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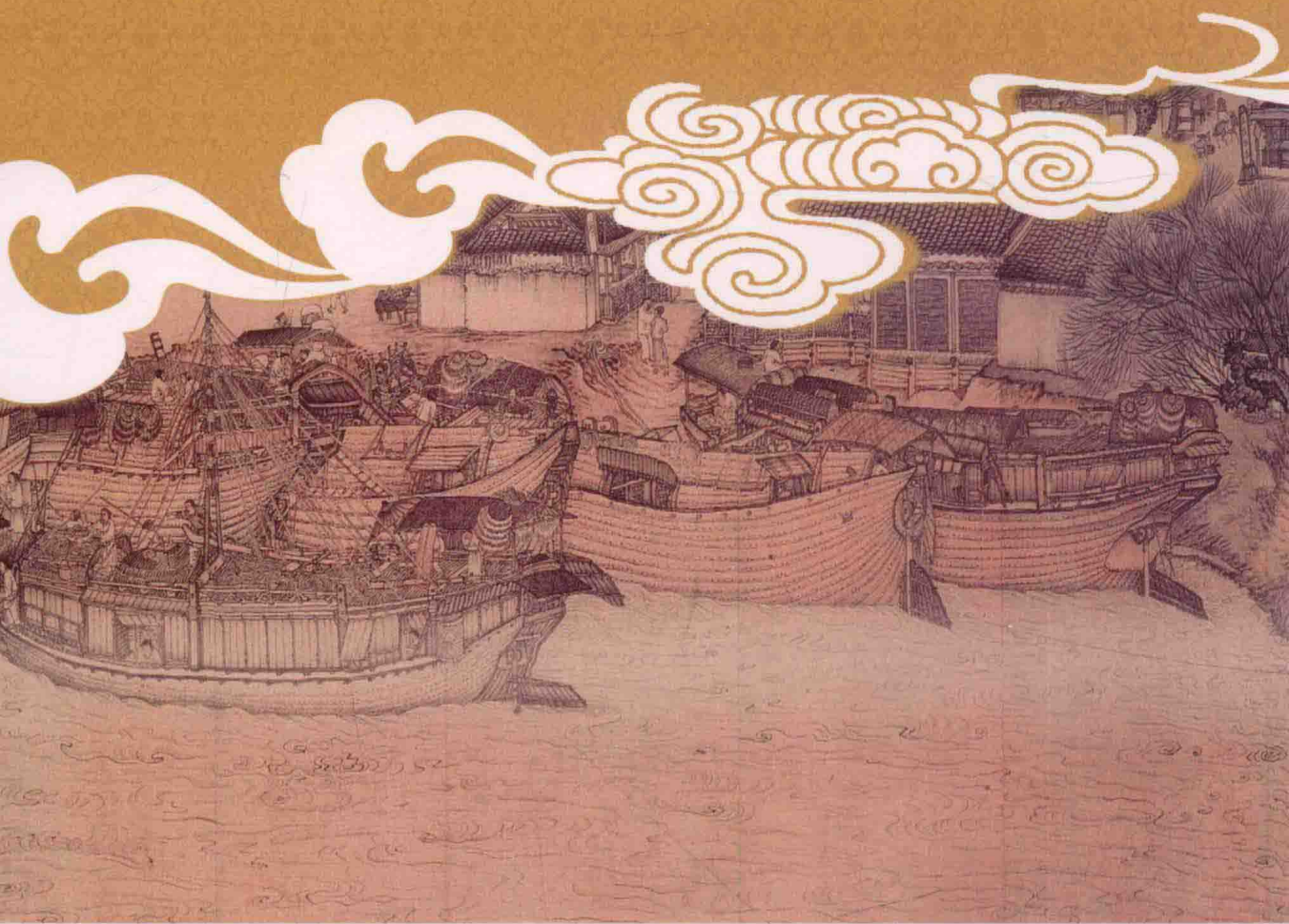
中国古船图说

