Chapter 4
Food Culture of the Han Korean Ethnic Group During Northeast Asian State Formation

Abstract The period of early state formation in Northeast Asia (3000–1000 BCE) has proved to be a topic of intense debate in Korean historical circles. Questions arise regarding the degree to which ancient mythological kingdoms can be regarded as historical. These include kingdoms ruled by China's Liao, Shun, and Xia kings, as well as the semi-mythological Shang and Zhou dynasties, along with Korea's Hwanguk, Baedalguk, and Dangun Joseon (or Gojoseon) kingdoms, This chapter discusses the prehistoric cultures of Northeast Asia including the establishment of Gojoseon and Dongyi (eastern archers) tribes, and the food cultures of Dongyi tribes which are characterized by fermented soybean products, soybean sprouts, *tofu* (soybean curd) and *bulgogi* (roasted beef marinated with soybean sauce).

The period of early state formation in Northeast Asia (3000–1000 BCE) has proved to be a topic of intense debate in Korean historical circles. Questions arise regarding the degree to which ancient mythological kingdoms can be regarded as historical. These include kingdoms ruled by China's Liao, Shun, and Xia kings, as well as the semi-mythological Shang and Zhou dynasties, along with Korea's Hwanguk, Baedalguk, and Dangun Joseon (or Gojoseon) kingdoms. China has designated the Liao, Shun, and Xia civilizations as belonging to the Heroic Age of myth, and the Shang and Zhou as historical dynasties; until recently, however, Korean scholars struggled to justify a decision regarding the Korean kingdoms due to insufficient research materials.

This lack of research can be ascribed to geopolitical historical events: In the wake of the collapse of the Baekje (660 CE) and Goguryeo (668 CE) kingdoms into Unified Silla (668–935 CE), the newly united country was unable to retain the northern territory of Goguryeo beyond the Amnok (Chi. Yalu) River. China occupied this northern border and remained stationed there upwards of a 1000 years, during which time the memory of ancient Korean hegemony in that region was lost. In modern times, the first half of the twentieth century proved highly unfavorable for productive scholarly research into ancient Korean food culture, and until recently, scholarly discussion of ancient Korean food culture could only scratch the surface due to a lack of records, whether written or archeological. In order to pick up the thread of Korean foodways, the hegemonic Dongyi tribes of southern Manchuria

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and the Korean Peninsula must be assessed culturally and historically as a single area of research.

4.1 Prehistoric Cultures of Northeast Asia

Three major ethnic groups that lived in ancient East Asia were the Dongyi tribes, who lived along the Liao River in northeastern China; the Huaxia tribes, who dwelt in the Yellow River region; and the Miaoman tribes, who occupied the Yangtze River region (Barnes 1993). Figure 4.1 maps the territories of these prehistoric tribes. Foundational stories and the fates of these tribes were transmitted over the years in the form of legends. Most Chinese myths concern these three tribes, especially the historic struggle spanning thousands of years between the Dongyi and Huaxia tribes as they continually vied to gain ascendancy over each other. Recent excavations of the Liao River civilization have garnered international interest, especially in the Hongshan culture discovered there. The objects unearthed provide archeological evidence of the existence of the Dongyi tribes, which were

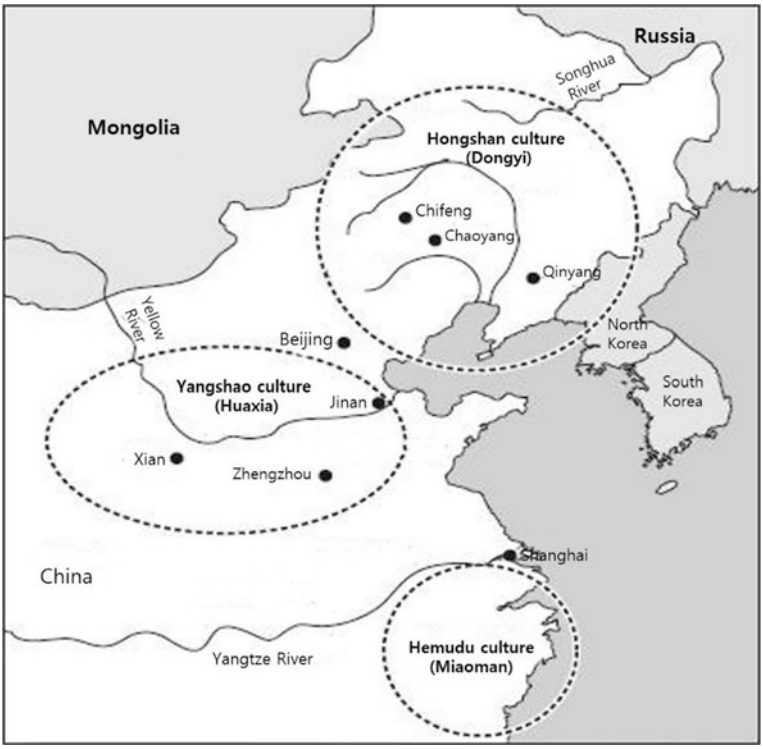

Fig. 4.1 Three prehistoric northeast Asian ethnic groups and their location

previously known only in myths. Excavations also led to the discovery of Liao River artifacts 2000 years older than the previously understood start date of Chinese civilization, which was thought to be located in the Yangshao (5000–3000 BCE) and Longshan (3000–2000 BCE) cultures of the Yellow River Basin. These discoveries necessitated a correction to the history of the emergence of civilization in Northeast Asia.

Hongshan culture was discovered in 1908 by Japanese anthropologist Torii Ryūzō (1870–1953), and soon thereafter, Emile Licent (1876–1952), a French Jesuit priest living in China, discovered 22 Neolithic sites. In 1934 Liang Siyong, a Chinese archeologist who had studied at Harvard University, presented his analyses on excavations in four northeastern provinces (Liaoning, Jilin, Heilong, and Rehe) in his "Report on archeology in Rehe." In 1935 Japan's Hamada Kōsaku and Mizuno Seiichi implemented a large-scale investigation of the area. After World War II the Chinese government continued the excavation work, naming the culture discovered in this region Hongshan. Characteristic artifacts include painted pottery, jade work, and microliths. Once full-scale excavations were achieved in the 1980s, Chinese scholars proposed that the cultures found along the entirety of the Liao River, including Xinglongwa, Hongshan, Zhaobaogou, and Xinle, constituted a Neolithic civilization new to the world; taken as a whole, the ancient peoples of this area were named the Liao River civilization. In June 2003, through China's "Process for Discovering the Origins of Chinese Civilization," China stipulated that the Liao River civilization, which predates the Yellow River civilization, would be known as the root of Chinese civilization. Until that point, the region of the Liao River civilization had been considered to be the land of the Dongyi tribes, outliers often depicted in Chinese historical texts as "foreign barbarians"—but now Chinese scholars began to see the region as one of the starting points of Chinese civilization, thus squarely situating the Dongyi as ancestors of the Chinese race and a foundational part of Chinese history. However, based on the discovery of stone mound tombs in Hongshan culture and the presence of similar stone mound tombs found in the regions of the Korean kingdoms of Gojoseon, Goguryeo, Baekje, and Silla, the Korean archeological academy argues that Hongshan culture is the progenitor of Korean culture.

Figure 4.2 shows the location of excavation sites of ancient Liao River cultures and the territory of Gojoseon. Details of each cultural, including artifacts unearthed, are summarized below.

1. Xiaohe West culture, Inner Mongolia, Aohan banner, Chifeng city: 7000–6500 BCE

   Neolithic Xiaohe cultural relics: semi-pit dwellings, various earthenware, stoneware and earthenware image of a face, etc.
2. Xinglongwa culture, Inner Mongolia, Aohan banner, Chifeng city: 6200 BCE–5200 BCE

   Neolithic Xinglongwa cultural relics: large-scale residential area, the first dragon-shaped water container, the world's oldest jade ware, comb-pattern pottery, flat-bottom pottery, baked clay male statue, etc.

