguma (沙姑马山, now Jabal Qurayyah in the United Arab Emirates), when it approaching Calicut the boat orients both *Big Dipper* with four *zhis* and *South Cross* with eleven *zhis*. On the needle route from Calicut to Aden, the boat orients *Big Dipper* with four *zhis* and *South Cross* with eleven and half *zhis* when setting sail from Calicut, orients *Big Dipper* with five *zhis* and *South Cross* with ten *zhis* and three *Jiaos* at Xixingyu (希星屿) Island, orients *Big Dipper* with five *zhis* and *South Cross* with ten *zhis* when passing Mount Zhijiaotanas (直焦塔那山), orients *Big Dipper* with five *zhis* and *South Cross* with ten and half *zhis* when arriving to Aden (阿丹). on the returning voyage, orients *Big Dipper* with five and half *zhis* and *South Cross* with ten *zhis* at Mount Tala (塔喇山). On the needle route from Calicut to Zufar, in Xixingshan (希星山) orients *Big Dipper* with five *zhis* and one *jiao*, and *South Cross* with ten *zhis* and one *jiao* at Mount Xixing (希星山), orients *Big Dipper* with six *zhis* and three *jiaos and South Cross* with eight *zhis* and three *jiaos* at Manjiaoshuanger (莽角双儿, now Mangalore in west of India), *Big Dipper* with seven *zhis* and three *jiaos* and *South Cross with* seven *zhis*

san three *jiaos* when approaching to Zufar (祖法儿, now Dhofar in Oman), On the returning voyage, the boat orients *Big Dipper* with seven and half *zhis* and *South Cross* with eight *zhis* when setting sail from Zufar, and orients *Big Dipper* with five and half *zhis* and *South Cross* with ten *zhis* at Jiaotou (礁头) (Xiang, D. 1961: 78–81).

8.2.3 *The Method of "Star Measuring Orientation" in Astronomical Navigation of Southeast of China*

According to these practices of astronomical navigation centering in South China Sea and Indian Ocean recorded in ancient Chinese sea route orientation books, and the related archaeological and ethnographical discoveries, the methods of star measuring orientation were not completely same, but with variant techniques and tools to measure the heights of stars, different units to show the height of the stars above the horizon, such as "centimeter" used by Marco Polo fleet and finger *zhi* (指) and angle *jiao* (角) in Zheng He's fleet and other Chinese boatmen. But these star measuring orientation practices were intrinsically relevant and essentially unified.

The tool for measuring the height of stars corresponding to the method of "orienting on stars across the ocean" of Zheng He's fleet was a kind of "Star-Orienting Board" (牵星板). Li Xu (李诩) described the content of this measuring scale in chapter one "Zhoubi's Ruler" (周髀算尺) of his *Essays of the Old Man Hut* (Jie'an Lao'ren Manbi 戒庵老人漫笔) in the Ming Dynasty, the "Star-Orienting Board" firstly shown by Ma Huaide (马怀德) in Suzhou (苏州), was made of a set of twelve pieces square board of hard wood with successive sizes of one finger *zhi* (指) up to twelve *zhis*, the largest piece of board with twelve *zhis* was about seven *cuns* (寸, 1 *cun* of length is about 3.3 cm). There was also a piece of square ivory board with four corners missing called Zhoubi's Ruler (周髀算尺), which was two *chi* (尺, 1 *chi* of length is about 33.3 cm) long and successively signed half *zhi*, half angle *jiao* (角), one *jiao* and three *jiaos* (Li, X. 1982: 29).

Obviously, this pair of "Star-Orienting Board" consists of 12 grade-scaled plates with scales of 1–12 *zhis* respectively together with a square ivory plate of 1–4 *jiaos*. The four corners of the ivory plate were cut into varying lengths with a half *jiao* (1/8 *zhi*), one *jiao* (1/4 *zhi*), a half *zhi* (2 *jiaos*) and three *jiaos* (3/4 *zhi*) respectively to be the complement rule scale of the 12 large boards. When the navigator observed and measured the stars he used different scales of the boards according to varying heights of the stars. The navigator held a proper star-orienting board forward to make it erect and perpendicular to the sea surface, and make its lower end aligned to the tangent of the sea and sky. The oriented star appeared in the upper end of the board, then the corresponding scale *zhis* of the star-orienting board and the number of supplementary *jiaos* on the ivory plate (if required) was just the height of the celestial body above the horizon (Fig. 8.3).

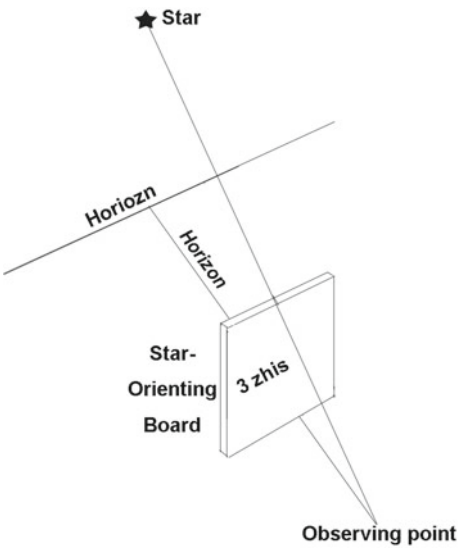

Fig. 8.3 The "Star-Orienting Board" in ancient Chinese navigation

A bamboo ruler unearthed in the shipwreck of Song Dynasty at Houzhu (后渚) seaport of Quanzhou in Fujian Province in 1974 was recognized as another star measuring tool of navigation. This rule is 20.7 cm long, specially carved one scale at one end and four scales at the other end, with an interval space of about three scales between them, each scale is about 2.6 cm (QZMMFJ 1987: 22; Figs. 8.4 and 8.5). Professor Han Zhenhua (韩振华) held that it was a ruler to measure the height of stars for navigation in the Song Dynasty. The interval space of about three scales in the middle of the ruler was the holder for boatman or where the bracket or handle was installed. The length of the four scales corresponded to the four fingers (*zhis*) of "star measurement with bare palm" in maritime ethnographies of southeast China, and the actual length of the four scales (2.6×4) was about equal to that of the average human palm. When it was in use, the end of the four scales was upward, and the seaman extended his arm forward holding the lower end of the ruler under the first scale and aligning it with the tangent of the sea and the sky, then the position of the oriented star on the four scales was its height above horizon (Han, Z.H. 1980).

In the maritime ethnographies in the southeast coast of China, the fingers of hand have been the most important "tool" of boatmen to measure the height of the stars in sky. The star measuring orientation was also a popular method of course steering among the boatmen in Zhejiang, Fujian, Guangdong, Guangxi, and Hainan of southeastern coast of China, indicating the profound cultural foundation of astronomical navigation practice. The proverb among boatmen of Zhoushan (舟山) archipelago in Zhejiang says that "by knowing the Polaris stars one is able to travel around the world", while the similar proverb of Beihai (北海) in Guangxi says that "those who know the Polaris stars are able to sail in five lakes and four seas over the world". Both of them concisely revealed the importance of measuring the height of polar stars for their steering in navigation. The primitive method of "measuring the

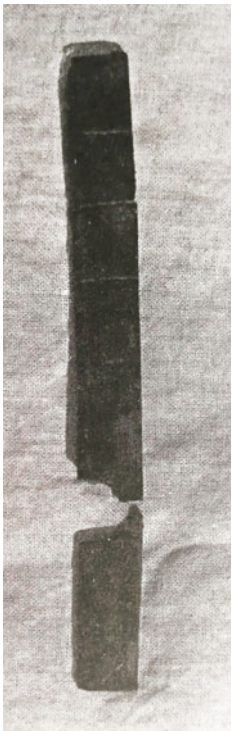

Fig. 8.4 A bamboo ruler as a star measuring tool in navigation from the shipwreck of Song Dynasty unearthed in Quanzhou, Fujian (after QZMMFJ 1987)