Illustrations: Shipbuilding History of Ancient China

席龙飞 龚昌奇 蔡薇 编著

By Xi Longfei, Gong Changqi, Cai Wei

【中英双语版】



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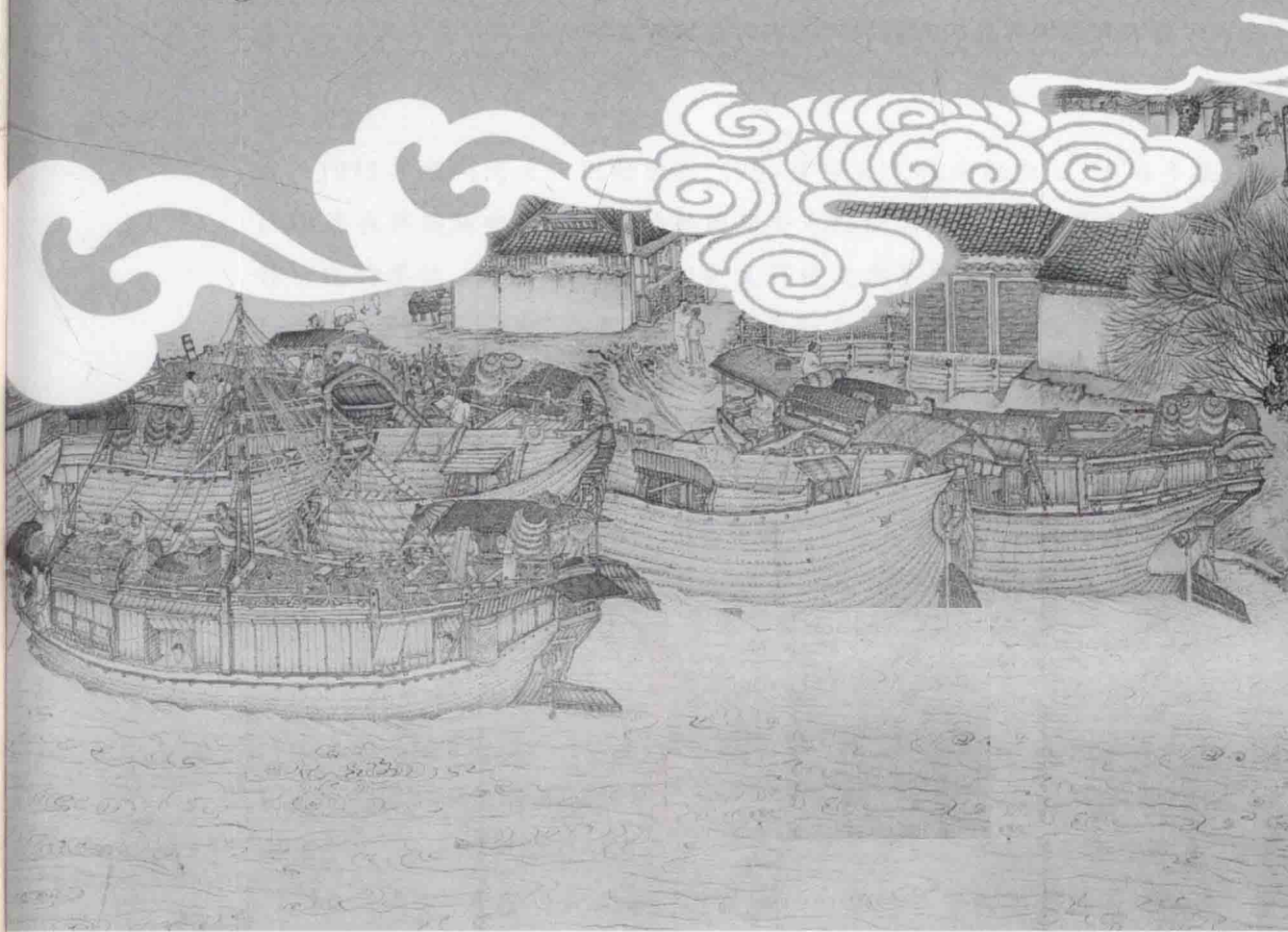
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序

1975年泉州湾宋代海船出土,1980年宁波宋代海船出土,1976年至1984年在韩国新安海底打捞的韩国新安元船出水,我校都是应邀参与合作研究的单位,其研究成果为船史及科技史学界所赞许。1984年蓬莱1号古船被清理,2005年蓬莱2号、3号和4号古船相继出土,我校不仅参与测绘与合作研究,还应邀承办了1989年“蓬莱古船与登州古港学术研讨会”和2006年“蓬莱古船国际学术研讨会”,会后都正式出版了相应的论文集。

对于早在20世纪50年代出土的梁山明代河船,近年我校应山东博物馆之邀赴该馆现场进行测绘与研究。对于2000年在淮北柳孜隋唐大运河遗址出土的一批唐代古船、2007年在广东阳江整体打捞出水的“南海一号”宋代古船、2010年在山东菏泽市出土的元代河船、2014年在河南洛阳出土的“洛阳运河一号”清代河船以及新近在宁波、慈溪等地出土的古船,我们都应邀进行了现场测绘与合作研究。通过这一系列工作我们深刻体会到,对出土古船的测绘与研究,是船舶史最为重要的一个研究方向。

众所周知,我国古代文献汗牛充栋。但是对于古代船舶的微观描述以及对于古代船舶的绘画作品则凤毛麟角。即使像北宋《清明上河图》、明代科技著作《天工开物》以及清代《姑苏繁华图》所绘就的船舶图样真实而清晰,但是要将相应的古船复原成船舶模型,也需要一个复原研究的过程。我校造船史研究中心的老教师们,早在20世纪80年代起迄今,先后应北京中国军事博物馆、澳门海事博物馆、嘉兴船文化博物馆、宁波古船展览馆、威海“定远舰”船模展览厅、淮北市博物馆、上海中国航海博