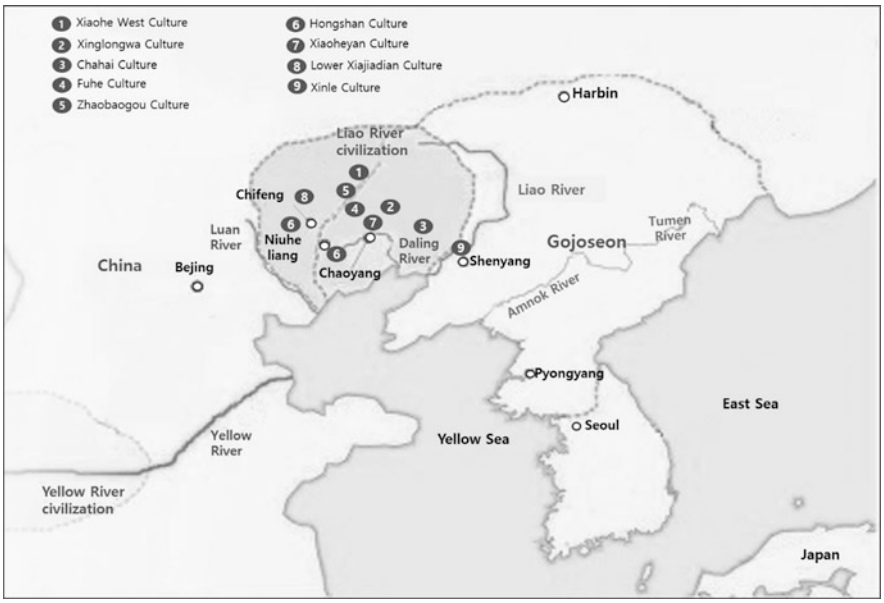

Fig. 4.2 The territory of Gojoseon and Liao River civilization

3. Chahai culture, bordering Inner Mongolia, Chahai region: 6000–5200 BCE
   Neolithic Chahai cultural relics: dragon-shaped stone statues, collective residences, various jade objects, comb pattern pottery, etc.
4. Fuhe culture, Inner Mongolia, Aohangi Fuhe Basin, Chifeng city: 5200–5000 BCE
   Neolithic Fuhe cultural relics: the oldest prognosticator bone, stone tools, bone tools, comb-pattern pottery, etc.
5. Zhaobaogou culture, Inner Mongolia, Luanhe Valley, northern Hebei Province: 5000–4400 BCE
   Neolithic Zhaobaogou cultural relics: the first rod-shaped earthenware, spiritual objects, fine stoneware, comb-pattern pottery, the first colored pottery in West Liaoning, etc.
6. Hongshan culture, Inner Mongolia, Hebei Province, Liaodong: 4500–3000 BCE
   Neolithic Niuheliang cultural relics: the first "mausoleum" (stone mound tomb), an object representing the existence of a state; statue of a goddess, various jade objects, bronze-casting relics, stoneware, colored pottery, plain pottery, pottery for rites, etc.
7. Xiaoheyan culture, Inner Mongolia, Aohangi Xiaoheyan Basin, Chifeng city: 3000–2000 BCE Bronze-stone combination period Xiaoheyan cultural relics: various patterns of pottery with symbols, stoneware, fine stoneware, bone ware, etc.
8. Lower Xiajiadian culture, Inner Mongolia, Aohan Mengke River Basin, Chifeng city: 2000–1500 BCE

Early Bronze Age, Lower Xiajiadian cultural relics.

9. Xinle culture in northern Liaoning Province, Shenyang City: 8000–7000 BCE
   Neolithic relics show evidence of maternal clans in settlement villages.

Hongshan peoples settled on the land, engaged in agriculture, and developed animal husbandry with domesticated pigs or sheep. They continued to hunt for wild animals and gather wild plants. Cultures that relied mainly on farming left archeological remnants such as broken stone tools, polished stone tools, microliths, and other implements used in daily life, as well as tools directly related to farming, such as plowshares, plows, and hoes. Comb-pattern pottery, which originated along the Korea Strait, appeared later at Hongshan archeological sites. Clay pottery bearing designs painted with a brush are thought to have been used for cooking and eating, while utilitarian brown pottery engraved with a design may have been used for storing food. The kind of painted pottery found in the contemporary Yangshao culture did not develop in Hongshan culture.

From the viewpoint of historical studies, the most significant evidence of a society moving in the direction of statehood entails the use of bronze tools and writing; although Hongshan culture had neither writing nor bronze, the great quantity and variety of artistically rendered jade implements and verifies that the culture had entered the stage of incipient state formation. Many ornaments made of jade and other stones have been found in Hongshan graves, including carved objects in the shapes of pigs, tigers, birds, and dragons. High artistic achievement in jade is a hallmark of Hongshan culture.

In Yeosu, South Jeolla Province, South Korea (the southern tip of the peninsula), similar jade objects were found arranged with human bones at a tomb site in 2007. They match the style of Hongshan jade, but date back as far as 6000 BCE, earlier than the estimated start date of Hongshan culture. Jade ornaments thought to date from the same era have also been discovered at the Munam-ri site in Jugwang-myeon, Goseong-gun, Gangwon Province, South Korea (northeastern coast). Around the same time Hongshan culture was being formed, there was an influx of jade ornaments on the Korean Peninsula. Analysis of the physical components of the jade excavated at Hongshan sites reveals that the jade came from Xiuyan, a region of Liaoning Province, China, about 400 km (249 miles) from Munam-ri. Xiuyan is not far from the Amnok River, and by continuing from there along the Tumen River, traders could have sailed down the east coast of Korea and arrived at Munam-ri. Comb-pattern pottery found across the region, including that of Hongshan culture, has also been found at Munam-ri. These discoveries suggest that in 6000 BCE the Hongshan culture in East and West Liaoning and the culture found in the northern area of the Korean Peninsula were likely one and the same.

Artifacts from Hongshan archeological sites provide important evidence substantiating the ancient history of the Korean race, which until recently had been known only in myths. For a thousand years the Korean race's ancient culture was denigrated by hegemonic Chinese kingdoms as "eastern barbarian" (Dongyi) culture, but current archeological discoveries attest that regardless of how the Dongyi tribes were viewed by outsiders, their culture in fact developed before heartland Chinese

civilizations (Shin 2018). In fact, it appears that the Dongyi tribes exerted equal influence on the ancient histories of China and Korea. Research into numerous historical texts has revealed that the Dongyi tribes comprised a massive race that played a leading role in Chinese civilization at that time. In a passage from *Zi yuan* (Essays on Chinese characters 266–420 CE) quoted in *Xin Tang shu* (New Book of Tang, or New History of Tang, 1060 CE), the author expresses a favorable impression of Dongyi peoples. Alluding to the natives of the Dongyi region, the writer distinguishes them as benevolent, gentle, and virtuous people. In *Hanshu: de li zhi* (Book of Han: treatise on geography) there is a passage describing the Dongyi as having placid natures, different from other foreign tribes the Chinese called "barbarians" (Lee and Kwon 2005).

Once the Goguryeo and Baekje kingdoms came under the rule of Unified Silla (668–918 CE), however, Goguryeo land north of the Amnok River was forfeited to Tang China, which resulted in a loss of competing power with China. In the passage of time, ancient Korean history came to be viewed erroneously through the lens of subservience to China. Much later, Japanese colonizers in the twentieth century (1910–1945) further distorted ancient Korean history by advancing the jingoistic falsehood that Korea had always been subservient to Japan or China. Seventy years after liberation, Korea has not yet completely emerged from this colonial fog. Over 200,000 Korean records were extorted or destroyed during the Japanese colonial period, and only 1400 *Uigwe* (Joseon Kingdom documents) were returned to Korea from Japan in 2011. Due to these narrative distortions and the damage done to ancient Korean records by Japanese occupiers (Kim 2011), no widely accepted theories of ancient Korean history have been identified—only rampant disputes. Thus, research on the Liao River civilization provided by findings at archeological excavations has the invaluable potential of recovering missing pieces of Korea's ancient history.

4.2 The Heroic Age

The representative mythological figures *Sanhuang wudi*, or Three Sovereigns and Five Emperors, are the subjects of orally transmitted stories that depict the beginnings of Chinese civilization. The oral history of China's ancient progenitors was first systematized and recorded during the Spring and Autumn (770–476 BCE) and Warring States (475–221 BCE) periods, and over the course of thousands of years, many theories were created and recreated by the assertions of prevailing philosophers and scholars. The Sanhuang wudi were long revered as historically factual personages until Qing (1644–1912 CE) leaders Kang You-Wei and Gu Jie-Gang, with others of the Han Learning school, who favored evidence-based scholarship, denied the historicity of the Sanhuang wudi and clarified that these were myths that had been fabricated by influential religious leaders.

Samguk yusa (Memorabilia of the Three Kingdoms) and *Jewang ungi* (Rhymed record of emperors and kings) are ancient texts containing the Korean founding

myths, but a book of myths that has more recently garnered attention among Korean historians is *Hwandan gogi* (Ancient record of bright heaven and earth) (Lim 1986). *Hwandan gogi* (or *Handan gogi*) is treated as a forgery by some historians in North and South Korea, and is not quoted in any historical work, but *jaeya* historians (lay historians) nevertheless judge it as a potential reference work for recovering Korea's lost ancient history. *Hwandan gogi* is described as a compilation of ancient texts brought forth in a single volume in 1911 by Gye Yeon-Su, a historian who fought for Korean independence in Manchuria. The supposed ancient texts consist of *Samseonggi* 1, written by High Priest An Ham-No under the Silla King Jinpyung; *Samseonggi* 2, by Won Dong-Jung; *Dangun segi*, by Yi Am-yi of the late Goryeo dynasty; *Bukbuyeogi*, by Hyuaegeosa Beomjang; and *Taebaek'ilsa*, by Yi Maek-Yi of the Joseon dynasty. *Samseonggi* 1 and 2 chronicle the history of Hwanin (God), who oversaw a land called Hwanguk, which was ruled by seven kings over a span of 3301 years, and of his son Hwanung, who founded the kingdom Baedal and its capital city, Sinsi, which was ruled for 1565 years by 18 kings. These narratives constitute the leading origin myths of the Korean race. Another founding myth, *Dangun segi*, which is well known among Koreans from Gojoseon histories, tells the story of the kingdom of Dangun Wanggeom, which was established and ruled over by Dangun and 47 kings for 2096 years after Baedal. *Bukbuyeogi* picks up with the histories of the six kings following Dangun, the bulk of which concerns the northern kingdom of Buyeo, a precedent of Goguryeo. *Taebaek'ilsa* contains the histories of the kingdoms of Hwanguk, Baedalguk, Samhan, Goguryeo, Balhae, and Goryeo. Although the publication process of *Hwandan gogi* is suspect, and professional historians deem some of the content to be incorrect, most agree that it would be a waste to discard or completely repudiate it.