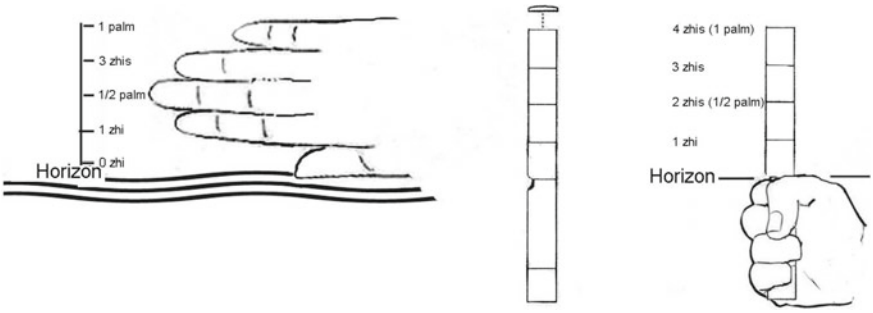

Fig. 8.5 Comparison of measurement of the angular height of star by the naked fingers of fisherman in Hainan and restored bamboo ruler from the shipwreck of Song Dynasty unearthed in Quanzhou

height of stars" used by boatmen in south of China was a kind of bare palm measurement. The fishermen in south island of Qinglan (清栏) of Wenchang (文昌) County in Hainan measured the height of the North Star (Big Dipper) above horizon with only five naked fingers (Fig. 8.5). They extended their right hands above sea level, expanding the palm with its center forward and the thumb downward, the end of the thumb was tangent to the sea-sky connection line and the little finger upward, then the observed corresponding positions of North Star on this palm rule such as the index finger, middle finger, ring finger, and little finger respectively indicated the heights of one *zhi*, two *zhis* (half *palm*), three *zhis* and four *zhis* (one *palm*) of the star above the horizon. Huang Huayin (黄华荫), a fisherman from Hainan island, measured the height of the North Star above the sea horizon near Hainan island as nearly one *palm* (four *zhis*), while he measured the height of the North Star on the sea horizon of the central Vietnam as half *palm* (two *zhis*). According to these practical surveying data of fisherman Huang Huayin, professor Han Zhenhua calculated that one *zhi* in star measurement orientation of modern fishermen of southeast coast of China were about 5° and 44 min in latitude, one *palm* and four *zhis* were 22° and 38 min. The height of the North Star over horizon around Hainan island is less than one *palm* and about 20° in latitude, while the height of North Star above horizon around central Vietnam is half *palm* and about 11° and 24 min in latitude, both of which are consistent with actual situation. This primitive method of star measurement with bare palm was an important inspiration for the study of the origin of ancient Chinese measuring ruler of the star height in navigation (Han, Z.H. 1980; Liu, N.W. et al. 1984: 11–13). Because the star measuring orientation originated from this primitive method of "star measurement with bare palm", all ancient Chinese sea route orientation books used the unit of *zhi* (指, the finger) in recording the star height above horizon in astronomical navigation.

The ethnographical "star measurement with bare palm" in South China Sea reflects the original and early stage of star measuring orientation in navigation, which might be the logical predecessor of star measuring ruler recognized in Quanzhou shipwreck of Song Dynasty and Star-Orienting Board of Zheng He's fleet of Ming Dynasty. These developed and evolved methods of star measuring orientation with rulers or scaled board were similar to that of modern fishers in Wenchang (文昌) County of Hainan, who just hold the vertical ruler to measure the height of star, making the lower end of the rule tangent to the sea surface so the upper end measures the height of stars. The method of stars measuring orientation included in the traditional compass needle navigation books in Jinghai (靖海) village of Hui'an (惠安) county of Fujian, was called the "method of measuring the height of star along the meridian", for instance, "the height of star along the meridian in Luzon (吕宋) is measured as five *cuns* (寸, 1 *cun* equal to 3.33 cm) and six *fens* (分, 1 fen equal to 0.33 cm), in Biaowei (表尾) is measured as seven *cun*s and two *fens,* in Wuyu (浯屿) of southern Fujian is measured as one *cun* and seven *fens*" (Liu, N.W. et al. 1984: 12). Directly marking the height of stars above horizon with a ruler, in this case, might be the result of using a ruler or scale for measuring the height of stars in nautical orientation.

To sum up, the astronomical navigation in ancient southeast of China has developed from "navigating by observing the sun, moon and stars" to "orienting on stars across the ocean", consisting of two categories of methods of "star-observing orientation for direction" and "star measuring orientation for position" with a long developing history. The measurement of height of the stars and constellations on horizon and searching the latitude position of the sailing boat provided reliable steering for offshore navigation before the appearance of magnetic compass in ancient China.

8.3 The Comparison of Astronomical Navigation Between South Coast of China and Pacific Austronesian

Before western navigators made their way into the Pacific Ocean, the indigenous Austronesian maintained an excellent technical system of navigation, including the unique seafaring crafts of double canoe and outrigger canoe, the changing triangular sails and sailing techniques of downwind and wardwind, as well as a series of marine geographical steering methods and astronomical orientation which were distinctive section in the world's nautical history. Austronesian has been the genius ethnics of astronomical navigation, who developed peculiar star compass for direction reference and star measuring orientation for fixing position. During his first Pacific voyage from east to west in 1769, Captain James Cook was amazed to witness the extraordinary practices of native navigation, their methods of observing the sun, moon, current changing and wind direction for orienting their destination island, or measuring stars in the sky for accurately defining the position of sailing canoe. When Cook left Tahiti he took the indigenous navigator Tupaia along with him, and it was Tupaia, with his ability of identifying and measuring stars and constellations, steering directions, destining the islands and the excellent downwind sailing skills, brought the Cook's fleet to New Zealand, Australia and Batavia (Haney, D. 1998: 40; Endeavour, P.A. 2001: 153, 169).

In the past half century, anthropologists had carried out in-depth investigations, researches, experiments, and restorations of the astronomical navigation of Austronesian (Sharp, A. 1957; Dodd, E. 1972; Lewis, D. 1994; Finney, B. 1994, 2003; Finney, B. et al. 2007). In 1964 and 1968, under the guidance of a number of native navigators from Melanesians who still retained the memories of traditional navigation methods, Davis Lewis successively sailed his boats of Rehu Moana and Isbjorn across the long distance ocean without compass and modern nautical gears, but naked-eye observation of stars, wind, and ocean current. Lewis' experimental navigation among the islands of Oceania left us valuable knowledge and record of aboriginal seafaring of the Pacific, including astronomical orientation of star observation.

In 1958, Ben Finney from the Department of Anthropology at the University of Hawaii began exploring the traditional navigation of native Polynesians. In 1973, together with the famous navigator Tommy Holmes, he founded the Polynesian

Voyaging Society, engaging in reviving the original sailing techniques of Polynesian composite canoes, and in 1976 he successfully sailed the double canoe Hokule'a from Hawaii to Tahiti island 2250 miles away. The captain of the voyage was a Hawaiian expert catamaran sailor Elia Kawika Kapahulehua, and the master navigator Pius Mau Piailug from a maritime family of Satawal Island of Caroline Islands of Micronesia who learned from his grandfather, his father, and uncle with rich knowledges of star orientation and oceanic hydrology, was recruited to pilot the sailing (Finney, B. 2003: 9–14).

As a new generation of master navigators of Hawaiian, Nainoa Thompson was also an important witness to the revival of traditional navigation methods of the Pacific, taking part in the 1976 voyage from Hawaii to Tahiti on Hokule'a and learning the traditional navigation knowledge of indigenous people from the old master navigator Pius Mau Piailug. In 1980 Nainoa sailed Hokule'a back from Hawaii to Tahiti in a non-instrument voyage. Since then Hokule'a had several successful Pacific voyages, and in 1995 Ben Finney organized six double canoes which included Hokule'a, sailed independently from Tahiti to Hawaii by using Nainoa's navigation methods, resulting in the roughtly same courses of six double canoes, confirming the accuracy and effectiveness of the old navigation methods of the Pacific indigenous people (Finney, B. 2003: 110–130).

In general, the nautical skills of indigenous Austronesian were rich and complex, slightly varying in different islands and sea areas. The stars and constellations, wind and clouds, ocean currents and migratory birds, and so on, were all references for orienting direction and position in native navigation. Among them, star navigation was the most representative technology, which including two types, the Star Compass indicating the rising/setting positions of different stars in the sky for orienting the direction of the sailing boat, and the bare hand measuring of the height of polar stars above horizon to determine the latitude position of the sailing vessel.