物馆等众多博物馆之邀，对一系列古船进行复原研究，为制作古船模型提供图纸，或协助监制古船模型，获得各馆以及国内外有关专家的好评。

通过多年的古船考古发掘与研究 and 古船微观复原研究，我校船史研究中心积累了一系列珍贵的图样与图片以及古船模型的照片，是我校席龙飞教授为代表的一批研究船舶史的师生的重要成果。本书——《中国古船图说》，是这些研究成果的汇总。

本书可以概略地展示中国船史研究的进展。同时，本书采取中英文双语的形式，可以让中外读者了解中国船舶的技术成就。

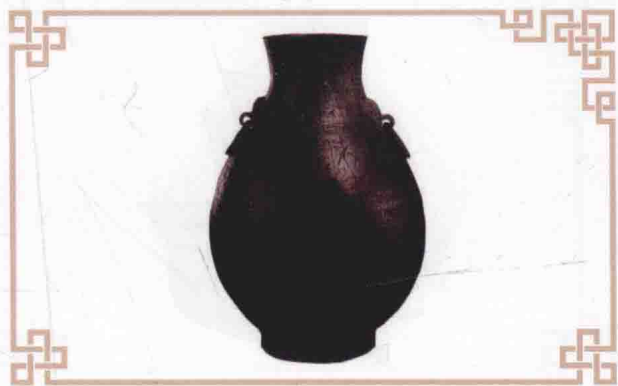
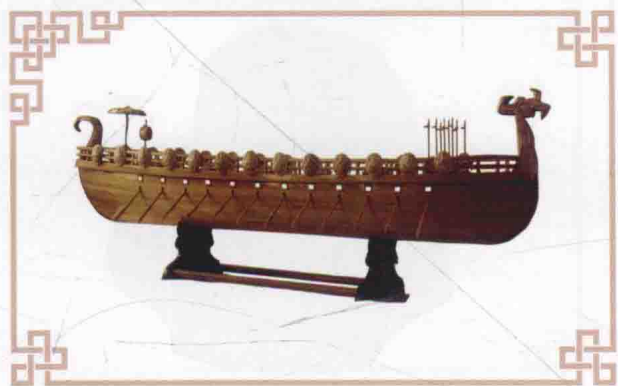
倡导和推动中国船史的研究，对弘扬我国航海文化和传承中华文明具有重要的意义，是我校船史研究中心的工作目标与期待。

今天是我国法定的航海日，我校船史研究中心的研究工作者们谨以此书作为参与航海日活动的献礼。

是为序。

严新平

2014年7月11日于武汉理工大学



Contents 目 录

1 新石器时代(约 18000 年—4000 年前) / 1

- 1-1 浙江吴兴钱山漾和杭州水田畈木桨 / 1
- 1-2 浙江余姚河姆渡木桨 / 1
- 1-3 浙江萧山跨湖桥独木舟 / 2
- 1-4 跨湖桥独木舟的制造工具 / 3

2 商、西周时代(公元前 1600—前 771 年) / 5

- 2-1 商代甲骨文中的“舟”字和带“舟”字偏旁的字 / 5
- 2-2 商代饗簋上的“荡”字表述了木板船的运用 / 6

3 春秋、战国时代(公元前 770—前 221 年) / 7

- 3-1 吴王的王舟舡 / 7
- 3-2 吴国的战船大翼、中翼、小翼 / 8
- 3-3 出土的鄂君启金节所反映的长江水系船队 / 9
- 3-4 战国墓葬中的游艇 / 10
- 3-5 中国风帆出现在战国时代 / 11

4 秦、汉时代(公元前 221—220 年) / 13

- 4-1 秦始皇派徐福入海求仙药所乘船舶 / 13
- 4-2 秦修灵渠沟通长江与珠江两大水系 / 14
- 4-3 出土的汉代船舶模型和船尾舵 / 16
- 4-4 汉代的楼船 / 18
- 4-5 中国的航海从汉代起开拓了海上丝绸之路 / 19