4.2.1 China's Three Sovereigns and Five Emperors

The story of the Three Sovereigns of China appears in various texts, including *Shiji* (*Records of the Grand Historian*, 94 BCE) and *Fengsu tongyi* (Comprehensive meaning of customs and mores, 195 CE). The Three Sovereigns are more than kings; they are revered as gods in Chinese history because of the groundbreaking innovations they brought to the people. According to *Shiba silue* (Eighteen concise histories, 1279–1368), the Three Sovereigns are Fu Xi, Shennong, and Huangdi (the Yellow Emperor). The first of the Three Sovereigns, Fu Xi, is said to have had the body of a snake and the head of a human. He taught the people how to hunt and use fire. The second is Shennong, the god of the sun and farming, who is depicted as having a human body with the head of an ox. Shennong tested all wild plants for the people by ingesting them himself to discover which ones were good and which were noxious. He taught the people how to set up a weekly farmer's market, among other things. In the end, he died after eating a poisonous plant. The third Sovereign is known as Huangdi, who invented the wagon and taught people how to build houses and make clothes. He introduced the concept of writing, the fields of astronomy and

mathematics, and taught the art of medicine. All the gods under heaven followed Huangdi except for Chiyou, who rebelled. Huangdi gathered an army and ultimately defeated Chiyou at Zhuolu and Banquan. Chiyou and his henchmen Feng Bo and Yu Shi (the wind and rain gods) surrendered to Huangdi (Sima Qian, *Shiji*, "Wu di ben ji" [Biography of the Five Emperors]). These myths depict the Huaxia tribes, ancestors of the now-dominant Han Chinese culture, although the story of the Huaxia conquering the Dongyi tribes (led by Chiyou) differs from that found in Korea's *Hwandan gogi*.

There are several divergent myths about the Five Emperors, but according to *Shiba silue*, the Five Emperors constitute five descendants of the Yellow Emperor, namely, Emperors Shao Hao Jin Tian, Zhuan Xu Gao Yang, Ku Gao Xin, Yao Tao Tang, and Shun You Yu. Shao Hao is the Yellow Emperor's son, and Zhuan Xu is Shao Hao's nephew, who established a strict law decisively separating heaven from earth and fortifying the relationships between master and servant, man and woman. After Zhuan Xu came Shao Hao's son Emperor Ku, who brought merriment to the people by creating all manner of music and musical instruments. Emperor Ku's son, Emperor Yao, is also called Tang Yao because he ruled the region of China occupied by the Tang (referring to the Han Chinese). Emperor Yao taught the people the right timing for planting crops, designated a 366-day calendar, and organized a government based on a system of public officials. Seventy years after ascending to the throne, Emperor Yao sought a successor, requesting that his subjects recommend one. They suggested Shun, a descendent of Zhuan Xu, a man of exceeding filial devotion. Emperor Yao sent Shun two of his daughters as brides, entrusted him with a great number of tasks, and tested his abilities and character. After 3 years he declared Shun would be his successor and "tasked him with everything under heaven." 20 years later Emperor Yao retired and made Shun regent, and 8 years later Yao died. Some scholars assert that around the time of Emperor Yao a centralized government was established in the Yellow River civilization. Together, Emperors Yao and Shun can be seen as representative sage kings who ruled during a golden age, and along with Xia's King Yu (who succeeded Emperor Shun) and Shang's King Tang (who overthrew the last ruler of Xia), this period of benevolent rulers is referred to as "Yao Shun Yu Tang."

The Three Sovereigns and Five Emperors represent mythological figures of China, but some Chinese records indicate that they belonged to the Dongyi tribes. A counterargument asserts that the Dongyi tribes preceding the Qin dynasty (221–206 BCE) and the tribes following the Han dynasty (206 BCE-220 CE) constitute different tribes, but the Han Korean ethnic group that held and defended southern Manchuria and the Korean Peninsula is without question the mainstream of the Dongyi tribes. In writings like *Hwandan gogi*, some or all of the Three Sovereigns and Five Emperors are depicted ethnically as either Dongyi or Han Korean (Lim 1986). The formation of early states in Northeast Asia entailed several ethnic tribes striving to hold their ground in order to expand their power, but hegemonic groups among their posterity refashioned or reinvented the myths to legitimize their rule.

4.2.2 Korea's Dangun Myth

According to *Hwandan gogi*, whose foundational myths were purportedly compiled between the Silla (57 BCE–935 CE) and Joseon (1392–1897 CE), in 7197 BCE Hwanin, founder of the Dongyi tribes, lived in heaven between Baekdu Mountain and the Heilong River (Lim 1986). Through seven successive emperors over a period of 3300 years, there were no battles or wars in the land. The concept of extraordinarily long-lived leaders finds a parallel in the Bible (the record of foundational myths on which western culture is broadly based): the book of Genesis records the life spans of the ancient patriarchs, including Adam, Methuselah, and Noah, as reaching nearly a thousand years each. In 3897 BCE Hwanin sent his son Hwanung to earth with the lords of wind, rain, and clouds, and 3000 followers to establish Baedalguk in Sinsi (city of gods), the kingdom said to precede Gojoseon. Hwanung's kingdom continued for 1565 years, through 18 emperors. In 2707 BCE, the 14th emperor, Chi'u, expanded the kingdom's arable land and produced the copper and iron needed for use in war. Chi'u (Chi. Chiyou) also appears in the aforementioned myths of the Three Sovereigns and Five Emperors. In 2333 BCE Dangun Wanggeom established a third kingdom, Dangun Joseon. Dangun Joseon was the last legendary country to appear in the Hwanguk ("heavenly kingdom") myths, and it survived until 295 BCE, when it fell during the reign of its 47th emperor, Goyeolga.

In *Hwandan gogi*, the legendary land Hwanguk is said to have been established in the 7000 s BCE, which, in an archeological context, locates it as nearly coinciding with both the Primitive Pottery era in Korea, which began circa 8000 BCE, and the Xinle culture (5500–4800 BCE) of northeastern Manchuria, which itself overlaps with early Hongshan culture. Traces of pottery use from the 6000 s BCE have been found across the Korean Peninsula, indicating that a settled clan society had likely emerged there by then. Each clan would have formed a settlement in which people lived in communal homes centered around a leader.

As discussed in Chap. 2, pottery use led to the development of *jjigae* (stew) culture and fermentation techniques, methods of preservation that greatly increased the ability of people to secure and store food, simultaneously improving the nutrition and hygiene of their diet. The ability to consume a greater variety and volume of nutritious foods led to stronger physiques and increased population, which, not incidentally, likely positioned the Dongyi tribes as an early ruling class in Northeast Asia. Fermentation techniques that produced rice wine have been traced to Korean origins. The famous passage in China's *Shijing* (an anthology of poetry from the Yellow River and Yangtze River valleys) that "there are a thousand types of wine in Liao" refers to the reign of Emperor Yao in the Liaodong territory of the Dongyi. It is reasonable that elements of culture developed by the Dongyi tribes in 6000 BCE would have spread to the Yellow River valley and influenced Huaxia tribal civilization there.

Yoon (2015) argues that *Hwandan gogi*'s earliest myths explain the progression of the formation of the Korean race: the era of Hwanin represents the stage when

Table 4.1 Formative stages of the Korean race and comparison with China

Archeological period	Korean civilization	Yellow river valley civilization
Old stone age	Group society before 8000 BCE	Social bands/tribes before 8000 BCE
Middle stone age	Tribal society 8000 s BCE	Hamlet society 8000 s BCE
Early Neolithic era	Joint villages 4000 s BCE	Groups of villages 3500 BCE
Iron age	State of Gojoseon 2333 BCE	States of Xia, Shang, and Zhou 2200 BCE
Bronze age	Gojoseon, several states period, fourth century BCE	Spring and autumn period, 770 BCE

people lived in a peripatetic group society; the era of Hwanung represents a more sedentary lifestyle that included farming, or a settled clan society; and Hwanung and Ungnyeo's marriage represents an alliance between several villages, or a joint village society. Table 4.1 shows the formative stages of the Korean race (Yoon 2015).

The myth of Dangun, which describes the formation of early societies in Korea and Northeast Asia, is found not only in *Hwandan gogi*, but also in texts such as *Samguk yusa* (Memorabilia of the Three Kingdoms, Ilyon 1206–1289), *Jewang ungi* (Songs of emperors and kings, Yi Seung-Hyu 1287–1301), *Sejong sillok* (Annals of Sejong, 1452), and *Eungje siju* (Annotation of Eungje si [Writings for the Ming Emperor], Gwon Ram, 1416–1465). Each rendition reveals slight narrative differences. The foundation myth of Dangun is responsible for the development of the Three Gods doctrine, the wellspring of Korean folk religion: the gods Hwanung (heaven) and Ungnyeo (earth) had a son, Wanggeom (Dangun), who came down and served the people. This idea was formational in Asian shamanism and in the Dongyi tribes' traditional religion, totemism.

According to the record in *Samguk yusa*, distinctions can be made between (1) the era of Hwanin and Hwanung, (2) the era when Hwanung established the city of Sinsi in the Taebaek Mountains, and the bear and tiger lived together, and (3) the era when Dangun established the state of Gojoseon. The era of Hwanin and Hwanung spanned a 1000 years, from about 6000–5000 BCE, when Primitive Pottery culture was widely disseminated across the Korean Peninsula. At this stage, groups of clans formed joint village societies, similar to early Liao River cultures such as Xiaohexi, Xinglongwa, Chahai, and Fuhe. These occurred simultaneously with the era of Hwanguk in *Hwandan gogi*. Hwanung's founding of Baedalguk in the Taebaek Mountains, with Sinsi as its capital, coincided with the period in which fishing and hunting clans who worshipped tiger and bear totems were merging into small tribal alliances as a step toward Neolithic farming. This occurred in 4000–3000 BCE and mirrors the period of the Liao River Valley's Zhaobaogou and Hongshan cultures.

