ABSTRACT
The activities of the ancient peoples of southern China on rivers and at sea can be dated to at least 6000 BC. The Hemudu culture has produced apparent water transport vehicles and its people were probably active at one time on the ocean, since their sites lie so close to it. Sites on the many islands on the southeast coast of China dating back five or six thousand years BC record the activities of peoples who lived, long-term, on the seas. They had a high degree of mobility, becoming a type of sea nomad. Their earliest survival tactics involved utilization of the natural environments of the islands, gathering shellfish and fish and hunting for small game. The high degree of mobility on the part of these nomads also made them the transmitters of cultural traits. For example, the Hemudu jade industry influenced the Pei-nan culture of Taiwan, and characteristics of the Ta-p'en-keng culture of Taiwan also occur in coastal areas in Fujian and Guangdong.

MOBILE ETHNOGRAPHIC AND HISTORICAL PEOPLES OF THE RIVERS AND COASTLINES OF SOUTHERN CHINA AND SOUTHEAST ASIA
In the Southeast Asian region, living on river banks, sea coasts and islands, there have been many groups of so-called “sea-nomads” since ancient times. Traditionally, these people lived on their boats and earned a living by collecting river or sea resources. They had hunting and fishing skills, yet did not practice agriculture. They were organized into small groups (boat teams), with members of nuclear families working together. Usually, there was a nominal leader who managed common affairs. Many of these sea nomads relied on mutually-beneficial relationships with land dwellers (Soper 1977:47).

In southern China there also have been, since ancient times, ethnic groups who live on water, known as tanchia. According to historical records, such people have existed since the Han Dynasty, although Chen Shu-ching (1946:43) favoured a much earlier appearance. Because of the far-flung distribution of these people all over southern China, including Sichuan and Guangxi Provinces, they cannot be considered as one single ethnic group. Instead, they are groups with a similar life style; they all live on the water.

Nowadays, tanchia are mainly distributed along the river banks of southern China. Sea tanchia existed only in the coastal regions near the Pearl River Delta, including Hong Kong and Macau. I suggest that these tanchia of the coastal regions of Guangdong are the descendents of ancient sea nomads who probably first emerged in Neolithic times more than 7000 years ago. The distribution of the prehistoric sea nomads of southern China was not limited to the Pearl River Delta of Guangdong. They spread over the coastal regions from Fujian Province to Guangxi and possibly even extended to the south.
PREHISTORIC METHODS OF SEAFARENG

The prehistoric means of seafaring were made of timber and rarely survive archaeologically. But one outstanding assemblage comes from the Hemudu site, dated between 7000 and 5000 years ago. Means of seafaring as well as remains of aquatic fauna and flora, such as fish bones, sea shells and water caltrop, were found here in large quantities. Among the animal bones and teeth are those of whale and shark, together with estuarine species such as Mugil and Gymnocranus sp. Suggested evidence of sea craft from Hemudu and other southern Chinese locations can be listed as follows (Chen Yan-hang, 1997):

1. Rafts of wood and bamboo. Rafts were probably the earliest means of water transportation (Ling 1970a:98). Chufanchih, a book by Chao Ju-kua of the Southern Sung Dynasty, records for the period 1174 to 1189 that hundreds of people travelled by sea on bamboo rafts from Taiwan to the Quanzhou region of Fujian (Chao Ju-kua 1940:87). Although no whole raft was found in Hemudu, many pieces of rattan and cordage were found, indicating the possible use of rafts (Chen Yan-hang 1997:37).

2. Canoes. A section of a plank wall was found in Hemudu containing a hollowed-out possible canoe segment 2 m long and 0.4 m wide. Some excavated pottery toy boats from Hemudu have square bows and sterns and flat bottoms (Lin Hua-tung 1992:142). They look like typical boats that still travel along rivers and along the coast (Chen Yan-hang 1997:42). In Fujian, there are still some surviving boat-shaped coffins placed in cliffs in the Wuyi Mountains. Some of these have been radiocarbon dated to between 4200 and 3500 BP (Chen Ch'un-hsi and Lin Zhong-gan 1993:32). On the Dong Son bronze drums of southern China and Southeast Asia there are many scenes of boats of a type similar to modern dragon boats. In the Province of Jianxi alone, archaeological excavations have recovered the remains of 20 canoes dating back to the time between the Warring States Period and the Han Dynasty (Chen Yan-hang 1991:33).

3. Wooden paddles. Altogether, seven wooden paddles were excavated from Hemudu, all broken, with flat blades like willow leaves (Chen Yan-hang 1997:40).

4. Stone anchor. A stone ball in a grass carrier net from Hemudu is perhaps the earliest stone anchor found in China. It is 50 cm in diameter, with an estimated weight of 170 kg, deemed capable of holding a boat weighing up to 28 tons (Chen Yan-hang 1997:41, 42).