4-6 汉代的船舶属具均已齐备 / 21

5 三国、两晋、南北朝时代(220—589年) / 25

5-1 三国时期的斗舰 / 25

5-2 晋代卢循发明了水密舱壁——八槽舰 / 26

5-3 晋朝武将王镇恶在渭水首次使用了车轮舟 / 27

5-4 晋代《洛神赋图》表现的双体游舫 / 29

6 隋、唐时代(581—907年) / 30

6-1 隋代结束南北朝分裂局面起到历史作用的五牙舰 / 30

6-2 隋代的运河工程和御用龙舟 / 31

6-3 隋唐大运河出土的唐船和拖舵 / 34

6-4 出土的唐代古船带有水密舱壁 / 35

6-5 出土的唐代古船——歇艚支江船 / 37

6-6 唐代开始出现转轴舵 / 38

6-7 唐代的广州通海夷道及海洋船舶 / 40

6-8 唐代赴朝鲜和日本的航线以及遣唐使船 / 42

6-9 唐代的造船场地遍布沿海和内陆 / 44

6-10 唐代具有包括楼船、艨艟、海鹞等在内的混合舰队 / 45

7 北宋、南宋时代(960—1279年) / 47

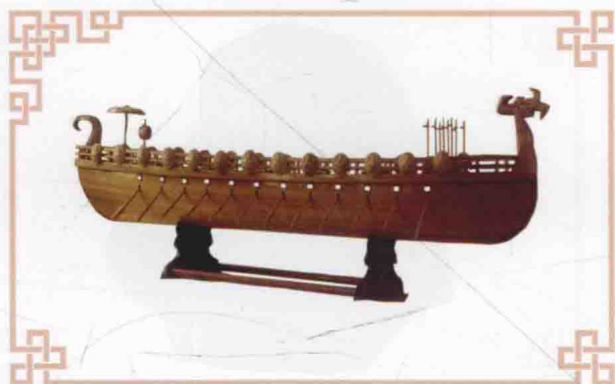
7-1 《清明上河图》表现的客船与货船 / 47

7-2 北宋出使高丽的客舟和神舟 / 50

7-3 宁波出土宋代古船带有减摇龙骨 / 51

7-4 天津静海元蒙口出土古船带有平衡舵 / 53

7-5 泉州湾宋代海船反映了宋代的造船技术成就 / 54



- 7-6 泉州法石出土古船应用木质榫钉连接 / 61
- 7-7 泉州法石出土的宋元碇石 / 63
- 7-8 宁波市和义路出土的港内交通船 / 64
- 7-9 上海中国航海博物馆收藏并展出的宋元时代大型木锚 / 68
- 7-10 “南海一号”及广东海上丝绸之路博物馆 / 73

8 元代(1206—1368 年) / 80

- 8-1 元代的海上漕运和漕运船 / 80
- 8-2 北直隶船 / 82
- 8-3 在韩国打捞到的新安船是中国元代航海贸易船 / 83
- 8-4 新安船所设顶边水舱是被动式减摇水舱 / 93
- 8-5 山东菏泽出土元代内河船的测绘与研究 / 95
- 8-6 在日本沿海鹰岛发现的元军船碇 / 103

9 明代(1368—1644 年) / 105

- 9-1 明成祖朱棣命三宝太监郑和统帅舟师下西洋 / 105
- 9-2 郑和在第七次出洋前镌立的天妃碑与铸造的铜钟 / 109
- 9-3 郑和宝船队:宝船、马船、粮船、坐船、战船 / 111
- 9-4 大型郑和宝船的复原研究 / 114
- 9-5 南京明代宝船厂遗址的发掘与研究 / 114
- 9-6 戚继光抗倭的大福船 / 123
- 9-7 航行于大运河的漕舫船 / 125
- 9-8 明初梁山河船的发掘与研究 / 127
- 9-9 蓬莱一号古船在结构上具有先进性 / 131
- 9-10 蓬莱二号古船的发掘与研究 / 136