Dangun Wanggeom's establishment of Gojoseon (also called Dangun Joseon) marks the formation of the first centralized government in Korean history, which occurred through the merging of small tribal states during the transition from the

Neolithic era to the Bronze Age in the 2000s BCE. This period, represented by Liao River Valley cultures Xiaoheyan and Lower Xiajiadian, appertains to China's golden age, or period of peace. The territory of Gojoseon is estimated to have covered at least the area of the eastern Liao River in the region of Baekdu Mountain (Chi. Changbai), where the Korean Peninsula abuts the Northeast Asian continent.

After the Neolithic era, an increase in population led to the emergence of tribal states, and as these began to undergo militarization around 1500 BCE, the era of megalithic culture began, which is represented by large stone structures such as dolmens and menhirs. This period coincides with the early Bronze Age on the Korean Peninsula. Dangun Wanggeom merged nine Tungus tribes to form the Joseon kingdom (now called Gojoseon, or "Old Joseon") with its capital in Asadal. Gojoseon territory included the area north of the Han River, Heilong River's southern Manchuria region, and the eastern Liao River region (Nahm 1988).

4.3 The Establishment of Gojoseon

In *Gojoseon yeongu* (A study of Gojoseon), Yoon (2015) posits that Gojoseon was a powerful state encompassing the entirety of the Korean Peninsula and Manchuria. The Luan River and the territory downstream, the Jieshi Mountains, served as a western border, west of Beijing; the Argan River marked the northern border; the eastern border was bounded by the Amur River (perhaps reaching Maritime Province, Russia); and the southern border was formed by the southern coast of the Korean Peninsula.

The record of the Dangun myth in *Samguk yusa* (Ilyon 1285) can be found in Sect. 2, "Wanggeom Joseon" of Book 1, *Kii* (Wonders), as follows:

> *Wei shu* (The book of Wei) states, "Two thousand years ago, Dangun Wanggeom founded a nation in Asadal. (It was called Muyeob Mountain, or Baegak, in Baekju. It is said that it was located to the east of Kaesong.) He named it Joseon, and it happened during the same period as the reign of Emperor Yao." *Gogi* (Ancient record of Korea) declares, "In the old days, Hwanung, the bastard of Hwanin, longed to live in the human world under the heavens. When his father learned of his son's desire and looked down at Taebaek, one of three mountain regions, he deemed it a worthy place in which his son could benefit the human race. He gave three heavenly seals to Hwanung and let him rule the land. Hwanung led three thousand of his heavenly cohort down to Sindansu, a holy sandalwood tree, near the top of Taebaek Mountain and called the place Sinsi (City of God). He became Hwanung cheonwang (Heavenly Emperor Hwanung). He remained in the world to govern human life, grain, disease, punishment, good and evil, and over 360 human affairs, reigning and edifying with his ministers *Pungbaek* (wind), *Usa* (rain), and *Unsa* (cloud). At that time, there was a bear and a tiger living in the same cave, and they petitioned Hwanung, the divine king, to transform into humans. In reply, Hwanung gave them a handful of psychedelic mugwort and 20 bulbs of garlic and said, "If you eat this and do not see sunlight for a hundred days, you will become human." The bear adhered to the diet, and after only twenty-one days turned into a woman, but the tiger could not tolerate the fast and left the cave before achieving the desired change. Since Ungnyeo (Bear Woman) had no partner, she went to the holy sandalwood tree and begged to be granted children. Hwanung took pity on her and transformed into a human in order to marry her, and soon she gave birth to a son they named

> Dangun Wanggeom. Dangun ascended the throne in the year Gyeongin in Pyongyang, 50 years after the Tang Emperor (Emperor Yao) came to power in China, and named the nation Joseon. Later, he moved the capital to Asadal on Baegak Mountain, and the place was called Gungholsan or Geummidal, and he ruled the country for 1,500 years. In the year Gimyo (1122 BCE), King Ho founded the Zhou dynasty in China and sealed Gija to Joseon, upon which Dangun moved his capital to Jangdangyeong. Later he returned to Asadal, abdicated the throne, and hid, becoming a mountain god. He was 1,908 years old."
>
> *Pei Ju zhuan* (Biography of Pei Ju), written during the Tang Dynasty (618–906 CE), states, "Goryeo [Goguryeo] was originally Gojuk-guk (now Haeju), but the Zhou Dynasty enthroned Gija there and called it Joseon, and the Han Chinese had three commanderies in the land: Xuantu, Lelang, and Daifang." The same information is related in *Tongdian* [Comprehensive institutions (766–801)]. *Hanshu* (Book of Han, 82 CE), however, lists four commanderies: Zhenfan, Lintun, Lelang, and Xuantu. Why does one record mention only three commanderies, one of which has a different name?

The existence of the Four Commanderies of Han (206 BCE–220 CE, China) and the importance and location of the states Gija Joseon and Wiman Joseon form the nexus of debates over ancient Korean history. After liberation from Japanese rule (1945), professional Korean historians identified the position of the Lelang Commandery (108 BCE–313 CE) as Pyongyang, asserting that it succeeded Gojoseon and established Gija Joseon, and that later, Wiman Joseon destroyed Gija Joseon and ruled the Gojoseon region. However, lay historians found that the Four Commanderies of Han were located in the Liao River territory, and that Gija Joseon and Wiman Joseon did not replace the state of Gojoseon. The root of the problem behind this debate lies in the deficiency of historical sources, without which it is difficult to verify the ancient names and locations of the kingdoms in question, particularly as place names were recorded differently depending on the era. Yoon (2015) has attempted to clarify this confusion by exhaustively examining all pertinent literary sources and historical research currently available.

Gojoseon became a powerful state by creating a confederation of the joint village societies that were scattered across Manchuria and the Korean Peninsula. It expanded its territory to the west by advancing across the Luan River and moving its capital to Asadal, in the Luan River region of the Baiyue Mountains. Around 1100 BCE the Western Zhou dynasty exiled the Gija clan to the territory of Gojoseon's western frontier and had them settle along the Luan River, putting them in charge of defending the border. Gojoseon retreated and relocated its capital to Jangdangyeong (Zangtangjing), along the eastern reaches of what is now the Daling River. In 195 BCE Wiman was exiled from Western Han to Gija Joseon, and before long, he usurped the government from Gija's 40-year-old grandson, Jun, and founded Wiman Joseon. In 108 BCE Western Han's Emperor Wu overthrew Wiman Joseon, and after setting up the Lelang, Lintun, and Zhenfan commanderies in that region, followed up on his victory by attacking the border of Gojoseon. In 107 BCE he installed the Xuantu Commandery along the west bank of the Liao River. Accordingly, the establishment of Gija Joseon, Wiman Joseon, and the Four Commanderies of Han all occurred in the western border region of Gojoseon, along the western reaches of the Liao River, while the Korean Peninsula and the northeastern area of the Liao River were under the rule of Gojoseon, the successor of which was

the Several States Period, followed by the four kingdoms Goguryeo, Baekje, Silla, and Gaya.

Several statelets existed during the time of Gojoseon, including Buyeo, Gojok, Goguryeo, Ye, Maek, Chu, Jin, Beon, Nangnang, Imdun, Hyeondo, Suksin, Cheonggu, Yang'i, Yangju, Bal, Yu, Okjeo, Gija Joseon, Biryu, Haengin, Haedu, Gaema, Guda, Jona, Juna, Jin, and peninsular Han (Yoon 2015). Among these, Jin is considered to have been under the direct control of Dangun's descendant, King Bu (r. 232–220 BCE), thus retaining a higher status than that of the other states. Jin covered the area from the Liaodong region to northwest of the Korean Peninsula and shared a border with the peninsular state of Han. Due to Han's location in the southern region of the Korean Peninsula, it received no harm during the battles between late Gojoseon and Wiman Joseon or Gojoseon and Western Han (China). Thus, the Han Korean culture was more fully preserved compared to that of Gojoseon culture and society.

Towards the end of Gojoseon, the power of Wiman Joseon increased in the Liao region at Gojoseon's western border, advancing as far as today's Daling River Basin. When the succeeding Han Commanderies were established following the demise of Wiman Joseon, the Gojoseon statelets in western Liao were transferred to the eastern stretch of the Liao River. Jin incurred heavy damage and could no longer maintain its capital in the eastern region of the Daling River, transferring it further east and south to the region of today's Pyongyang, which had served as a capital during the era of joint village societies. King Bu and his clans emigrated south, where the Han Koreans had not been ravaged by war. The people of Han accepted the Jin clan and honored them as their rulers. King Bu became known as Great King Jin and was made the highest leader of the Han (Yoon 2015). From around the third century BCE the ruling power of Gojoseon began to weaken. The Several States period followed in the wake of Gojoseon's demise.

4.3.1 Gojoseon Industry and Lifestyle

Farming was the key industry of Gojoseon economy. Since farming had existed from the period of Lower Neolithic tribal societies, by now many different grains were being cultivated, including rice, barley, foxtail millet, broomcorn millet, soybeans, adzuki beans, sorghum, barnyard grass, and more, along with hemp, jute, and other textile fibers (Yoon 2015). Cultivated lands were divided and irrigated, bronze was used to make farm implements like plows and spades, and cows and horses were being used for farm work. Each village clan engaged in what were by then well-established communal traditions, the most basic of which was shared labor. Grains were the main crop, and by then rice may have already become a staple crop. This deduction would push the start date of rice farming back a thousand years or more from the previously held theory, which pointed to the Three Kingdoms period (57 BCE–668 CE) as the probable time of incipient rice cultivation.