The "Star Compass" of Satawal in Carolinian Islands of Micronesia was not a real compass instrument but an abstract image of horizon in navigators' minds in which the stars and constellations bearing, which was called *naang* in Satawal language. This image of star compass arranged the rising/setting positions of the polar stars, 15 zenith constellations above horizon within a 32-scale circular or square plan. This star compass with Satawal island in its center acted as a giant coordinate system and reference for orienting the boat direction in the sea around Satawal Island for the native sailors (Fig. 8.6). Because the positions of rising/setting of stars and constellations are related to the changes of latitude, there were different Star Compass systems in different latitudes, for instance, the islanders of Woleai in Caroline islands and the new generation of Hawaiian navigator Nainoa Thompson all had their own Star Compass for navigation (Finney, B. et al. 2007).

The Pacific indigenous navigators also noted the correlation between the height of the polar stars above horizon and latitude variations. Nainoa Thompson used bare fingers and hand to measure the height of Polaris above horizon and calculate the latitude's position of the boat on the voyage from Hawaii to Tahiti. In his experience, the height of each finger above the horizon was equivalent to 2° of latitude, so the fingers could measure the Polaris to a total height of 10° of latitude.

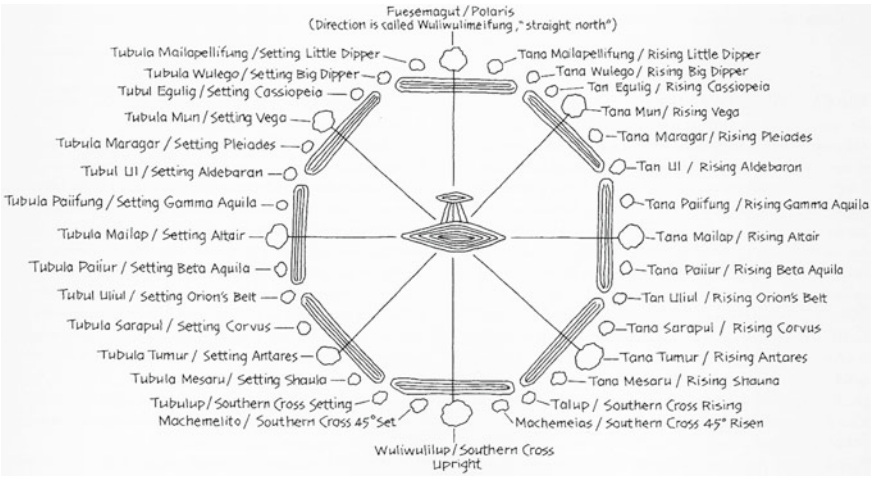

Fig. 8.6 The "Star Compass" of native sailors in Satawal Island of Carolinian (after B. Finney, et al. 2007)

For example, extending the right arm, resting the lower middle finger on the horizon, index finger upward, then the latitude height of the middle point of the middle finger, the upper end of the middle finger, the middle point of the index finger, the upper end of the index finger respectively measured 1°, 2°, 3°, 4°. If using the five fingers of the entire palm to measure stars, rest the lower end of the small finger on the horizon, then the position of the upper thumb measured 10° latitude.

The entire hand with an open palm could also be used to measure the stars at greater latitude. Holding out entire hand, opening palm toward horizon with the downward thumb perpendicular to the index finger and the tip of the thumb was tangent to and rested on the horizon, then the junction of index finger and the end of middle finger roughly indicated between 12° and 23° (Fig. 8.7). Hawaii and Tahiti are located between the Tropics of Cancer and Capricorn on both sides of the equator, with a latitude distance of about 40°, and the height of Polaris and Antarctic Star above horizon had been respectively measured by hands of island navigators as the important astronomical orientation for positioning in seafaring (Finney, B. et al. 2007).

In addition to the above-discussed star observation and measurement orientation systems, they also have "Wind Compass" which relying on the seasonal and regular wind directional variations, "Swell and Current Piloting", "Navigator Birds" and "Islands Charts Orientation", reflecting the long-term practical experience of their navigations in the Pacific Ocean.

The cross-cultural comparison of ancient Chinese navigation, the boatmen ethnography of south coastal China, and the navigation cultures of the indigenous Austronesian, is not difficult to find a high degree of commonness of primitive astronomical navigation in the vast Asia–Pacific maritime regions.

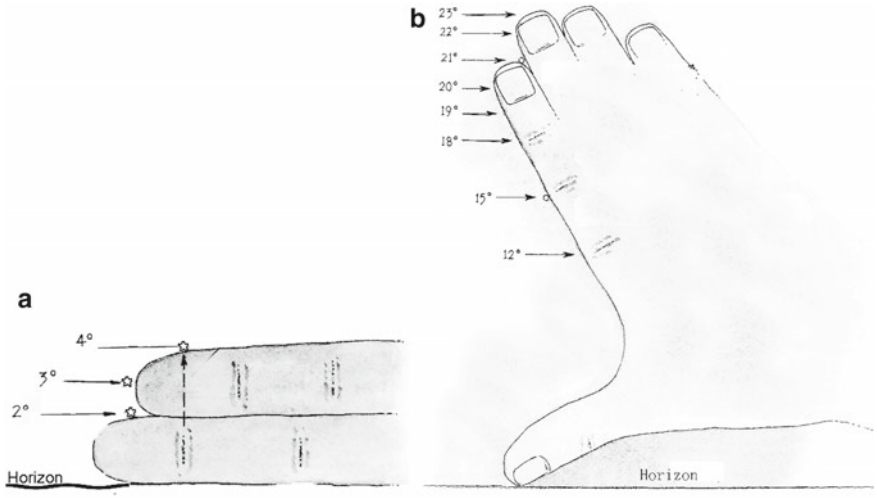

Fig. 8.7 The measurement of the angular height of star above the horizon by bare fingers in Austronesian navigation (after B. Finney, et al. 2007)

The ancient astronomical navigation in the southeast coast of China included two types of star orientation by observation and measurement. The star observation focused on the seasonal variation of the rising/setting of the sun, moon, stars, and constellations as the direction reference for the sailing course steering. The star measurement focused on the height of North Star or Big Dipper above horizon in different sea regions to determine the latitude position of sailing boat. Interestingly, the astronomical techniques of the Pacific Austronesian comprised two almost identical categories, namely, the "Stars Compass" in different sea regions recording the rising/setting positions of the stars and constellations body as the reference for the direction of the sailing course, and Nainoa Thomson's method of "Star Measuring" with hand and fingers to get the height of polar stars above horizon to estimate the latitude position of sailing canoe.

Regarding the operation techniques, the southeastern China and Pacific share a highly consistent operational method of astronomical orientations. The "Star Observation Orientation" recorded in the sea route guides of ancient China such as *The Guide for Right Sea Routes* mark the rising and setting positions of variant stars on the Chinese coordinates "compass" with 24 scales signed Ten Heavenly Stems *gan* (干) and Twelve Terrestrial Branches *zhi* (支), while the "Star Compass" of the Pacific islanders such as Satawal and Woleai in Caroline Islands and Nainoa Thompson's also marked the rising and setting positions of stars on the 32-scale star compass. Moreover, as the reference for steering direction in navigation, both "Star Observation Orientation" in southeastern China and "Star Compass" in the Pacific were the image of horizon with star bearing in navigators' mind rather than the real one as magnetic compass. The positioning orientation of "Star Measurement" with bare palm manifested in the maritime ethnography of southeastern coast of China

was also very similar to Hawaiian navigator Nainoa Thompson's hand and fingers' measuring star height above the horizon.

It is thus clear that there probably had been an ancient astronomical navigation community or cultural interaction between the maritime societies in southeast China and the Pacific indigenous peoples. The "Star Compass" used to distinguish directions of the rising and setting of stars and the "Star Measurement" with bare palm used to get the height of stars and latitude position of a sailing boat are the common maritime cultural heritages of this navigation community. It is not difficult to understand the reasons for the existence of this navigation cultural community if we return to the perspective of the blueprint of ethno- history of the *Bai Yue*-Proto-Austronesian interaction (Wu, C.M. 2003).