9-11 在蓬莱发现的三号、四号古船是韩国船 / 141

9-12 浙江象山海滨发现明代古船 / 148

9-13 “南澳一号”明代沉船船体有待打捞 / 151

9-14 中国的三大船型：沙船、福船、广船 / 152

9-15 福州赴琉球的封舟 / 157

10 清代,迄至洋务运动时期(1644—1860年) / 158

10-1 日本《唐船之图》表现的中国海洋船舶 / 158

10-2 汉口港帆樯林立的帆船 / 166

10-3 洞庭湖的四桅帆船 / 168

10-4 九江的客船与货船 / 169

10-5 大运河漕船“两节头” / 171

10-6 黑龙江抗俄雅克萨战役战船 / 172

10-7 乾隆下江南的皇船“安福舫” / 175

10-8 《姑苏繁华图》描绘的清代船舶 / 178

10-9 风帆的各种索具 / 183

10-10 起锚绞车以及绞盘 / 190

11 近代(洋务运动起至新中国成立前,1860—1949年) / 192

11-1 林则徐在鸦片战争中萌发了“师夷之长技以制夷”的思想 / 192

11-2 江南机器制造总局及其所造舰船 / 194

11-3 左宗棠创办福州船政局及该局的造船技术成就 / 199

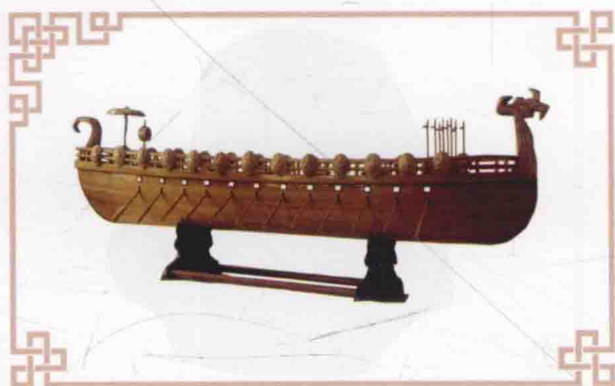
11-4 天津机器局及其大沽船坞 / 208

11-5 广东军装机器局及所属黄埔船坞 / 209

11-6 旅顺船坞及大连修造船工场 / 211

11-7 青岛的近代造船业 / 215

11-8 洋务运动建立近代造船业的历史作用 / 217



Contents 目 录

1 Neolithic Age (about 18000 years ago-4000 Years ago) / 1

- 1-1 Oars in Zhejiang Wuxing Qianshanyang and Hangzhou Shuitianfan / 1
- 1-2 Oars in Zhejiang Yuyao Hemudu / 2
- 1-3 Kuahuqiao Canoe in Zhejiang Xiaoshan / 2
- 1-4 Manufacturing tools of Kuahuqiao canoe / 3

2 Shang Dynasty and Western Zhou Dynasty (1600 B.C.-771 B.C.) / 5

- 2-1 The character "boat" in oracle in the Chinese Shang Dynasty / 5
- 2-2 The character "dang" on the ancient cauldron of Shang Dynasty showed the wooden boat application / 6

3 Chunqiu and Warring States Period(770 B.C.-221 B.C.) / 7

- 3-1 Yuhuang King Boat of Wu Kingdom / 7
- 3-2 Dayi, Zhongyi and Xiaoyi warship in Wu Kingdom / 8
- 3-3 Fleet of boats in Yangtze River on the excavated plate / 9
- 3-4 Yacht in the buried goods of Warring States / 10
- 3-5 Sail appeared in the Warring States Period / 11

4 Qin Dynasty and Han Dynasty (221 B. C.-220 A.D.) /

- 4-1 Boats which Xu Fu took to search elixir for the Emperor Qin Shi Huang / 13
- 4-2 Linqv connected two waterway system of Yangtze River and Zhujiang / 15
- 4-3 Excavated boat model and stern rudder of Han Dynasty / 16
- 4-4 Storey ship of Han Dynasty / 19
- 4-5 Sea Silk Road explored from Han Dynasty / 20
- 4-6 Complete ship outfitting of Han Dynasty / 20



5 The Three Kingdoms, Jin Dynasty, Southern and Northern Dynasties (220—589) / 25

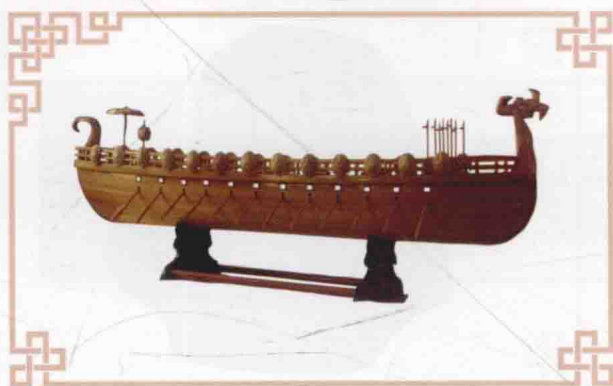
- 5-1 “Dou Jian” of the Three Kingdoms period / 25
- 5-2 Lu Xun of Jin Dynasty invented watertight bulkhead in Bacao Boat / 26
- 5-3 Wang Zhen’e of Jin Dynasty used wheel paddle boat the first time in Weishui River / 27
- 5-4 Catamaran leisure boat in the painting of *Goddess Luo Rhapsody* of Jin Dynasty / 29

6 Sui Dynasty and Tang Dynasty (581—907) / 30

- 6-1 Wuya warship played a historical role in the split situation of Northern Dynasty and Southern Dynasty in Sui Dynasty / 30
- 6-2 The canal project and the Dragon Boat in Sui Dynasty / 32
- 6-3 The excavated Tang ship and drag rudder in Sui and Tang Grand Canal / 34
- 6-4 Unearthed boat of Tang Dynasty with watertight bulkhead / 35
- 6-5 Unearthed ancient boat of Tang Dynasty—Xiehuang River boat / 37
- 6-6 Axis turning rudder appeared from Tang Dynasty / 39
- 6-7 Guangzhou navigating routine and ocean-going ships in Tang Dynasty / 40
- 6-8 Navigating routine to Korea and Japan and the ships of Japanese missions to Imperial China in Tang Dynasty / 42
- 6-9 Shipbuilding sites spread inland and sea area in Tang Dynasty / 45
- 6-10 Various warship types in Tang Dynasty including Lou ship, Mengcong ship and Haigu ship / 45

7 Northern Song Dynasty and Southern Song Dynasty (960—1279) / 47

- 7-1 Cargo ships and passenger ships in painting *Riverside Scene at Qingming Festival* / 47
- 7-2 Passenger ship and Shenzhou ship served as an envoy ship to Korea / 50
- 7-3 Anti-rolling keel in ancient ship of Song Dynasty excavated in Ningbo / 51
- 7-4 Balanced rudder was equipped in ancient ship excavated in Tianjin Jinghai Yuanmengkou / 53
- 7-5 Sea-going ship of Song Dynasty excavated in Quanzhou Bay reflected achievements of shipbuilding technology of that period / 54