As Gojoseon waned, tools began to be forged in iron, which came to be preferred over bronze, and were often paired with wooden handles. The development of such tools allowed for more rapid soil preparation, and the volume of crop yield increased significantly. Along with agriculture came animal husbandry and weaving, and rudimentary looms were used to make cloth from hemp, wool, and silk. Hunting and fishing continued to play an important role in daily life (Yoon 2015).

The houses in farming villages included some structures built above ground, but most were dugouts halfway underground, mainly rectangular in shape. Lots varied in size from 80 m^2 for a larger footprint to 10 m^2 for a smaller shelter, but most averaged about 20 m^2. Roofs were made of straw or other grasses, often thickly smeared with mud. Early Gojoseon remains show evidence of fire pits in the homes, which would have been used for warmth, while by late Gojoseon the beginnings of *ondol* (floor heating) can be seen. In order to block moisture, floors were tamped down and heated with fire, and then fine clay, or clamshells mixed with clay, were added to the floor. Wooden planks or mats made of reeds or straw were laid on top of the clay. Partitions were installed in the houses, cupboards and cellars were made, and grains were stored in large earthen jars. The ruling class of Gojoseon lived in much larger and better-equipped structures above ground.

For eating and drinking, Gojoseon people used *byeon* (bamboo dishes), *jo* (dishes with lids), and *du* (wooden footed dishes), and various forms of clay pottery continued to be used. The staple foods of Gojoseon consisted of rice, barley, foxtail millet, broomcorn millet, pulses, adzuki beans, sorghum, and barnyard grass. For side dishes, they mostly ate wild greens and wild and domesticated animals. People cooked whole grains, but they also used stone mortars and pestles to grind grains into flour for cooking. Ground rice was steamed in earthenware steamers and formed into rice cakes (*tteok*), which were widely consumed during the Gojoseon period. The practice of making jjigae (stew) in earthenware pots, which began in the Primitive Pottery era, expanded across the land until it became a universal method of cooking. During this time the manufacture of salt increased, and salt preservation and fermentation techniques for vegetables, fish, shellfish, and meat had become routine, as had the production of alcohol and vinegar. A number of different types of pottery vessels have been excavated at Gojoseon archeological sites, including earthenware pots (*ttukbaegi*), footed and non-footed small bowls, rice bowls, and plates. Specialized food wares suggest classification of food types and purposes: distinct vessels were created for main dishes, side dishes, alcohol, and sweet treats, as well as for banquets and ceremonies (Yoon 2015).

4.4 History of the Dongyi Tribes

The legendary nations of the Chinese Heroic Age begin with Emperor Yao and continue with Emperor Shun, followed by the Xia (2000–1520 BCE) and Shang (1520–1030 BCE) dynasties. The legend of the Three Sovereigns and Five Emperors tells the story of the formation of China's mythologized kingdoms and the battles

fought between clans. Recent Korean historians claim that the Dongyi tribes established and ruled the land during China's Shang dynasty. Most legends, including China's, were utilized by future governments to legitimize current royal authority or leadership. Filtering the contents of legends for unadulterated facts has proved ineffectual. Only when tied to archeological evidence can the gaps in prehistoric legends be filled and the work of restoring the history of the Dongyi tribes between 8000 and 2000 BCE succeed.

The term "Dongyi" is the designation given in ancient Chinese records to the tribes that lived in Northeast Asia, including the Korean Peninsula. Records such as *Hou Han shu* (Book of the Later Han, 25–220 CE [dates refer to the given dynasty]), *Sanguo zhi* (*Records of the Three Kingdoms*, 8–265 CE), *Jin shu* (Book of Jin, 265–418 CE), *Liang shu* (Book of Liang, 502–557 CE), *Sui shu* (Book of Sui, 581–618 CE), and *Xin Tang shu* (New Book of Tang, 618–907 CE) comprise part of China's official recorded history and contain biographies of a succession of important people belonging to the Dongyi tribes (Shin 2018). The 85th volume of *Hou Han shu*, 75th biography, which concerns the Dongyi, includes the tribes Buyeoguk, Eumnu, Goguryeo, Guryeo, Dongokjeo, Ye, and Han (Korean).

Figure 4.3 shows the territory of the Dongyi tribes during the Gojoseon period. The Dongyi tribes are associated with megalithic culture, represented here by dolmen and a loquat bronze sword.

The character for *dong* in Dongyi means east, and according to *Shouwen jiezi* (An explanation of written characters, 100 CE), the character for *yi* in Dongyi derives from the combination of the characters for big, arrow, and people, or "big-arrow tribe(s)." The traditional Korean dictionary definition of "Dongyi" as "barbarians from the east" reflects the vilification of the tribes by later generations of Chinese, who used an epithet to denigrate the Dongyi peoples. However, the term should be interpreted by its original meaning, "the tribes from the East that use arrows," or the Eastern Archer tribes. The people of Goguryeo wore bird feathers in their hats to symbolize their use of arrows to hunt birds, unlike other tribes in the region, who hunted mainly with knives or spears.

In later Chinese literature, the use of "Dongyi" often refers to the ancient tribes of Gojoseon, but during the Han dynasty (206 BCE-220 CE), Gojoseon people were referred to as Ye, Maek, or Han Korean, collapsing the difference between the Yemaek and Dongyi tribes. After the construction of the Great Wall, the Dongyi tribes inside (west of) the wall merged with the Han Chinese, while the Dongyi outside (east of) the wall came to be called Ye or Maek, until the term "Dongyi" gradually disappeared from the record.

Yoon (2015) suggests that the principal group forming the Han Korean tribe consisted of the indigenous Dongyi who lived on the Korean Peninsula and in Manchuria. While it is plausible that immigrants from different regions may have arrived from time to time, Yoon asserts that there is little evidence they conquered or suppressed the native tribes in that area.

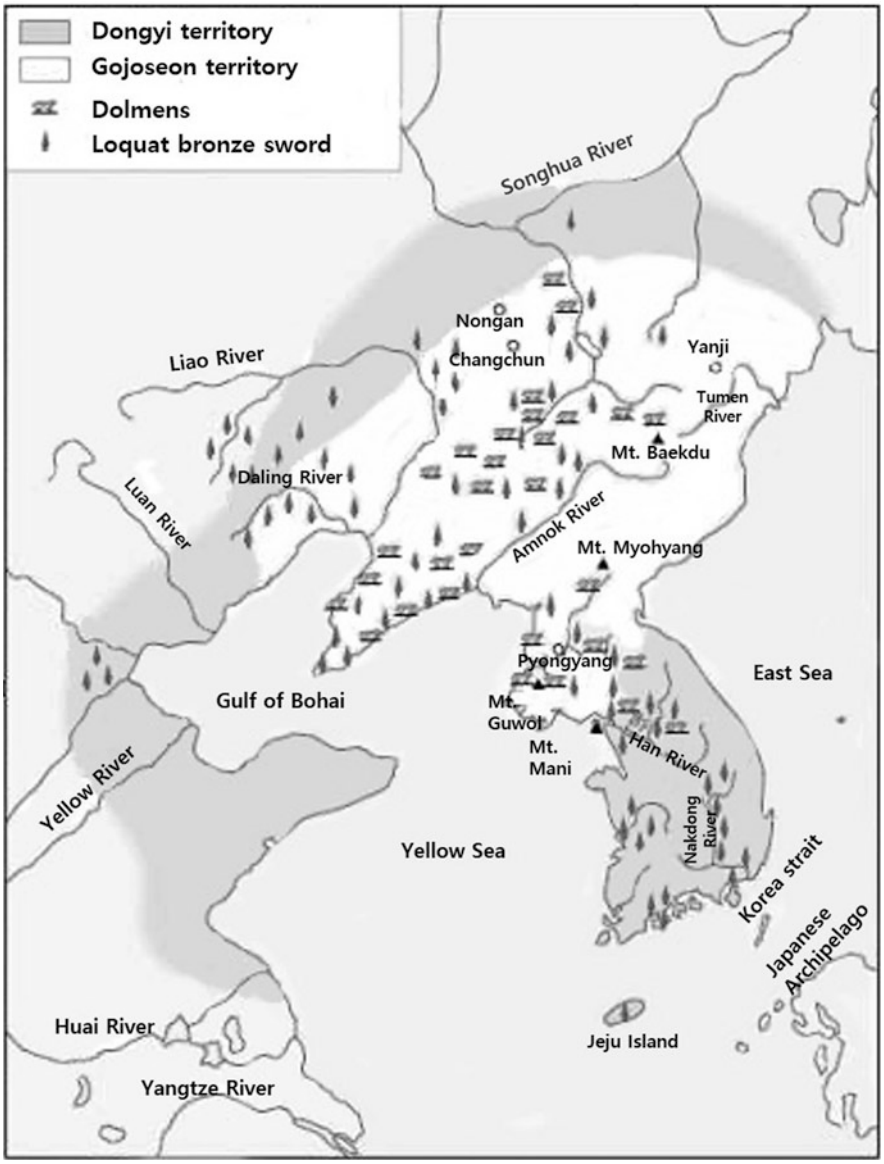

Fig. 4.3 The territory of Dongyi tribes during the Gojoseon period

4.5 Food Culture of the Dongyi Tribes

As discussed in Chap. 1, scholars postulate that the first inhabitants of Northeast Asia subsisted on a largely carnivorous diet, based on their practice of hunting large animals, while their descendants in the late Paleolithic era shifted to an omnivorous

diet due to a gradual increase in plant consumption. This was facilitated by the cyclical use of caves and shelters that provided a concentration of edible plants nearby—plants that had grown from seeds discarded or excreted by previous dwellers after the consumption of wild fruit and plants. Typical examples of plants increasingly used as food included tree fruits such as acorns, wild fruits like wild berries and grapes, grain seeds, plant roots, and tree shoots. Analysis of charred remains at Upper Paleolithic archeological sites reveals traces of a number of plants, including rice (*Gramineae*) and beans (*Leguminosae, Papilionoidiae*). As the plant food supply expanded, people gradually moved from mountainous regions to plains. Evidence indicates that hunting also changed over time, from chasing after large prey to hunting small game on flat land with bows and arrows (Lee 1998).