Part IV
Discussion

Chapter 9
A Brief Review on the Researches of Cultural Relationship Between Indigenous *Bai Yue* in Southeast of China and Pacific Austronesian

Ancient "*Bai Yue*" (百越) and "*Austronesian*" are indigenous peoples with very close relationship, distributing from south China, Southeast Asia, and the Pacific Islands.

"*Bai Yue*", meaning "Hundreds of *Yue*" in Chinese language, were the ancient "barbarian" *Man* (蛮) or *Yi* (夷) ethnicities living in the south of China and Southeast Asia, being recorded in the Chinese historical literatures in the vision of *Huaxia* and *Han* people in Central Plain. They varied as *Wu* (吴), *Yue* (越), *Yue* (粤), *Ou* (瓯) and *Min* (闽) in Xia, Shang, and Zhou dynasties, *Yu Yue* (于越), *Eastern Ou* (东瓯), *Min Yue* (闽越), *Southern Yue* (南越), *Western Ou* (西瓯), *Luo Yue* (骆越), *Gang Yue* (干越), *Yang Yue* (扬越), *Dian Yue* (滇越) and other ethnic groups in Eastern Zhou and Han dynasties, and their minority descendants of *Zhuang* (壮), *Dong* (侗), *Miao* (苗), *Yao* (瑶) from Tang and Song dynasties to the modern period. They were hetero-cultures successively encountered by *Huaxia* and *Han* nationality along with their expansion and migration from Central Plain to peripheral states and from the North to South.

Austronesian or *Malayo-Polynesian* language family, are the indigenous societies living in the Southeast Asia and Pacific archipelagos, originally cognized in the vision of Euro-American linguistics since the seventeenth century. They were hetero-cultures encountered by Euro-Americans along the process of their "Geographical Discovery" in the Pacific, varying with the ethnic groups of Malays, Micronesian, Melanesian, and Polynesian.

The relationship between *Bai Yue* and Proto-Austronesian has long been studied in both Chinese and Euro-American academies. During most of the twentieth century, Chinese historians and archaeologists mainly discussed the origins of Malay ethnics as one branch of Austronesian within the academic framework of the ethno-history of *Bai Yue* centering on the southeast coast of China, while western academic peers mainly based on the linguistic investigation of modern Austronesian and carried out multi-disciplines' research on the origin of Proto-Austronesian.

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9.1 The Exploration of the Origin of Malays in the Vision of Research to Ancient *Bai Yue*

In twentieth century, Chinese ethno-historians and archaeologists were fully aware of the unification of prehistoric and ancient indigenous cultures in the southeast of China, focusing on the systematic restoration of the origin and development of *Bai Yue* ethnicities, which had been different from the *Huaxia* system in Central Plain from prehistory to the Zhou and Han dynasties (Lin, H.X. 1936; Chen, G.Q. et al. 1999). The early researchers including Lin Huixiang, Ling Chunsheng and Xu Songshi, put forward the viewpoint that the Malays had originated from *Bai Yue* cultures in southeast of China. Their works were actually the earliest efforts of Chinese scholars in study the origin of Austronesian.

Since the 1930s, professor Lin Huixiang of Xiamen University first paid attention to the close relationship between the Neolithic cultures of southern China and those of Southeast Asia and the Pacific Archipelagos, suggesting that the culture of "Maritime Region of Southeastern Asia" represented by prehistoric "Wuping (武平) Type" was different from that of northern China. He said that "being connected with the southern neighboring peninsulas and islands viz. Malaysia or even Polynesian islands, the prehistoric culture of southeast China was different from that of northern China…The stone stepped adzes are characteristic of Neolithic Taiwan, Fujian, Guangdong, Jiangxi, and Zhejiang in the southeast of the mainland." "From the southeast region of China, the stepped adze migrated…to the southeast, the islands of South China Sea and Polynesia" (Lin, H.X. 1937, 1956, 1958b). He also extended his vision to the origin of the Malays, pointing out that *Bai Yue* people in the south of China were in fact the ancient Malayan who resided on the southeast of mainland China, that is, the so-called "Proto-Malaysian", and comprehensively expounded this viewpoint by the evidences of physique features, cultural customs, archaeological remains, and so on. In terms of prehistoric cultural relics, stone stepped adzes, stone shouldered axe, stone arrowheads, stamped pattern pottery, and other prehistoric cultural characteristics in south China were also commonly seen in the Southeast Asia and Pacific islands. He considered that the Malays of the Southeast Asia were the half-blooded product of Oceanic branch of Mongolian, primitive Indonesians of the Caucasian and the much older pygmy Negrito mixed in the region from Indochina to south China, and gradually migrated southward to the islands of Southeast Asia in the Neolithic period. He drew two southward migrating routes of these Proto-Malaysian, namely, the western route from Indochina peninsula to Sumatra, Java islands, and the eastern route from the coast of Fujian and Guangdong to Taiwan, the Philippines, Sulawesi, Sulu, and Borneo (Lin, H.X. 1938, 1947, 1958a).

In the same time, professor Ling Chunsheng put forward the hypothesis of "Asian Mediterranean" cultural circle around the South China Sea and described the indigenous community among the southern China, Southeast Asia, and the Pacific Islands. He insisted that the distribution of Indonesian cultural circle suggested by the western anthropologists should be extended to the mainland of

southern China. He made a macroscopic comparison on the ancient cultural stratifications respectively in the southern China, Indochina Peninsula, and Southeast Asian Archipelago. His theory revealed the co-exiting indigenous cultural foundation among the mainland, peninsula, and archipelago around the South China Sea prior to the immigration of Indian, Sino-Tibetan, Arabian and European peoples. He also divided the ancient cultures of East Asia regionally into Mainland Culture of *Huaxia* and *Han* nationality in the central plains and northwestern inland, and Maritime Culture of *Island Yi* and *Bai Yue* ethnicities in the southeastern region. He considered the indigenous maritime ethnics in the islands of Southeast Asia, namely the Austronesian, as the result of the long voyages of *Island Yi* and *Bai Yue* migration from the mainland of southeast coast of China to islands since prehistory (Ling, C.S. 1950, 1954a, b, 1961).

Professor Xu Songshi also focused on the ancient ethnic interaction between south China and Southeast Asia, emphasizing the cultural origin of Malays from the ancient indigene of southern China. He argued that "the ancestors of Malays were the *Great Yue* (大越) who originally lived in Zhejiang, Jiangsu, and Fujian. The minorities of *Miao*, *Yao* and *Dan* today are most closely related to the ancestors of Malays." He also expounded the relationship between the *Wu*, *Yue*, *Min Yue*, *Miao*, *Yao* people in mainland of southern China and Malays of Southeast Asia according to their shared common cultures of language, custom, physique, material implement and so on. Specifically, he took the original land of *Wu*, Y*ue* and *Min Yue* as the largest birthplaces of ancient Malay ethnic groups (Xu, S.S. 1939, 1946, 1959).

Since the 1950s, the study of Chinese scholars on the indigenous cultural relationship between southern China and Southeast Asia and Pacific basically followed the historical vision of *Bai Yue* cultural history taken by these predecessors. *The History of Bai Yue Ethnicities* of Xiamen University as the representative works, was in fact the inheritance and extension of professor Lin Huixiang's researches. They hold that "as early as the late Neolithic period, there were close cultural interactions between ancestor of ancient *Bai Yue* people and the prehistoric cultures of Southeast Asia. Later, the *Bai Yue* people, especially those in the southeastern coast of China, moved southward several times from the mainland to the Philippines through Taiwan, and those in the southwestern and southern regions migrated southward to Indochina and other places. The migrated *Bai Yue* people assimilated with the local indigenous peoples and developed into what are now the ethnicities of Southeast Asia." They also listed the archaeological and ethnographic evidences to support their argument of the immigration and assimilation of *Bai Yue* (Chen, G.Q. et al. 1999).