- 7-6 Wooden dowel connection was applied in ancient ship excavated in Quanzhou Fashi / 61
- 7-7 Stone anchorage of Song or Yuan Dynasty excavated in Quanzhou Fashi / 63
- 7-8 Port transport ship excavated in Ningbo Heyi Road / 64
- 7-9 The big wooden anchor of Song or Yuan Dynasty exhibited in Shanghai National Navigating Museum / 68
- 7-10 "Nanhai No.1" ship and Guangdong Sea Silk Road Museum / 73

8 Yuan Dynasty (1206-1368) / 80

- 8-1 Grain transportation and grain carrier in the sea in Yuan Dynasty / 80
- 8-2 Bei Zhili Junk / 82
- 8-3 Xin'an ship salvaged in South Korea was a transportation ship for oversea trade in Chinese Yuan Dynasty / 83
- 8-4 The topside tank set up in ancient Xin'an ship is a kind of passive anti-rolling tank / 93
- 8-5 Surveying and study of a Yuan Dynasty inland ship unearthed in Heze, Shandong / 95
- 8-6 Anchorages of Yuan army found on Japan's coastal area, Takashima / 103

9 Ming Dynasty (1368-1644) / 105

- 9-1 Ming Emperor Zhu Di ordered Zheng He to sail to the Western Ocean / 105
- 9-2 Tianfei monument and copper bell set by Zheng He / 109
- 9-3 Zheng He fleet: treasure ship, horse loading ships, grain carriers, passenger ships, war ships / 111
- 9-4 Reform study of Zheng He treasure ship / 114
- 9-5 Excavation and study of treasure ship shipyard site of Ming Dynasty in Nanjing / 114
- 9-6 Dafu warship Qi Jiguang used for defending aggressive Japanese / 123
- 9-7 Grain carrier sailing in the Grand Canal / 125
- 9-8 Excavation and study of inland Liangshan ship of Ming Dynasty / 127
- 9-9 Advanced structure technique in ancient Penglai No.1 ship / 131
- 9-10 Excavation and study of Penglai No.2 ancient ship / 136



- 9-11 Excavated Penglai No.3 ship and No.4 ship was regarded as South Korea ships / 141
- 9-12 Ancient ship excavated in shore of Xiangshan, Zhejiang Province / 148
- 9-13 Nan'ao No.1 ship of Ming Dynasty is to be salvaged / 151
- 9-14 Three typical ancient ship types: Sha type ship, Fu type ship and Guang type ship / 152
- 9-15 Feng ship sailing from Fuzhou to Ryukyu / 157

10 Qing Dynasty, to Westernization Movement (1644-1840) / 158

- 10-1 Chinese ocean-going ships in the painting of *Picture of Tang Ships* / 158
- 10-2 A forest of masts of sailing ships in Hankou Port / 166
- 10-3 Four-mast sailing ship in Dongting Lake / 168
- 10-4 Cargo ships and passenger ships in Jiujiang / 169
- 10-5 Grain carrier "Liangjie Tou" in the grand canal / 171
- 10-6 War ship in the Albazin campaign in Heilongjiang Province / 172
- 10-7 Emperor Ship "Anfu Lu" used by Qianlong Emperor / 175
- 10-8 Ships of Qing Dynasty in the painting of *Gusu Downtown Map* / 178
- 10-9 Different kinds of sail rigging / 183
- 10-10 Anchor winch and winch / 190

11 Modern Times (from Westernization Movement to the end of old China, 1840-1949) / 192

- 11-1 A famous figure Lin Zexu's idea to reform technique in Qing Dynasty / 192
- 11-2 Jiangnan Machinery Manufacturing Bureau and its product: war ships / 194
- 11-3 Zuo Zongtang set up Fuzhou Shipbuilding Brueau and its achievements in shipbuilding / 199
- 11-4 Tianjin Machinery Bureau and Dagou Dock / 208
- 11-5 Guangdong Military Machinery Bureau and Huangpu Dock / 209
- 11-6 Lvshun Dock and Dalian Shipbuilding and Repairing Factory / 211
- 11-7 Modern shipbuilding industry in Qingdao / 215
- 11-8 Historic role of westernization drive for modern shipbuilding industry / 217

1

新石器时代 (约 18000—4000 年前)

Neolithic Age (about 18000 years ago-4000 years ago)

1-1 浙江吴兴钱山漾和杭州水田畈木桨

1958 年前后, 分别在濒临太湖的吴兴钱山漾和位于钱塘江畔的杭州水田畈两处, 发掘出新石器时代末期的文物, 其中有五六支木桨。据鉴定, 这些都是 4700 年前的遗物。