At the beginning of the Holocene epoch, the Paleolithic people living on the Korean Peninsula and along the Korea Strait expanded their use of marine products by inventing pottery. With earthenware vessels, they were able to facilitate further use of quick-rotting seafood by cooking it over a fire for immediate consumption or boiling and drying it for storage. They also developed a method of fermentation that consisted of salting the food with seawater and placing it in a crock. The numerous shell middens on the coasts of Korea and Japan attest to the use of these fermentation techniques, which represent a unique characteristic of food culture in this period.

As discussed above, jjigae, which is a representative element of Korean food culture today, is a dish made by boiling seafood and vegetables with salted water in an earthenware vessel. It is thought to be a legacy of the era of Primitive Pottery culture on the Korean Peninsula (Lee 1999). The use of earthenware for the storage of collected grass seeds (grains), vegetables, meat, and seafood inevitably leads to natural fermentation, so alcoholic grain fermentation (*gokju*), pickled vegetables (kimchi), salt-fermented fish, and meat sauce were probably made before farming began in this region.

Professor Lee Sung-Woo (1990) concludes that "In the history of humankind, the first group of people to use soybeans as food, even among the Dongyi tribes, was the Yemaek tribe," and refers to this development as "the beginning of nation formation in Northeast Asia (4000–2000 BCE)." He believes that nomads from northern regions who began settling farms in southern Manchuria and the Korean Peninsula around the Baekdu Mountains during the Neolithic Era were the first to cultivate soybeans, and that by the early Bronze Age (1500 BCE), soybean consumption had spread throughout the entire region of Northeast Asia.

4.5.1 The Origin of Fermented Soybean Foods

The technique for fermenting soybeans to make sauce developed almost simultaneously with the use of soybeans as food. The basis for this assertion rests on remains discovered at shell mounds that date to about 6000 BCE—the Primitive Pottery era—that point to the use of alcohol fermentation techniques. By about 3000 BCE the making of grain wine using *nuruk* (cereal alcohol fermentation starter)

had become universal. It follows that when soybeans began to be cooked for food in pots, the use of *meju* (soybean fermentation starter) to ferment beans in crockery would also be possible. Just as boiling saltwater in a pot with seafood, vegetables, and grains in preparing jjigae led to the discovery of salt, techniques for preserving foods in salt were also developed and would come to be used in making fermented soybean sauces. It is estimated that the manufacture of fermented sauces using beans would have begun in Korea and the southern Manchuria region in the 1000s BCE by the Dongyi tribes. This inference supports written records stating that soybeans, which were introduced to China in the seventh century BCE, were handily made into soybean fermented food (*chi*) by the time of the Han dynasty, 220 BCE.

The earliest written record of alcoholic drinks is found in the aforementioned phrase from *Shijing* in about 1000 BCE, "There are a thousand wines in Liao." Through archeological research, it is now known that by 2000 BCE, during the time of Emperor Yao, a great variety of grain wines were already being made. By now the people of Korea and southern Manchuria had begun using soybeans for food, and all the conditions for the birth of soybean fermentation techniques were present.

Neolithic peoples would have been used to consuming very strong-smelling, nearly rotten meat because they lacked proper storage methods for the meat they hunted. They likely would have desired strong seasoning to improve the insipid flavor of the grains and plant foods they grew as they began to settle on the land and farm. If leftover cooked soybeans were placed in a crock, mold and bacteria would grow on them and the protein would decompose. The natural state of the decomposed amino acids and ammonia would emit a smell and taste similar to that of the strong flavor of preserved meat. Today, foods like Korea's *cheonggukjang* (thick, fermented soybean paste) and Japan's *natto* (fermented soybeans) are made using a similar process. The first mention of fermented soybeans in Chinese literature refers to chi (Kor. meju), which is soybeans mixed with mold and bacteria to form, as mentioned above, a natural soybean fermentation starter.

The oldest archeological evidence of fermented soybean product was excavated in 1972 at the Mawangdui tombs site in the eastern part of Changsha County, Hunan Province, China, where traces of soybeans and fermented soybean paste have been found. The most intact of the three tombs there belonged to Xin Zhui (213–163 BCE), also known as Lady of Dai, wife of Marquis Li Cang (Prime Minster 193–186 BCE) from the Western Han period. Buried in the tomb with her were a variety of foods and grains she would have enjoyed during her lifetime, held in 48 bamboo containers and 51 ceramic dishes. Each receptacle bore a label naming the food items held within; 312 labels were inscribed on wood blocks, 49 on wood tablets. Figure 4.4 shows the carbonized soybean paste and soybean seeds excavated from the tomb (Hunan shengbo wu guan 1978; Lee 2004).

In China's ancient record *Shangshu* (*Book of Documents*, oral legends recorded during the Zhou dynasty) the only seasonings mentioned are salt and sour green plum, and in both *Chu ci* (Songs of Chu, 220 CE), in which food is discussed at length, and *Li ji* (The book of rites, 450 BCE-100 CE), the question "What is chi?" arises. According to Huang (2000), there is no mention of chi in Chinese literature before the Qin dynasty (221–209 BCE), but by the time of Western Han (206 BCE–

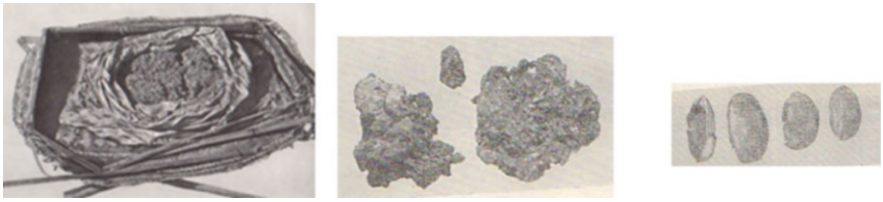

Fig. 4.4 Carbonized soybean paste and soybean seeds found in Mawangdui Tomb

9 CE) chi had become a staple food. One of the food containers found in Lady of Dai's tomb is labeled "chi" (Lee 2004). *Shiji*'s "Huo zhi lie zhuan" (Biography of important people and customs, 90s BCE) contains a phrase which means "a thousand jars of nuruk and salted chi." *Jijiupian*, a Chinese primer from 40 BCE, mentions a type of food containing turnip sprouts, salted chi, sour pickles, vinegar, and layered, fermented meat. In Eastern Han's *Shuowen Jiezi* (Character dictionary, 100 CE) chi is described as being made by fermenting soybeans in a dark place and mixing them with salt, similar to today's recipe for cheonggukjang. Also, *Qian hanshu* (History of the Former Han Dynasty, 221 BCE–9 CE) states that of the seven wealthiest people in the land, two gained their riches in the chi trade. *Shijing* records that when Liu Chang, King of Huainan, was banished in 173 BCE for instigating a rebellion against the Han emperor, he and his attendants were supplied with firewood, rice, salt, chi, and cooking utensils (Huang 2000).

However, Zhang Hua's *Bowuzhi* (Records of diverse matters, 290 CE) states that "There is chi in other countries," and in *Bencao Gangmu* (Compendium of *Materia Medica*) by Li Shizhen (1518–1593) too, chi is mentioned as a foreign product. A passage in *Xuezhai zhanbi* (a Northern Song (960–1126 CE) book of textual criticism) reads, "The word 'chi' does not appear in the *Jiujing* (Nine classics); only a dialect version of the word appears." In the article on Goguryeo found in *Sanguozhi* (Record of the Three Kingdoms), Book of Wei, Biography of the Dongyi tribes (8–265 CE), the people of Goguryeo (37 BCE–668 CE) are described as excelling in fermentation techniques. Additionally, there is a quotation from *Xin Tang shu* (New book of Tang) in *Haedong Yeoksa* (A history of Korea), compiled during the time of Kings Jeongjo (r. 1776–1800) and Sunjo (r. 1800–1834) of the Joseon dynasty, stating that emissaries were carrying chi (Kor. *si*) from the capital of Bohai (Kor. Balhae), a specialty food of that region (Lee 1992). In Chinese literature, the word *jiang* (Kor. *jang*), which today means "fermented sauce," referred instead to *yukjang*, a dish of fermented, layered meat. The first time the term "soybean sauce" (*doujiang*) appeared in Chinese literature was toward the end of Eastern Han, in a tract written by Wang Chong called *Lunheng* (Disquisitions, 80 CE). In light of these facts, the dominant Korean theory today is that China's "jiang" was not soybean sauce, and that soybean fermentation techniques were introduced to China from outside its borders (Lee and Kwon 2005).

The evidence culled from these records and archeological sites provides a basis for the conclusion that the technique for fermenting soybeans began with the Dongyi

tribes in southern Manchuria and the Korean Peninsula. At first, they used soybeans as food out of necessity, but as pottery and fermentation techniques developed, they eventually mastered the fermentation of soybeans, including the making of chi. Ancient fermented soybean products are similar to the materials Koreans use today when making traditional jang, including meju (soybean fermentation starter) and cheonggukjang (quick-fermented soybean paste). Dishes like these, then, were being produced during the Bronze Age (1500 BCE). Fermented soybeans that started off in the form of meju gradually developed into *ganjang* (soybean sauce), *doenjang* (fermented soybean paste), and other savory sauces, which became widely disseminated in Northeast Asia by the time of the Han dynasty (200 BCE), if not earlier (Lee and Kim 1998).