In general, in the past twentieth century, in studying the indigenous cultures in the maritime region of Asia-Pacific, Chinese scholars mainly focused on the Malays as a branch of Austronesian, rather than concerning the diverse and other widely distributing Austronesian cultures in Oceania. In exploring the origins of Malays of Southeast Asia, almost all of them started from the vision of *Bai Yue* history, regarding the Malays people as the result of migration of ancient *Bai Yue* across the South China Sea.

9.2 The Multidiscipline Researches on the Origin of Proto-Austronesian in the Vision of Modern Linguistics

Since the very beginning of the research, "Austronesian" was a linguistic identification and originally recognized as a linguistic community. The linguistic approach had been the breakthrough point and the basis for the multidiscipline explorations on the origin of Austronesian since the nineteenth century.

The indigenous peoples on the islands of Southeast Asia and Oceania were respectively considered as independent "*Indonesian*" and "*Oceanian*" in early Euro-American academy. On the one hand, Spanish, French, British had long discovered the unification and intrinsic connection of more than 1200 different native languages on the islands in the Great South Sea of Oceania. Except the Papuans on the island of New Guinea and the indigenous people of the Australian continent, the native languages of three archipelagos of Polynesia, Melanesia and Micronesia are highly unified and have correlation with distinctive physique, religions, cultures and folklores. This unified indigenous segment of cultural history is termed "*Oceanian*" or "*Austronesian*" (Kirch, P.V. 2002: 4–10, 305–307). On the other hand, European referred to the Southeast Asian archipelagos as "India" and termed the indigenous peoples there as "Oost indie", "Indonesian" or "Malaysian" in the Dutch and English literatures. German anthropologist A. Bastian and American anthropologist A. L. Kroeber respectively outlined the identity of the indigenous community centered on the Southeast Asian islands, the Indonesian or "Southeast Asiatic" culture in which mainland and islands shared alike (Kroeber, A. L. 1974: 225–228).

In the early exploration of the origin of Austronesian of Oceania since the nineteenth century, anthropologists have come up with various theories of locally Oceanian, Southeast Asian, or even American origin (Howard, A. 1967). The theory of local origin of Oceania was based mainly on the false geological tectonic assumption that Oceanian archipelagos had been the remains of the lost continent and the center of Austronesian. They asserted the Malays in Southeast Asia were offspring of the Austronesian blown westward from Polynesia by prevailing winds (Moereenhout. J.A.1837, 1942). The advocators of the theory of American origin based on the similarities in languages, physiques, customs and mores, evil spirits, human sacrifices, cannibalism, decorative arts, writing symbols, megalithic architectures, agricultures, caste, and property systems between the Polynesian and the South American Indians, as well as factors such as monsoons and ocean currents, arguing that the indigenous Oceanian originated from the American Indians who spread westward (Garnier, J. 1870; Howard. A. 1967; Heyerdahl, T. 1952: 177–178).

As the basic and key methodology in exploring the origin and diffusion of Austronesian, linguistics involves different ways of comparative linguistics, linguistic paleontology, and historical linguistics summarized by M. Swadesh (1964). The comparative linguistics was pioneered by E. Sapir in the study of American Indians (1916), which identifying the region with the highest degree of linguistic

variability and complexity as the common origin of the subsequent separating ethnic groups according to the lexicostatistical classification of the languages. Regarding the Austronesian, I. Dyen used Swadesh's "Basic Vocabulary" for the comparative study of language divergence of modern Austronesian, and found that the language variation and complexity of the three regions are the highest, namely Taiwan, Sumatra, and the Bismarck Islands in the eastern part of New Guinea, thus identifying them as the origins of Austronesian (Dyen, I. 1962). By the same way, through the comparative study of the lexical classification, grammars of different dialects, and sub-regional languages, American linguist Horatio Haley deduced the chronological genealogies of Austronesian languages, combining monsoon and cultural data, expounded the path of the migration and spreading of the Proto-Austronesian from the East Indies of Southeast Asia to the Pacific islands (Howard, A. 1967). In another linguistics study, R. Blust assumed the "Taiwan Homeland of Austronesian", establishing the "Family Tree for Austronesian" basing on the cognate of different linguistic branches, and concluding that the Proto-Austronesian was initially split in Taiwan, and then gradually spread to the Philippines, Kepulauan Maluku, and Lesser Sunda Islands, New Guinea and three archipelagos in Pacific (Blust, R. 1985, 1995).

The method of linguistic paleontology and historical linguistics are based on the lexical analysis of modern ethnic groups to "discover" its ecological and cultural content of historical period. The historical features of flora and fauna concealed in the modern vocabulary reflect the environment of possible original land of the ethnics before migration. Dutch scholar H. A. Kern discovered the flora and fauna features of tropical coast and assumed that the most likely region of the Proto-Austronesian is on the coast of the Indochina peninsula (Kern, H.A. 1889). R. Blust reconstructed that the region of the proto-Austronesian was in the west of the Huxley's line, namely between Taiwan or Sunda Islands (Blust, R. 1976, 1982).

The physical anthropology and anthropometrics were another important discipline in classification and identification of the indigenous people in Southeast Asia and Oceania and searching for evidences of their origin and migration. As early as 1914, Georg Friederici identified three basic racial elements concerned the indigenous peoples in Southeast Asia and Pacific, namely *Negrito* in the Malay Peninsula, Melanesia Islands, and Australian, *Papuans* mainly living in New Guinea, and *Malayo-Polynesian* or *Austronesian* previously migrating from the Indochina peninsula to the archipelagos. This early classification preliminary revealed the diverse peopling of indigenes before Hinduization and Sino-Tibetan migration (Friederici, G. 1914; Howard, A. 1967). More scholars have noted the complexity of the ethnicities of the region on perspective of diachronic series showing the history of migration and change of ancient people. For example, Roland Dixon reconstructed the five stages of migration of indigenous peoples, namely the oldest *Negrito* of Southeast Asia, indigenous *Australians* who moved southward from Southeast Asia, and the *Negroids* who migrated from Southeast Asia to the Oceanic islands, *Indonesians* who migrated from the Indochina peninsula or the coast of southern China to Southeast Asia and the Pacific with possibly interracial Caucasians, as well as *Mongolians* who spread from continent Asia to oceans

(Dixon, R. 1920, 1929). Further human biological investigation revealed regional hereditary genetic connection and diachronic continuity of the indigenous ethnics around South China Sea since the late Pleistocene to the early and mid-Holocene, forming the viewpoint of "Regional Continuity Model" or "Local Evolution Hypothesis". Specifically, the human being of "Ancient South China Type" in Neolithic and Bronze ages had been close to Indonesians and Melanesians, who could even be traced back to the late Paleolithic Liujiang Man (柳江人) (Wu, X.Z. 1987; Zhu, H. 2002). Dental morphological researches also have confirmed the ethnic continuing of indigenous people in south China and Southeast Asia since the late Pleistocene, reflected in the formation of the Sundadonty type (Turner II. C.G. 1990). The molecular biology supported the general consensus of cross-border unity and at least the early Neolithic origin of the ancient *Bai Yue* and Proto-Austronesian in southern China and Southeast Asia (Merriweather, D.A. et al. 1999; Huang, Y. et al. 2003; Chiu, H.L. 2015; Yang, M.A. et al. 2020).

The cognition of the origin of indigenous peoples in Southeast Asia and Oceania was deepened by the investigations of ethnology and archaeology (Dixon, R. 1920, 1929, 1932, 1934; Heine-Geldern, R. 1932; Skinner, H.D. 1934, 1957; Beyer, H.O. 1948; Suggs, R. 1960a, b). Of these works, Heine-Geldern summarized eight successive cultural stages mainly through the typological research on the stone adzes, showing the Neolithic cultures' diffusion and mixture in south of China, Southeast Asia, and Pacific, setting the foundation for understanding the integrated and changing history of indigenous cultures in this maritime region (Heine-Geldern, R. 1932). The discovery and study of Lapita Culture was the representative exploration to the Neolithic development of Austronesian, which was represented by a series of distinctive material cultures, such as the settlement pattern of the beach terraces or shallow lagoons with stilt house, utilizing of tree crops, animal domesticating and sophisticated fishing, earthenware vessels with red slipped plain or dentate stamped pattern wares varying of round, flat bottom, ring foot pots, jars, plates, basins, and bowls. The culture dated about 3500–2500 years ago and distributed west from Mussau Island of Papua New Guinea and east to Samoa, showing the gradual spread of Austronesian ancestors from west to east in the Pacific (Kirch, P.V. 1997, 2002). The investigation on the origin of Lapita Culture provides an important entry point for searching the earliest homeland of Proto-Austronesian.