With such simple means of seafaring as those listed above, it is likely that people could only make short trips along the coast and to neighbouring islands. However, some scholars believe that the sail first appeared in China as early as the late Neolithic (Sun Guang-gi 1993:37). This is possible, since people of the 'Ta-p'en-k'eng Culture had already crossed the Taiwan Strait and reached Taiwan by at least 5000 years ago.

SEA NOMADS AND SHELL MOUND SITES

The sea nomad lifestyle cannot be completely divorced from terrestrial resources, and sea nomads of ancient times could not completely separate themselves from the inhabitants on land and become totally independent, self-sufficient societies (Chen Pi-sheng 1954:120). Some studies of tanchia show that, as well as living on their boats, they also built wooden houses afloat or constructed floating houses on rafts (the so-called pai) (Chen Shu-ching 1946:170).

There are many shell midden sites in the southeast coastal regions of China. They are mainly concentrated along the lower reaches of the Min River in the Fujian Province, in the southwestern coastal regions of Taiwan (between the Tseng-wen and Kao-p'ing rivers), and in the Pearl River Delta of Guangdong Province. Sporadic examples also occur in the Taipei Basin of Taiwan, in the P'eng-hu (Pescadores) Islands and in Lingshui District of Hainan Province. The shell midden sites of the coastal regions of Fujian and Guangdong generally have the following characteristics:

1. Most sites are located on terraces alongside estuaries, or on the slopes of small crescent shaped islands.
2. Most sites are small and have only thin cultural strata, suggesting short duration and possible seasonality of settlement.
3. Livelihood depended mainly on fishing and gathering of shellfish, with hunting of small animals.
4. No shell midden sites in Fujian or Guangdong show any signs of agriculture.

In 1994, I discovered two Neolithic shell midden sites at Ch'in-kuei-shan and P'u-pien, both on Chin-men (Quemoy) Island in Fujian Province of Taiwan (Chen Chung-yu 1997). The Ch'in-kuei-shan site is located in northeastern Chin-men, above the estuary of the Ch'in-sha river. The shell midden is about 1 m thick and contains shells, sherds, stone tools, antlers and animal bones. The pottery is a fine sandy red ware basic with fine cord-marking, shell impression and finger nail impression. The stone tools include cores, flakes, choppers and anvils, but no polished adze. The five radiocarbon dates for this site are listed in Table 1. For comparison, the date of the Fu-kou-tun Culture of Chin-men Island is 6305+378 BP (NTU-65, shell: Lin Chao-chih 1969:38). Ch'in-kuei-shan has only one cultural layer, so the upper date of 3395+360 BP (GX20425) could indicate either a 4000-year span of site usage, or the presence of a later component.
Table 1: Radiocarbon dates for Ch'in-kuei-shan, Chin-men Island.

<table>
<thead>
<tr>
<th>Lab. No.</th>
<th>C14 BP</th>
<th>Cal BP</th>
<th>Depth cm</th>
<th>Material</th>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>GX23272</td>
<td>6800±100</td>
<td>7757-7570</td>
<td>70-80</td>
<td>charcoal</td>
<td>Fu-kuo-tun</td>
</tr>
<tr>
<td>GX20427</td>
<td>5940±70</td>
<td>6410-6279</td>
<td>90-100</td>
<td>shell</td>
<td>Fu-kuo-tun</td>
</tr>
<tr>
<td>GX20426</td>
<td>5475±70</td>
<td>5908-5756</td>
<td>40-50</td>
<td>shell</td>
<td>Fu-kuo-tun</td>
</tr>
<tr>
<td>GX20425</td>
<td>3395±60</td>
<td>3330-3184</td>
<td>10-20</td>
<td>shell</td>
<td>P'u-pien</td>
</tr>
<tr>
<td>NTU-65</td>
<td>6305±378</td>
<td></td>
<td></td>
<td></td>
<td>Fu-kuo-tun</td>
</tr>
</tbody>
</table>

Table 2: Radiocarbon dates for the P'u-pien culture, P'u-pien site, Chin-men Island.

<table>
<thead>
<tr>
<th>Lab No.</th>
<th>Locality</th>
<th>C14 BP</th>
<th>Cal BP</th>
<th>Depth cm</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>GX23274</td>
<td>PPII P2</td>
<td>4030±55</td>
<td>4570-4418</td>
<td>210-220</td>
<td>charcoal</td>
</tr>
<tr>
<td>GX20429</td>
<td>PPII P1.7</td>
<td>3800±120</td>
<td>3876-3575</td>
<td>60-70</td>
<td>shell</td>
</tr>
<tr>
<td>GX20430</td>
<td>PPII P1.9</td>
<td>3585±65</td>
<td>3538-3386</td>
<td>80-90</td>
<td>shell</td>
</tr>
</tbody>
</table>

The P'u-pien site is also located in northeastern Chin-men, about 3 km from Ch'in-kuei-shan site. The environment of P'u-pien is different from that of Ch'in-kuei-shan in that it is on a sand dune behind a flat seashore, about 200 m inland. The site covers about 4 hectares. The distribution of shell midden is sporadic, with two separate areas having midden thicker than elsewhere. Artefacts include sherds and some quartz pieces, but no stone tools were found. The site is younger than Ch'in-kuei-shan, with five radiocarbon dates between 4500 and 3500 BP (Table 2), but still there are no indications of agriculture.