4.5.2 The Origin of Soybean Sprout Cultivation

Traditional soybean products, aside from fermented variations, include soybean sprouts, soy milk, and *dubu* (soybean curd; Jap. tofu), but unfortunately, when and where these foodstuffs were first made has not been discovered. Traces of these products are first mentioned in literary texts from the Han dynasty period. After the Han dynasty, soybean sprouts appear in Chinese medical books as *dadou huangjuan*, or "yellow sprouts of soybeans." Soybean sprouts used as medicine would be sprouted only 1–2 cm in height and then dried and ground into a powder. In contrast, Koreans preferred to sprout their soybeans longer, for direct consumption. *Shennong Ben Cao Jing* (The Divine Farmer's *Materia Medica*, oral traditions compiled and recorded c. 250 CE) is an ancient text of medicinal herbs that were reportedly used during the Zhou (1030–221 BCE) and Qin (221–207 BCE) dynasties. The "Cures for 52 ailments" section contains written characters for *shu* (soybeans), *niemi* (rice malt), and *shumi* (glutinous foxtail millet), but not dadou huangjuan (Huang 2000). It may be the case that soybean sprouts were not used as medicine until after the Han dynasty.

The first text to mention soybean sprouts as food is the Southern Song (1127–1279) cookbook *Shanjia qinggong* (Pure food of the mountain people), which contains a detailed description of how to sprout them. *Dongjing meng Hua lu* (The Eastern capital: a dream of splendor, 1149) mentions that *yadou* (bean sprouts) were frequently sold as a staple food in the Northern Song (960–1126) capital market. *Ben Cao Tu Jing* (Illustrated canon of herbology, 1061) casts mung bean sprouts as the most delicious kind of sprouts. The Yuan dynasty (1260–1368) text *Jiujia biyong* (Mongolian home-style cooking) is the first work to contain the term *douya* (bean sprouts), but in its recipe for these beans, douya is referred to as mung bean sprouts. Toward the end of the Han dynasty, mung beans had been introduced from India or Southeast Asia to China, as mentioned in the texts *Qimin yaoshu* (Essential techniques for the welfare of the people, 544) and *Shi liao ben cao* (Compendium of dietary therapy, 670). Even today, mung bean sprouts are a favorite in the southern region of China, while soybean sprouts are more popular in the north.

The regional preference for each of these two foods seems to coincide with the locales in which each crop was first cultivated.

The technique of sprouting grains appears to have been familiar to people by the Primitive Pottery era. When grains are harvested and placed in a moist environment, they sprout of their own accord, creating an enzyme that breaks down the grain's starch into a simple sugar. The grains can be dried (or roasted) and then ground to produce malt powder, which has a sweet taste. The history of malt, then, can be said to be nearly as old as the history of fermentation. In ancient Chinese texts such as *Chu ci* and *Li ji* the word *nie* (malt) appears. The fact that taffy, a product made from malt, appears in *Shijing*, the oldest collection of Chinese poetry, indicates that the technique for making malt was likely in use well before the advent of literary Chinese.

People living in Northeast Asia began to cultivate soybeans around 2000 BCE, and during cold winters, when it was difficult to grow green vegetables, soybean sprouts may have been consumed as an acceptable substitute. When soybeans germinate, the trypsin inhibitors are deactivated, and the oligosaccharides break down, which reduces intestinal gas; in addition, vitamins such as ascorbic acid, riboflavin, and niacin increase dramatically. For this reason, soybean sprouts would have been nutritionally valuable to people living in the cold north, while in warmer climes where food was relatively more abundant, as in China's southern region, there may not have been as great an interest in sprouting. Huang (2000) points out that to the Han Chinese, who lived in warmer regions, bean sprouts were considered to be the food of poor people and thus were less likely to be featured in Chinese literature. The term *daedu hwang* (soybean sprout), quoted from a Chinese medical text, appears in the Goryeo work *Hyangyak gugeupbang* (Native first aid prescriptions, 1236). Today soybean sprouts are one of the vegetable dishes Koreans enjoy eating throughout the year, and North Koreans living in China's northeastern Jilin Province are more likely to eat soybean sprouts than the Chinese. Generally speaking, soybean sprouts are not frequently consumed in China or Japan.

4.5.3 The Origin of Tofu

The origin of tofu (Kor. dubu) is unclear (Huang 2000). During China's Song (960–1279), Ming (1368–1644), and Qing (1644–1911) dynasties, and until recently too, tofu was believed to have been made for the first time during the Han dynasty by the King of Huainan, Liu An (179–122 BCE). The basis for this is the Song dynasty legend of Mt. Bagong tofu. In it, Liu An is a Daoist ascetic who, exhausted from an extended meditation and fast, nevertheless scales a mountain and encounters the eight Daoist immortals. Liu asks them the secret to everlasting life, and they instruct him to eat tofu. They teach him how to grind soybeans into soymilk and then coagulate it—a process similar to that of making tofu. The writings of Zhu Xi (1130–1200) of the Song dynasty contain a line about the King of Huainan earning money with his skill in tofu-making. Similar content regarding Liu An being the first

to make tofu can be found in Ming dynasty texts such as *Cao mu zi* (a philosophical work, 1378), *Wuyuan* (The origin of things, fifteenth century), and *Ben Cao Gang Mu* (Compendium of *Materia Medica*, sixteenth century).

However, upon close examination of *Huainanzi* (Master Huainan, c. 139 BCE), scholar Yuan (1981) reveals that there is no mention of tofu in the text, nor any ancient words that might refer to tofu, such as *li qi* or *lai qi*. Further, Yuan asserts there is no record of tofu-making before the Song dynasty (960–1279), whether in Tang (618–906) or any earlier documents. In classic food texts from the Tang dynasty, including *Qimin yaoshu* (Essential techniques for the welfare of the people, 544), there is no reference to tofu. The oldest record of tofu, according to Yuan, is found in *Ben cao yan yi* (Extension of the pharmacopoeia) from the end of the eleventh century. Yuan asserts that tofu did not exist during the Tang dynasty, and that it was first made in the eleventh century, after which it enjoyed widespread use for the remainder of the Song dynasty.

Meanwhile, Shinoda Osamu concludes that tofu was made toward the end of the Tang dynasty, based on a line in the Chinese text *Qing shi lu* (Veritable records of the Qing dynasty, 960): "When Shiji became Qingyang's Chief Executive, he emphasized leading a simple life and promoted eating tofu over meat" (Lee 1992, Choi 2009). Also, the text *Wu lei xiang gan zhi* (Compendium of interactions between various substances, 980), written at the beginning of Song, contains the phrase, "If you fry tofu in oil it becomes a delicious treat." Yang Wan-Li's (1127–1206) *Cheng Zhai zhi* (Writings of Cheng Zhai [sobriquet of Yang Wan-Li]) contains a section called "Doulu zi rou zhuan—doufu," (Tale of the softness of Doulu—tofu), which Huang (2000) describes below:

> "Doulu" was a well-known family name during the Tang and Five Dynasties periods, and "rou" means "fu," or soft, so Doulu zi rou has come to mean doufu [tofu]. Its hometown is Waihuang, in northeast Henan. Its name means "bean soup made of finely ground, boiled soybeans," and it has the same smell as white *da geng* or *xuan jiu*. The texture is similar to butter or fermented milk. It first appeared toward the end of the Han dynasty, then after disappearing for many years, resurfaced during Northern Wei (530–550).

Thus, the historical home of tofu is thought to have been in an area called Waihuang, in the northeastern reaches of the Yellow River Valley, where Dongyi tribes lived (present-day Henan Province). The texture of tofu was described as similar to that of certain dairy products. Lee (1984) adds that the ancestors of the Dongyi tribes, as nomads, would have been familiar with dairy products like cheese and yogurt. Huang (2000) also surmises that the motive for making soymilk derived from the northern nomads' familiarity with drinking milk. Dairy products receded from use when tribes settling in northern Manchuria and the Korean Peninsula began privileging crops over domesticated animals, but milk remained in their collective memory. In time they also came to make soybean curd. Lee persuasively argues, based on the appearance of curds and cheese (called *rufu*) in *Tang su* (Book of Tang), a book covering the Sui dynasty (581–618) and the beginning of Tang (618–906), that northern nomads who used soybeans would have made soybean curd, which is similar to fermented dairy products, especially in its runnier form. If millstones were in regular use during the Han dynasty, then they would have been

part of the tribal food culture in northern regions as well, and therefore it is not unlikely that people ground soybeans into powder or soaked them to make soymilk.

The more primitive form of millstones—mortars and pestles—have in fact been discovered at Middle and Upper Neolithic sites across the Korean Peninsula, including those at Jitap-ri in Bongsan-gun, Hwanghae Province; Amsa-dong in Seoul; Seopohang in Gyeongheung, North Hamgyong Province; Amnam-dong in Busan; and Jungdo in Chuncheon, Gangwon Province. Artifacts confirm that mortars were in continual use throughout the Gimhae culture period (1–250 CE) (Kim 1973). As the Lelang commandery began (108 BCE–313 CE), mortars and pestles were further developed by connecting them to a pivot or axle, which resulted in the creation of a rotating millstone able to pulverize grains and legumes into a fine powder (Lee 1965). On the basis of this knowledge, Chang (1993) concludes that the era in which tofu was first made in Korea could be located toward the end of the Three Kingdoms period (57 BCE–668 CE) or the beginning of the Unified Silla period (668–918).