Of investigation to the origin of the Austronesian and Lapita Culture, the hypothesis of "Out of Taiwan" and "Neolithic Rice Farming" were the most influential reconstructions. Both of them were not the achievement of purely archaeological discovery, but the archaeological deduction and annotation to the premise of linguistic model. The hypothesis "Out of Taiwan" was in fact based on the "generally accepted conclusions" of "Taiwan Homeland of Austronesian" of comparative linguistic discovery, and then prejudicially identified the oldest Neolithic Tapengkeng (大坌坑) Culture in Taiwan as the heritage of oldest Proto-Austronesian. Archaeologists linked the cultural remains of corded pattern pottery in Tapengkeng Culture and the adjacent Fuguodun (富国墩) Type on the coast of Fujian with the ancestors of Austronesian (Chang, K.C. et al. 1964; Chang,

K.C. 1987). Professor Peter Bellwood and other scholars also emphasized Taiwan as the main focus of the source of Lapita Culture, constructing the model of "Out of Taiwan" as history of expansion of Proto-Austronesian, which starting 5000 years ago from the southeastern coast of China centered on Fujian and Taiwan, expanding to Southeast Asian Islands in 5000–3000 BP, and then spread to Pacific Islands in 3000–1000 BP (Bellwood, P. 1997; Kirch, P.V. 1997). So the reason for Fujian and Taiwan having long been focused in the search for the homeland of Proto-Austronesian was in fact the linguistic "discovery" of "Taiwan Homeland of Austronesian", rather than the archaeological discovery of the oldest Austronesian. However, the latest linguistic investigation and research in south of China proved that the hypothesis of "Taiwan Homeland of Austronesian" was uncertain and not all inclusive (Deng, X.H. 1992, 1994; Deng, X.H. et al. 2011). So we queried that the oldest Neolithic Tapengkeng Culture in Taiwan might be the origin of local Austronesian, it couldn't be inter-attestation and the archaeological evidence of linguistic "Taiwan Homeland of Austronesian" hypothesis.

Another fashionable work on the origin and dispersal of Austronesian was the hypothesis of "Neolithic Rice Farming", which was based on another premise of the linguistic "Language-Farming Model" advocating that the Proto-Austronesian had been a group of "farming" and "Neolithic" people. A lot of archaeologists considered that the "Neolithic" "farming" and migrating Austronesian were different from the indigenous gathering-hunting and non-Neolithic groups in Asia–Pacific region, putting forward the "Two-Layer Model" to explain the prehistoric cultural and ethnic changes. They argued that Austronesian had brought a full agricultural economy and introduced pottery, stone adzes into the Indo-Malaysian archipelago while indigenous people continued the hunting and gathering there (Gorman, C.F. 1971; Bellwood, P. 1997: 201–202). In fact, over the past ten thousand years, indigenous cultures, including the Proto-Austronesian, was generally suited in the cultural margin of Neolithic cereal farming zone of East Asia centered in the middle and lower reaches of Yellow and Yangtze rivers, and their food economy remained in the foraging pattern of hunting-gathering for a long period of time. The rice cultivation agriculture was not the inherent subsistent pattern of early Proto-Austronesian and was just gradually accepted by them in the late stage of prehistory, much later than their foraging and maritime history. No remains of cultivated rice have been found in the prehistoric Pacific Islands including Lapita Culture, showing that it was not the essential cultural connotation of the Proto-Austronesian before they spread to the Pacific. So the "Neolithic Rice Farming" was not identified with Proto-Austronesian, and the southward track of the dissemination of rice farming was by no means circumstantial evidence of the migration route of Austronesian.

In short, since the "Austronesian" was originally identified as a linguistic community, the linguistics had been methodologically the theoretical accordance for the multidiscipline researches of Euro-American anthropologists in last century. They generally explored the origin of Proto-Austronesian under the premise of the linguistic investigation in the Southeast Asia and the Pacific Archipelagos, reconstructing the theories of "Out of Taiwan" and "Two-Layer Model" of Austronesian

history. However, the "Taiwan Homeland of Austronesian" as the most important "discovery" of comparative linguistics was uncertain for the reason of excluding the potential Proto-Austronesian language heritages in the south of mainland China, in which the abundant language elements of Proto-Austronesian have been investigated in the lower layer of *Zhuang-Dong* (壮侗, *Kam-Tai*) language family or even *Han* dialects of southeast China. They are indispensable for systematic lexicostatistics in reconstructing of "family tree" of Austronesian languages. This systematic deficiency of modern comparative linguistic investigation of Austronesian made their "generally accepted conclusions" of "Taiwan Homeland of Austronesian" and the related archaeological reconstruction of "Out of Taiwan" unconvincing. The hypothesis of "Two-Layer Model" and the "Neolithic Rice Farming" of Austronesian are open to dispute too, which is not consistent with the continuous and inherited indigenous history of hunting and gathering in the most time of Neolithic age in south coast of China and Southeast Asia until the acceptance of rice cultivation in the late Neolithic age.

9.3 The Archaeological Perspective on the Prehistoric Cultural Interaction Between Ancient *Bai Yue* and Proto-Austronesian

For more than one century, Chinese and Euro-American scholars have respectively concentrated on the cultural origins of the indigenous peoples of Southeast Asia and Pacific Archipelagos. Western anthropologists mainly based on the linguistic standpoint of the modern Austronesian, exploring the original homeland of Proto-Austronesian, while the Chinese scholars have constructed the history of oceanic dispersal of Proto-Malaysian based on the history of ancient *Bai Yue* indigenes of southern China. The different perspectives and academic estrangement of *Bai Yue* history in the East and *Austronesian* anthropology in the West caused the awkward situation of different focuses, restricting the mutual understanding on the origin of the indigenous ethnics in Southeast Asia and the Pacific.

In fact, the preliminary investigations of multidiscipline show that there were a series of basic cultural commonness between ancient *Bai Yue* and Proto-Austronesian (Malaysian), indicating that there existed a certain degree of prehistoric and indigenous cultural community in the vast Asia–Pacific maritime region around the South China Sea. The investigation of this macroscopic history of "*Bai Yue-Proto-Austronesian*" through the further comparative studies of archaeology, physical anthropology, ethnology, and ethno-linguistics in the cross-border region of Asia–Pacific is still with considerable academic potentiality (Wu, C.M. 2003).

The essential unity of indigenous cultures from prehistoric ancestors of *Bai Yue* to the Proto-Austronesian in the Asia–Pacific region had been deeply based on the commonness and inheritance of the Paleolithic pebble stone tool tradition over hundreds of thousands of years. The pebble stone tool culture since the middle

Pleistocene represented the mainstream of Paleolithic culture broadly in southern China and Southeast Asia, which was basically different from the flake stone implements in north China and northeast Asia, presenting the earliest evidence with far distant origin and continuous development of indigenous culture in the Maritime Region of Southeastern Asia (Wu, X.Z. 1987; Wu, R.K. et al. 1989; Wu, C.M. 1999c:41-60; Wang, Y.P. 1997: 142–158).

At about ten thousand years ago when the global Mesolithic upheaval and Neolithization happened, the unity of prehistoric cultures between south China and Southeast Asia continued and became more prominent. The subject cultural connotation of Hoabinian period inherited the tradition of pebble stone tools of Paleolithic age and developed a lot of new elements of local Neolithization. Specifically, the Mesolithic and early Neolithic cultures generally presented the foraging pattern of hunting, gathering, and fishing, continued chopped pebble tool, innovated Sumatralith style discoid pebble tool, and improved pebble tools with chiseled perforation, concaved surface, ground edge, as well as quasi "Neolithic" of embryonic axes and adzes, coexisting a group of Microlithic remains. These common features during Hoabinian period across the borders of southern coast of China and Southeast Asia, inherited hundreds of thousands of years' local Paleolithic tradition and gave birth to the native Neolithic cultures, demonstrating the regional continuity of the prehistoric indigenous cultures.