Both these sites, to judge from their locations, dates and lack of any signs of agriculture, are suggested here to have been occupied by sea nomads.

SEA NOMADS AS ACTIVE CULTURAL TRANSMITTERS

The appearances and subsequent distributions of a number of artefact categories in the Neolithic cultures of this region often puzzle archaeologists. For instance, stone stepped adzes first appeared in the Hemudu Culture, and shouldered axes first in the Pearl River Delta. But both these artefacts occur in the Yuan-shan Culture of northern Taiwan. Also, the prehistoric Taiwan jade industry, best known from the Pei-nan Culture, spread all over the eastern coast of Taiwan, the Taipei Basin, from the estuary of the Kaoping river to the Heng-ch'un Peninsula, Orchid Island, Green Island and the Penghu Islands. It probably originated in the Hemudu Culture (Chen Chung-yu, 1998), but has rarely appeared in the coastal region of Fujian Province opposite Taiwan.

Pottery has also been used by archaeologists as a sensitive divider of cultural phases. But its distribution in this region is especially complicated. Pottery which dates between 5000 and 2000 BC in the coastal shell middens of Guangdong and Fujian often has cord marking, finger-nail and shell impression and comb incision. This pottery belongs to the Fu-kuo-tun Culture, also called the Kejiatou Culture by mainland Fujian archaeologists. From a macro-viewpoint, Chang Kwang-chih believed the Fu-kuo-tun Culture was closely related to the Ta-p'en-k'eng Culture of Taiwan (Chang Kwang-chih 1987:8). But An Chih-min and Wu Mian-ji think these two cultures are quite different (An Chih-min 1990:4, 5; Wu Mian-ji 1990:28, 1993). Yang Shi-ting has also carried out comparative studies of the pottery, stone objects and other material culture of the Neolithic shell middens and sand dunes of the coastal regions of Taiwan, Fujian, Guangdong and Guangxi. He concludes:

The Ta-p'en-k'eng Culture, Fu-kuo-tun Culture and Kejiatou Culture do not belong to the same archaeological culture as the above mentioned sites of Guangdong and Guangxi, nor are they different types of one culture. But, because of the closeness of their geographical locations and the similarities of their ecology and fishing and hunting economic lives, certain cultural communications might have existed among these coastal primitive inhabitants (Yang Shi-ting 1990:44; original in Chinese).

During the late Neolithic, around 3000 BC, a grayish-black variety of pottery appeared widely in the coastal regions of China. To account for this, Chang Kwang-chih early on developed his Lungshanoid theory (Chang 1959). Meanwhile, painted pottery also appeared at this time in the southwestern site of Feng-pi-t'ou in Taiwan. In depth investigation of the pottery, stone tools, jades and other artefacts of these Neolithic cultures show there is both unity among diversity and diversity among unity. All apparently had close relationships but did not belong to a single cultural phenomenon. I suggest that the sea nomads of this region were transmitters of material culture. Their free transmissions interrupted the hypothetical rules of cultural boundaries set by earlier researchers and made it hard for them to agree upon the sequence of these southeastern coastal Neolithic cultures of China.

WHO WERE SEA-NOMADS?

The geographical area discussed in this article, namely, the southeast coastal region of China, including the two sides of the Taiwan Strait, is within the area occupied by the "hundred yue" of ancient Chinese records (Meacham 1996). These populations spread over the region south of the middle Yangzi, including Hunan, Jiangxi, Zhejiang, Fujian, Guangdong and Guangxi Provinces. Among them, major groups included the Ou Yue of southern Zhejiang, the Min
Yue of Fujian and the Nan Yue of Guangdong and Guangxi. Ling Shun-sheng (1970b:226) thought the Yue were Austronesians and that they migrated into the Pacific after the Ch’in and the Han southwards expansion of the Chinese. Ling’s opinion is negated by current knowledge of the chronology of Austronesian dispersal. However, the ancient Min Yue of Fujian had customs similar to those of some of the Taiwan aborigines, such as snake totemism, short hair, tattooing, teeth-pulling, pile-dwellings, cliff-ourials and uxorilocal post-marital residence. Perhaps the Taiwan aborigines were also Min Yue (Ye and Xin 1980), derived in ancient times from the southeast coast of Mainland China (Chen Guo-qiang 1961), as suggested also by the linguists Li (1979) and Blust (1985; see also Bellwood 1991).

More clarification and discussion is needed on the problem of the homeland and early dispersal pattern of the Austronesians. But it is my belief that in the southeast coastal regions of China there were many sea nomads during the Neolithic and that many spoke ancestral Austronesian languages and were skilled seafarers.

REFERENCES