Literature of the Joseon dynasty offers clues that help date the societal use of tofu. According to the 66th volume (1434) of *Sejong sillok* (Veritable records of King Sejong), the Xuande Emperor (1425–1435) of Ming dynasty China sent a personal letter to King Sejong with a Joseon envoy who had brought elaborate birthday gifts from Korea for a member of the Chinese royal family. In the letter, the Xuande Emperor lauds the Joseon women gifted to the imperial family for their culinary expertise, especially in tofu-making, and requests that King Sejong send more women like them (Chang 1993). This passage implies that Koreans would have been making tofu for their own royal tables at least by the late Goryeo dynasty (918–1392), which predates the making of tofu in China.

Further, *Munjong sillok* (Annals of Munjong, 1450) contains a record of a petition sent to King Munjong by military official Jeong Hyo-Gang regarding the making of bean curd: "Because our salt pans are plowed with oxen, the beasts' waste mixes with the salt as it bakes in the sun, making it unsanitary; using salted water from these pans to make tofu for sacrificial rites or royal offerings would be improper, so I humbly request the use of *sansu* [acidic water]." References in other contemporary texts that this issue was repeatedly taken up in the royal court indicate the significance of salt and tofu manufacture as commercial food products during this period. Concerning the brine water made with salt (*gansu*) and other coagulants, a passage in Li Shizhen's Ming dynasty text *Ben cao gang mu* (Compendium of *Materia Medica*, 1596), which discusses tofu in volume 25, states that "Other than salt water, coagulants include leaves of *shan fan* (Asian sweetleaf), *suan jiang* (Chinese lantern), and even vinegar." Taking these references together, it appears that in China's Ming and Korea's Goryeo dynasties, saltwater was the main coagulant employed in making tofu (Chang 1993). Once tofu reached widespread production, sources indicate that the manufacturing process in China and Korea was the same, but the birthplace of soybeans and the era in which soybean products were first used appear to differ significantly.

If the Dongyi, who used soybeans as a staple food, did indeed make tofu, then incipient use of tofu would have predated the Han dynasty. By the Han dynasty tofu may have been introduced to China. The basis for the latter inference lies in the

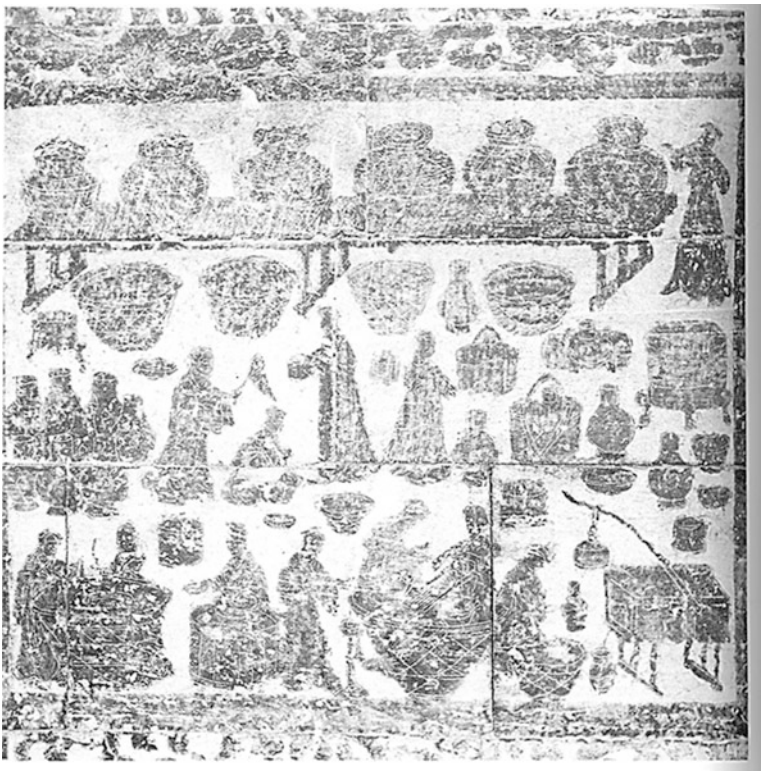

Fig. 4.5 A stone painting in the Dahuting tombs of the eastern Han Dynasty that May Depict Tofu-making

1980s discovery of a stone painting in the Dahuting tombs of the Eastern Han dynasty that appears to depict the tofu-making process (Fig. 4.5). However, later Chinese scholars have interpreted this rock art as depicting the process of making alcohol, not tofu. The question of which product is being made in the image continues to be debated (Choi 2009).

The legend of Mt. Bagong tofu seems to suggest that King Liu An of Huainan (177–122 BCE) learned how to make tofu from northern tribes. Although the method for making soybean curd became known around 200 BCE in China, tofu was generally only eaten by vegetarian Buddhist monks for a 1000 years, quite possibly because of a southern Chinese bias against the foods of northern "barbarians." A similar phenomenon occurred in the West: for the first 200 years after their introduction, soybeans were used strictly as a feed crop; it was not until the late twentieth century that they were recognized as a functional food for people.

4.5.4 Development of Soybean Foods

In his book *Seongho saseol* (Seongho's miscellany), Seongho Lee Ik (1681–1763), a proponent of the *Silhak* school of Confucianism, which pursued reform from the perspective of practical science and realism, describes the nutritional benefits of soybeans as follows (Lee 1984).

> The soybean is one of the five staple grains, yet people do not value it. It is said that grain saves people, and indeed, the life-saving power of soybeans is prodigious. Few elders live well these days because many are poor; all the best food made of "good" grain is given to the rich, while soybeans are passed on to the poor [but soybeans can be used to great advantage for health].
>
> The price of soybeans is equal to that of cheap unhulled rice. One *mal* [18 L] of unhulled rice yields four *doe* [1.8 L] of polished rice. Thus, four *doe* of polished rice may be exchanged for one *mal* of soybeans. The additional three-fifths of grain volume acquired has a significant impact on poor people's diets.
>
> Grinding soaked soybeans with a stone mill will produce soymilk, which can be used to make dubu (soybean curd). The byproduct of this process is an abundance of edible residue (*biji*). Boiling biji for soup makes a delicious meal. Additionally, sprouting soybeans for food increases the amount of nutrients available in the diet. Poor people can fill their stomachs by mixing ground beans with bean sprouts to make porridge.
>
> My life in the country has opened my eyes to these things, so I write them down for the benefit of those who teach and govern the people.

Seongho saseol is considered to be the first Korean record describing the nutritional benefits of soybeans and soybean-based foods. Soybean curd is made into a number of different products in Korea, China, and Japan, some of which are listed and named in Table 4.2.

4.5.5 The Origin of Bulgogi

As the nomadic Maek tribes people of the northeast region of the Amnok River settled on the Korean Peninsula and discovered soybeans fermenting into sauces in their earthenware, it is no stretch to imagine that their meat-heavy food culture combined with soy sauce culture would eventually bear fruit in dishes like bulgogi. Bulgogi consists of beef marinated in a soy-based sauce and then grilled; it has become popular around the world today as a uniquely Korean dish. In China, this dish was called *maekjeok* (Chi. *modi*), or meat cooked by the Maek tribe. *Soushen ji* (Anecdotes of seeking the supernatural), written during China's Jin dynasty (265–420 CE), includes the following passage: "Although modi is the food of barbarians, the fact that Chinese people have enjoyed it for so long, and that the feasts of every noble or rich house must have it, are signs that they might have to invade [the Maeks to obtain more]!" (Lee 1984). The phrase translated as "for so long" is written in the original text as "from the beginning of creation," indicating

Table 4.2 Comparison of bean curd uses and names in Korea, China, and Japan

Product name in English	Product name per Country	Processing method
Soy milk	China- Dou jiang Korea- Duyu Japan- Tonyu	Soybeans are soaked in water, ground in a mortar, and filtered
Soymilk skin	China- Doufupi Korea- Dubupi Japan- Yuba	The protein sheet that forms on the surface of soybean milk Is removed and dried
Soybean curd	China- Doufu Korea- Dubu Japan- tofu	Coagulant (Gansu [brine], acid, or calcium salt) is added to soybean milk, and the precipitate is taken and pressed to make curd
Deep-fried bean curd	China-Doufupao Korea- Twigin dubu Japan-Aburaage	Small blocks of soybean curd are deep-fried
Frozen bean curd	China-Dongdoufu Japan- Kori tofu	Bean curd is frozen, then thawed To form sponge-like texture
Fermented bean curd	China-Doufuru (sufu)	Bean curd is salted and fermented

that Korean bulgogi must have been transmitted to China long before the Jin dynasty. Today yakiniku, Japanese grilled meat based on Korean bulgogi, is so well loved that it can be found in most restaurants in Japan. Bulgogi was created by the meeting of two ancient cultures, the northern meat culture and the peninsular soy sauce culture, which together created a masterful dish that harks back to the origin of Korean foodways. Figure 4.6 presents a flow chart showing the development of Korean food culture as communities in Northeast Asia began engaging in agriculture and state formation (Lee 2001).

Southern Korean Peninsular fishing and grains-and-vegetables culture

↓

Advent of northern horseback-riding nomads

↓

Settled agricultural society and the need for a steady supply of protein to supplement meat

↓

Soybean cultivation and development of soybean dishes (around 2000 BCE)

↓

Primitive Pottery culture's fermentation methods lead to fermentation of soybeans—beginning of soybean sauce culture

↓

Development of various methods of cooking with fermented soybean sauces, including bulgogi—the combination of meat culture and soy sauce culture

Fig. 4.6 Prehistoric Korean food culture formation

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