Comparative Study of Early Farming Cultures in China

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This paper examines how foods varied according to area and period, by investigating Chinese remains situated east of Shenshi Province, from which natural remains of the Neolithic Age have been excavated. This paper does not deal with natural remains on which only a brief report has been issued, but the number of remains examined amounts to 392, which must be regarded as sufficient to fully reflect the whole image of the Neolithic Age in China.

During the Early Neolithic Age along the Yangtze River Valley [河姆渡 (He-mo-du) Culture and 馬家浜 (Ma-jia-bang) Culture], rice was cultivated, and pigs, dogs, and water buffaloes were bred. However, the natural remains of foods cover a large variety of items, which shows that these cultures had a comprehensive food system, without depending on a specific item. During the 大溪 (Da-xi) Culture and 松沢 (Song-ce) Culture, the weight of cattle kept dropped, and there was a greater tendency to depend on the hunting of deer. It is assumed, however, that most animal protein was taken from fish, and that life by the waterside, centered on rice cultivation, was the nucleus of these cultures. During the 良渚 (Liang-xu) Culture in the latter half of the Neolithic Age, a selective economic pattern was developed, which depended on the cultivation of rice, and the hunting of Japanese deer (Cervus nippon), together with fish caught from the river and the wet-field.

Along the Yellow River Valley during the early stages of this Age [裴李崗 (pei-li-gang) Culture and 磁山 (Ci-shang) Culture], a comprehensive food system with a wide range of food items was seen. In the period of the Yangshao Culture, though foxtail millet was the principal food, millet and kaoliang were cultivated and, in some areas, rice was cultivated under the influence of the Yangtze Valley. The breeding of pigs and dogs continued, together with the hunting of various kinds of deer, so this culture was not limited to any specific food item. During the 龍山 (Long-shan) Culture, wheat was added to the crops cultivated, and sheep and cattle were added to their livestock, which points out a diversification of food resources. Importance was attached to various species of deer, including Chinese water deer (Hydropotes inermis) mi-lu (Elaphurus davidianus), and Japanese deer, but not restricted to these, as hunted animals. As can be seen above, the range of food was narrow, but the foods on which the cultures depended showed a varied living pattern.

On the other hand, the early farming cultures which developed north of the Great Wall were characterized by the variety of cultivated crops, including foxtail millet, millet, kaoliang, and beans. Though pigs and dogs were seen among the livestock, their number was small. The life-style was based on hunting, fishing and gathering of plants, and a comprehensive economic pattern continued independent of a specific type of food item.
The breeding of cattle as a means of acquiring food showed a negative economic effect; the loss of energy was double in the case of pigs, which showed the best results, and reached as high as about 20 times in the case of cattle, which showed the worst results. Therefore, the decline of cattle breeding in the Yangtze Valley indicated how effective selective production activities centering around rice cultivation were in agriculture before manuring became common. Before dry-field farming advanced south to the Huaihé, rice cultivation had expanded as far as the Yellow River, and further, beyond the borders of China, into Korea and Japan. Rice became an important food source in these areas, which expressly proves the effectiveness of selective production.

The superiority of crops to nuts lies in their rich protein content; however, this protein is not broken down and absorbed by the human body without sodium. Therefore, the food system which depended on the hunting and breeding of certain cattle continued, even in the selective economic pattern centering around rice cultivation. It was not until the production and supply of salt started that culture based primarily on rice cultivation took form.