Eight or nine thousand to two or three thousand years ago, the prehistoric cultures in maritime region of Southeastern Asia respectively evolved into the Neolithic, Bronze, and Early Iron Ages. In the mainland of the southeast of China, the indigenous cultures developed and varied as a series of regional and temporal types of material remains characterized by stone stepped adzes, shouldered stone axes and adzes, and stamped pattern pottery wares mostly with round bottom and ring foot, which were basically different from the *Huaxia* cultural system characterized by tripod and pouch-shaped leg pottery vessels centered in the lower reaches of the Yellow River. These indigenous cultural heritages reflect the distribution and variants of ancient *Bai Yue* ethnicities, the North-South cultural interaction and *Huaxia-Bai Yue* assimilation in prehistory and early history of China. For the reason of environmental restraint of Wuyi-Nanling mountainous watershed, and the differential locations in the geopolitical order of "Central Nation-Peripheral Barbarian States" of ancient Chinese civilization, these indigenous cultures varied in three sub-regions and multi-districts, showing differentiated enhancing of indigenous characteristics from north to south, from inland to ocean. In the plain region lying to the south of the lower reaches of Yangtze River, to the west and north of Wuyi-Nanling watershed, "Relying on Huaxia Nationality" and territorially connecting to the Central Plains, the indigenous cultures were more deeply assimilated by the *Huaxia* culture, coexisting a lot of tripod and pouch-shaped leg pottery vessels of northern system. In the hilly and mountainous coast of southeast China, lying to the east and south of Wuyi-Nanling, locating far away from the Central Plains, "Facing Maritime Barbarians of Austronesian". the indigenous cultures developed in the semi-enclosed geographical environment. In the oceanic region of Taiwan, Hainan and other continental islands, locating far beyond the

range of *Huaxia* influence during prehistoric age, indigenous cultures were more strongly and persistently characterized by pottery wares of round bottom and ring foot of southern system, almost no tripod and pouch-shaped leg pottery vessels discovered in prehistory (Wu, C.M. 1999c: 63–81). Even the modern heritage of the primitive pottery making of Taiwan Aboriginals continued in line with the Neolithic cultural tradition represented by stamped geometric pattern pottery wares (Wu, C.M. 1994b). The indigenous culture of the stamped pottery of mainland of southeastern China extended in fact to the prehistoric cultures of Southeast Asia, such as Kalanay, Tabon, and Novaliches sites in the Philippines, in which the majority potteries were the round bottom and some ring foot wares with geometric patterns (Jocano, F.L. 1975: 23–33; Wu, C.M. 2008b). The carved and stamped geometric patterns of pottery pots and bowls were also the characteristic vessels in the Neolithic culture of the Indonesian archipelagos. In Neolithic Lapita Culture of Oceania, a group of potteries of round and flat bottom or ring foot, with polished in red slip, stamped and carved geometric patterns (Kirch, P.V. 1982, 1997, 2002: 101–106), also shared similar indigenous features with those in the southeast coast of mainland China. This indigenous cultural commonness among the mainland and islands in south China, Southeast Asia, and Oceania since the Neolithic Age, reflect the assimilation of prehistoric and early historic cultures of ancient *Bai Yue-Proto-Austronesian* as a continuous cultural system.

It should be noted that the exterior elements from the North such as the tripod and pouch-shaped leg pottery vessels of *Huaxia* system respectively discovered in Shixia (石峡) and Tanshishan (昙石山) cultures on the southeast coast of China had been regarded as the southward dispersal "Sino-Tibetan Language Family" of Lungshanoid (Longshan) period (Chang, K.C. 1987a, 1989). This hypothesis made the date of sinicization of the Indigenous of *Bai Yue* and Proto-Austronesian back to the late Neolithic age of China, which was an illusion of archaeological discovery and typological research and not in line with the continuing development of indigenous cultures along the Neolithic, Bronze, and early Iron ages in the southeast coast of China. The indigenous vessels in Shixia Culture represented by the potteries of round bottom *Fu* (釜) cauldrons, pots and ring foot jars, pots, and plates were the constant core content and were inherited in the Middle Layer Type of Shixia in the Xia and Shang dynasties. The exterior Longshan elements indirectly from north of China in Shixia Culture were just the short-lived "interruption" and did not continue by the way of linking in the cultural series. It was similar in the coast of Fujian centered at the lower reaches of the Minjiang River. In the Neolithic cultural sequence of the Kechutou (壳丘头), Tanshishan (lower, middle and upper layers), and Huangtulun (黄土仑) cultures dating 6000–3000 years ago, the main potteries of round bottom and ring foot formed a continuing indigenous compound. A very small amount of Longshan elements in Tanshishan Culture neither represented the migration of "Sino-Tibetan Language Family", nor passed on to the following Upper Layer Type of Tanshishan and Huangtulun Culture. The earliest archaeological evidence of the direct migration of "Sino-Tibetan Language Family" in this region was the burial remains of *Chu-Han* people at Zhuangbianshan (庄边山) site in Minhou (闽侯) about 2000 years ago. Since the Six Dynasties, the

systematically cultural supersession of "Sino-Tibetan Language Family" finally began (Wu, C.M. 1995).

Because of the successively multicultural assimilations of the migrated *Han* nationality, Arabian, Indian, and modern European which resulted in the deep cultural changes in the "Maritime Region of Southeastern Asia", the indigenous cultural connotation of *Bai Yue-Proto-Austronesian* continued and were integrated into their minority descendants of *Zhuang-Dong* (*Kam-tai*) language family and the indigenized group of *Han* nationality in southern China and were accumulated in modern cultures of southern China and Southeast Asia. As far as linguistics is concerned, scholars made in-depth investigations on the southern *Zhuang-Dong* (*Kam-tai*) language family, comparing them with the language of modern Austronesian, discovering that the language of *Li*, *Shui*, *Dong*, *Zhuang* and other minorities' descendants of *Bai Yue* share much lexicostatistical commonness with that of the Taiwan aboriginals and indigenous population in the Philippines and Malaysia. The same connotation even exists in southern Chinese *Han* dialects of *Min* (Fujian), *Yue* (粵 Guangdong) and *Hakka* (客家). These lexicostatistics investigations on the genetic affinity between Southern Chinese and Austronesian present the new and indispensable linguistic perspective on searching for the origin of Austronesian (Deng, X.H. 1992, 1994; Deng, X.H. et al. 2011).

Ethnographically, there are also a great amount of indigenous cultural heritages of ancient *Miao*, *Man* and *Bai Yue*, which were accumulated in modern societies of southeast coast of China and Southeast Asia. The most distinctive feature of indigenous inheritance was the prosperous maritime culture and rising of Maritime Silk Road along the southeast coast of China during the Tang, Song, Yuan, and Ming dynasties, which had been identified as the continuation of the prehistoric and early seafaring practices of *Bai Yue* people who were "good at using boats" (Huang, S.P. 1999; Gong, B.H. 1999; Wu, C.M. 2004, 2007, 2011b, 2017). The maritime culture has been the result of cross-cultural assimilation of both sinicization of native *Bai Yue* and indigenization of immigrated *Han* nationality, recalling the important cultural memories of indigenous community of *Bai Yue* and Proto-Austronesian in Asia-Pacific region.