吴兴钱山漾木桨(图 1-1 下)以青冈木制成, 桨叶呈长条形, 长 96.5 厘米, 稍有弧度, 凸起的一面正中有脊, 柄长 87 厘米。

杭州水田畈木桨, 分宽窄两种。宽者桨叶宽而扁平, 宽 26 厘米, 厚 1.5 厘米, 末端削成尖状, 另做桨柄捆绑其上。窄者数量较多, 桨叶宽 10~19 厘米, 用整根木料削成, 桨柄呈圆锥形(图 1-1 上)。

这一批木桨的发现足以证明, 在新石器时代, 江浙一带滨海地区的舟船活动就已相当广泛。舟楫的出现和应用, 对于促进生产发展和文化交流都具有重大意义。

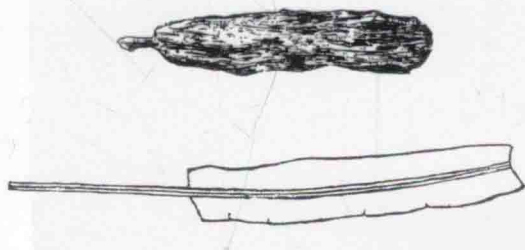


图 1-1 浙江吴兴钱山漾、杭州水田畈、出土的木桨
Fig.1-1 Oars in Zhejiang Wuxing Qianshanyang and Hangzhou Shuitianfan

1-1 Oars in Zhejiang Wuxing Qianshanyang and Hangzhou Shuitianfan

Oars in Zhejiang Wuxing Qianshanyang and Hangzhou Shuitianfan were excavated around 1958 identified to be the relics of 4700 years ago. It proves that shipping with boats was widely spread in Zhejiang coastal region during Neolithic Age in China.

1-2 浙江余姚河姆渡木桨

发现于滨海地区的浙江余姚河姆渡文化遗址, 其绝对年代在 7000 年以前。在河姆渡文化遗址的发掘中, 发现有“干栏”式建筑遗迹, 梁柱间用榫卯结合, 地板用企口板密拼, 具有相当成熟的木构技术。生产工具有伐木的石斧和加工木料的石凿、石锛。特别值得注意的是, 在出土文物中有 6 支木桨。





保存较好的一支木桨残长 92 厘米,柄部残,断面呈方形,粗细仅容手握。做工精细,桨柄与桨叶结合处,阴刻有弦线纹和斜线纹图案(图 1-2)。显而易见,这样做工精细的木桨,绝不会是最原始的。原始木桨的出现当然会更早,如果推到 8000 年前或更早一些,应当说也在情理之中。



图 1-2 7000 年前的河姆渡雕花木桨(局部)

Fig. 1-2 Part of the Hemudu Carved Oar 7000 Years Ago

1-3 浙江萧山跨湖桥独木舟

在我国发现有多艘独木舟,其年代有早也有晚。但都不是用石器而是用金属工具制造的。唯有在 2002 年发掘到的浙江萧山跨湖桥独木舟是在新石器时代,而且是借助火焦法用石器刮制出来的,见图 1-3 和图 1-4。



图 1-3 浙江萧山跨湖桥遗址出土的 8000 年前的独木舟

Fig. 1-3 Canoe Excavated in Zhejiang Xiaoshan Kuahuqiao 8000 Years Ago

1-2 Oars in Zhejiang Yuyao Hemudu

The Zhejiang Yuyao Hemudu cultural ruins which was found in the coastal areas is with the absolute age at least 7000 years. During the excavation of the cultural relics in Hemudu, it showed that quite mature timber structures technology were used at that time. Production tools concluding stone axes, stone chisel and stone adze, particularly, six oars were in the archaeological finds.

One piece of oars which was well preserved with the length of 92 cm, was slightly made and carved with line and diagonal pattern at the junction between oar handle and blade (Fig. 1-2). Obviously, such a well-made oar was not the original one. The original wood oar is sure to be older. It should be also reasonable even if we deduce it at 8000 years old or earlier.

1-3 Kuahuqiao Canoe in Zhejiang Xiaoshan

There had been many canoes being found in China which could be back to old days with different ages. While, not were all of them made by stone tools, but by metal tools instead. Only the Zhejiang Xiaoshan canoe which was discovered in 2002 was made by stone tools and fire focal law in the Neolithic age (Fig. 1-3~Fig.1-4).