Abbreviation of Institute's Authors

AD-SYSU Anthropology Department of Sun Yat-sen University, 中山大学人类学系

AEB Archaeology Editing Board, 考古编辑部

AG-CUHK The Art Gallery of the Chinese University of Hong Kong, 香港中文大学文物馆

AHPCRWT Anhui Provincial Cultural Relic Working Team 安徽省文物工作队

ASBYE Association for Study of Bai-Yue Ethnicities, 百越民族史研究会

ASHD-XMU The Archaeology Speciality of History Department, Xiamen University, 厦门大学历史系考古专业

BJNM Beijing Nature Museum, 北京自然博物馆

BTDHVT Bao Tang Dan Toc Hoc Vietnam, 越南国立民族学博物馆

CCAA-CUHK Centre for Chinese Archaeology and Art, ICS, The Chinese University Of Hong Kong, 香港中文大学中国考古艺术研究中心

CGHSBSHJTU Compilation Group of "History of Shipbuilding" of Shanghai Jiaotong University, 上海交通大学 "造船史话"编写组

CMA-XMU The Center for Maritime Archaeology, Xiamen University, 厦门大学海洋考古学研究中心

CREC Cultural Relics Editorial Committee, 文物编辑委员会

CRP Cultural Relic Press, 文物出版社

DAHU Department of Anthropology, Harvard University, 哈佛大学人类学系

EFINJM Ethnicity and Folklore Institute of Nanjing Museum, 南京博物院民族民俗研究所

C. Wu, *The Prehistoric Maritime Frontier of Southeast China*,
The Archaeology of Asia-Pacific Navigation 4,
https://doi.org/10.1007/978-981-16-4079-7

FJPASYHC Fujian Provincial Association for Study Yan-Huang Culture, 福建省炎黄文化研究会

FJPCAB Fujian Provincial Cultural Administration Bureau, 福建省文化厅

FJPM Fujian Provincial Museum, 福建省博物馆, 福建博物院

FKCM Fengkai County Museum, 封开县博物馆

FSCAT-IA-CASS The First South China Archaeologiucal Team, the Institute of Archaeology, Chinese Academy of Social Science, 中国社科院考古研究所华南一队

FZMCRAT Fuzhou Municipal Cultural Relic and Archaeological Team, 福州市文物考古队

GASAB Gui'an Social Affair Bureau, 贵安新区社会事务管理局

GDPICRA Guangdong Provincial Institute of Cultural Relic and Archaeology, 广东省文物考古研究所

GDPCRAC Guangdong Provincial Cultural Relic Administrative Committee, 广东省文物管理委员会

GDPM Guangdong Provincial Museum, 广东省博物馆

GDPSCRM Guangdong Provincial Society of Cultural Relic and Museology, 广东省文物博物馆学会

GLMCRAT Guilin Municipal Cultural Relic and Archaeological Team, 桂林市文物工作队

GXZMCRAB Guangxi Zhuang Municipal Cultural Relic Administrative Bureau, 广西壮族自治区文物局

GXZMCRAT Guangxi Zhuang Municipal Cultural Relic and Archaeological Team, 广西壮族自治区文物工作队

GXZMM Guangxi Zhuang Municipal Museum, 广西壮族自治区博物馆

GXICRCA Guangxi Institute of Cultural Relic Conservation and Archaeology, 广西文物保护与考古研究所

GLZM The Guilin Zengpiyan Museum, 桂林甑皮岩博物馆

GZMCB Guangzhou Municipal Cultural Bureau 广州市文化局

GZMCRAC Guangzhou Municipal Cultural Relic Administrative Committee, 广州市文物管理委员会

GZMICRA Guangzhou Municipal Institute of Cultural Relic and Archaeology, 广州市文物考古研究所

GZMM Guangzhou Municipal Museum, 广州市博物馆

GZPICRA Guizhou Provincial Institute of Cultural Relic and Archaeology, 贵州省文物考古研究所

HDAHU History Department of Anhui University, 安徽大学历史系

HDECGX History Department of Ethnic College Guangxi, 广西民族学院历史系

HJRBAP-SYSU Hanjiang River Basin Archaeology Program of Sun Yat-sen University, 中山大学韩江流域考古课题组

HPCCRAB Hepu County Cultural Relic Administration Bureau, 合浦县文物管理局

HPCM Hepu County Museum, 合浦县博物馆

HUPICRA Hunan Provincial Institute of Cultural Relic and Archaeology, 湖南省文物考古研究所

HNPM Hainan Provincial Museum, 海南省博物馆

HZCCC Huazhou County Culture Center, 化州县文化馆

IA-CASS The Institute of Archaeology, Chinese Academy of Social Science, 中国社科院考古研究所

IHB-XMU Institute of Historical Books of Xiamen University, 厦门大学古籍研究所

IHNS-CAS Institute of the History of Natural Science, Chinese Academy of Sciences, 中国科学院自然科学史研究所

IHP-AS Institute of History and Philology, Academia Sinica, 中研院历史语言研究所

JXPCRAC Jiangxi Provincial Cultural Relic Administrative Committee, 江西省文物管理委员会

JXPICRA Jiangxi Provincial Institute of Cultural Relic and Archaeology, 江西省文物考古研究所

JXPM Jianxi Provincial Museum, 江西省博物馆

JXPSA Jiangxi Provincial Society of Archaeology, 江西省考古学会

LYMBCP Longyan Municipal Bureau of Culture and Publishing, 龙岩市文化与出版局

LYTA-IA-CASS Luoyang Team of Archaeology, Chinese Academy of Social Science, 中国科学院考古研究所洛阳发掘队

LZMM The Liuzhou Municipal Museum, 柳州市博物馆

MSAT Archaeological Team of Mingshanhou Site, 名山后遗址考古队

NACDHM Nan'ao Coast Defense History Museum, 南澳县海防史博物馆

NNMCRAC Nanning Municipal Cultural Relic Administrative Committee, 南宁市文物管理委员会

PBCICRC Pingba County Institute of Cultural Relic Conservation, 平坝县文物管理所

PDCM Pingdu County Museum, 平度县博物馆

PNCM Puning County Museum, 普宁县博物馆

QJCM Qujiang County Museum, 曲江县博物馆

QZMMFJ Quanzhou Maritime Museum of Fujian, 福建泉州海外交通史博物馆

QZSAB Quanzhou Seaport Administrative Bureau, 泉州港务局

QZSA Quanzhou Seaoort Association, 泉州港口协会

RAACBD Research Association of Ancient Chinese Bronze Drum, 中国古代铜鼓研究会

SAM-PKU School of Archaeology and Museology of Peking University, 北京大学考古文博学院

SCA Society of Chinese Archaeology, 中国考古学会

SCUM Sichuan University Museum, 四川大学博物馆

SDPM Shandong Provincial Museum, 山东省博物馆

SDCM Shunde County Museum, 顺德县博物馆

SDPQLASEO Shandong Provincial Qilu Archaeology Series Editorial Office, 山东省《齐鲁考古丛刊》编辑部

SHM Shanghai Museum, 上海博物馆

SHMCRAC Shanghai Municipal Cultural Relic Administrative Committee, 上海市文物保管委员会

SMBLZ The Science Museum of Bailian Cave in Liuzhou, 柳州白莲洞科学博物馆

STDCRCS Shantou District Cultural Relic Conservation Station 汕头地区文管站

SXCCRAC Shaoxing County Cultural Relic Administrative Committee, 绍兴县文物管理委员会

SXCICRC Shaoxing County Institute of Cultural Relic Conservation, 绍兴县文物保护管理所

SZMM Shenzhen Municipal Museum, 深圳市博物馆

TAIOCTW Temporary Association for Investigating Old Customs in Taiwan, 临时台湾旧惯调查会

TSHS Tieshan High School铁山中学

WMCICRC Wuming County Institute of Cultural Relic Conservation, 武鸣县文物管理所

WXCCRAC Wuxian County Cultural Relic Administrative Committee, 吴县文物管理委员会

XSMM Xiaoshan Municipal Museum, 萧山市博物馆

YDMM Yingde Municipal Museum, 英德市博物馆

YNPEAC Yunnan Provincial Ethnic Affair Committee, 云南省民族事务委员会

ZHCCC Zhenghe County Cultural Center, 政和县文化馆

ZHMM Zhuhai Municipal Museum, 珠海市博物馆

ZJDM Zhanjiang District Museum, 湛江地区博物馆

ZJMM Zhenjiang Municipal Museum, 镇江市博物馆

ZJPICRA The Zhejiang Provincial Institute of Cultural Relics and Archaeology, 浙江省文物考古研究所

ZJPM The Zhejiang Provincial Museum, 浙江省博物馆

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