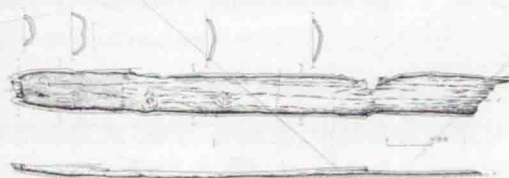


图 1-4 跨湖桥独木舟平、剖面图(采自《跨湖桥》)

Fig. 1-4 Sheer Plan and Body Plan of Canoe in Kuahuqiao



1-4 跨湖桥独木舟的制造工具

可能与其他国家不同,我国跨湖桥独木舟是用火和石锛刮制出来的。分析其原因是:(1)在跨湖桥遗址出土的石器以石锛为最多;(2)刮制独木舟时石锛比石斧更为有效;(3)在跨湖桥遗址出土的石器除残器外共 106 件,其中石锛共 28 件,占 26.4%(图 1-5~图 1-8)。

在跨湖桥遗址出土器柄 11 件,其中 B 型石锛柄 8 件。该石锛柄取用

1-4 Manufacturing tools of Kuahuqiao Canoe

May be it is different from other countries that Kuahuqiao canoe was made by stone tools with the system of fire method. The reasons are as following: 1) most of the stone tools found in the Kuahuqiao site were stone adzes; 2) the stone adze is more effective than stone axe; 3) the number of the stone tools found in the Kuahuqiao site were 106 except some residuals, including 28 stone adzes which took 26.4% of them (Fig. 1-5~Fig. 1-8).

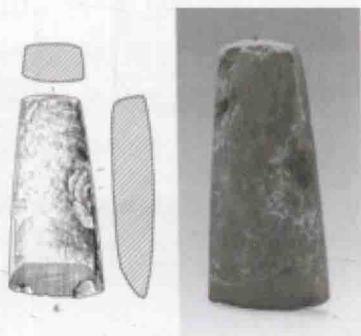


图 1-5 Aa 型石锛示意图
Fig. 1-5 Aa Type Stone Adze

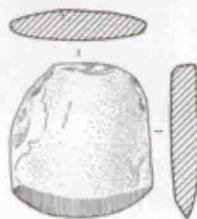


图 1-6 Ab 型石锛示意图
Fig. 1-6 Ab Type Stone Adze

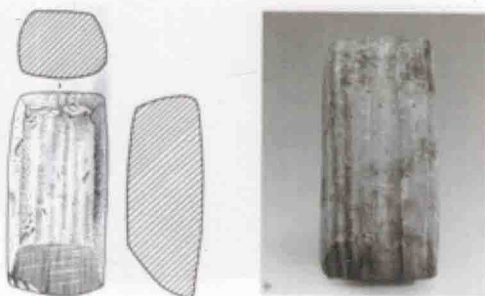


图 1-7 Ba 型石锛示意图
Fig. 1-7 Ba Type Stone Adze

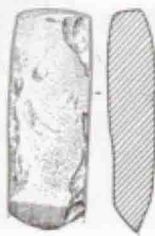


图 1-8 C 型石锛示意图
Fig. 1-8 C Type Stone Adze





大小不一的树木枝杈部位为材料，将其细杈截为长柄，粗杈加工为较短的锤头(图 1-9)，其中外侧切面尤深且平，是捆扎、固定石铤的位置。

我们还注意到晚于跨湖桥遗址 1000 年的河姆渡遗址出现的有段石铤(图 1-10)，更适于制造独木舟，其影响不仅在我国东南沿海地区，对太平洋广大地区都产生了重大影响。

During the unearthed 11 clayware handles in the Kuahuqiao site, there are 8 B type stone adze handles. It used branches from different sizes of trees as the materials, whose thin branches were cut into long handles, wide ones processed for the shorter hammers(Fig. 1-9), and the lateral section is deep and flat which is the position to tie and fix the stone adzes.

We also note that there are stepped stone adzes (Fig.1-10) in the Hemudu site which is 1000 years later than the Kuahuqiao site, it is more suitable for making canoes, and it was not only influenced the southeast coast of China, but also the vast area of the Pacific.

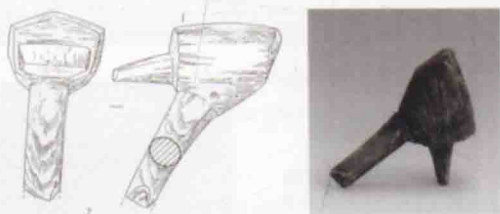


图 1-9 跨湖桥遗址 B 型石铤柄示意图
Fig. 1-9 B Type Stone Adzes Handle in the Kuahuqiao Site

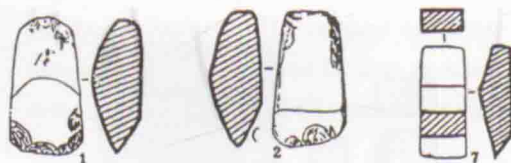


图 1-10 河姆渡遗址出土的隆脊型有段石铤示意图
Fig. 1-10 Special Type of Stone Adze in the Hemudu Site

跨湖桥独木舟在我国是唯一的，在亚洲是年代最古老的，在全世界来说也是罕见的。与荷兰出土的公元前 6300 年的独木舟相比，在时间上来说，两者是相当的。

The Kuahuqiao canoe is unique in China, the oldest in Asia, and pretty rare in the world. Compared with the canoes unearthed in Holland in 6300 B.C., both of them are comparative in the view of history.