

PREHISTORIC AND PROTOHISTORIC SOCIOCULTURAL
DEVELOPMENT IN THE NORTH HAN RIVER
REGION OF KOREA

by

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“Prehistoric and Protohistoric Sociocultural Development in the North Han River Region of Korea”, a dissertation prepared by Hyuk J. Ro in partial fulfillment of the requirements for the Doctor of Philosophy degree in the Department of Anthropology. This dissertation has been approved and accepted by:

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the Lower Han River Basin by way of the river system, brought it under the crucial influence of the latter's more advanced cultural elements. The circumscribed environment derived from the distinctively developed geomorphological formation of the North Han River Valley influenced autochthonous sociocultural development in the region.

Enumerating the most basic factors, the affluent riverine resources of the Valley enabled Chŭlmun period inhabitants be heavily dependent on riverine fishing supplemented by the hunting and gathering of wild vegetation. Riverine fishing as well as hunting and gathering richly supplemented the agrarian economy which became dominant in the Valley after the appearance of Mumun people in later prehistoric times. Due to population saturation of limited arable lands, Mumun agrarian people became increasingly circumscribed and could not evolve into a state-level society. In association with this factor, the geographical proximity of the Valley to the Lower Han River inevitably brought it under the influence of advanced cultures emerging in the Lower Han River Basin. This process, which began in the later Mumun period, actually has continued to the present, passing through the protohistoric State Formation period and Paekche kingdom.

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CHAPTER I

INTRODUCTION

Purpose and Methodology

The primary purpose of this dissertation is to reconstruct sociocultural development in the North Han River Valley in Korea during the prehistoric and protohistoric period, ca 6000 B.C.-A.D. 300, in light of available archaeological data. The North Han River Valley (Figure 1) has been chosen as the subject of this dissertation for two reasons. First, located in the central part of the Korean peninsula within discrete geographical boundaries and marked by a unique natural environment, it presents a valuable case for studying prehistoric cultural processes. Second, the writer has been carrying out archaeological research in the North Han River Valley for more than a decade.

In terms of methodology, a synthetic rather than quantitative approach is employed, largely due to the nature of the data available. As such, this

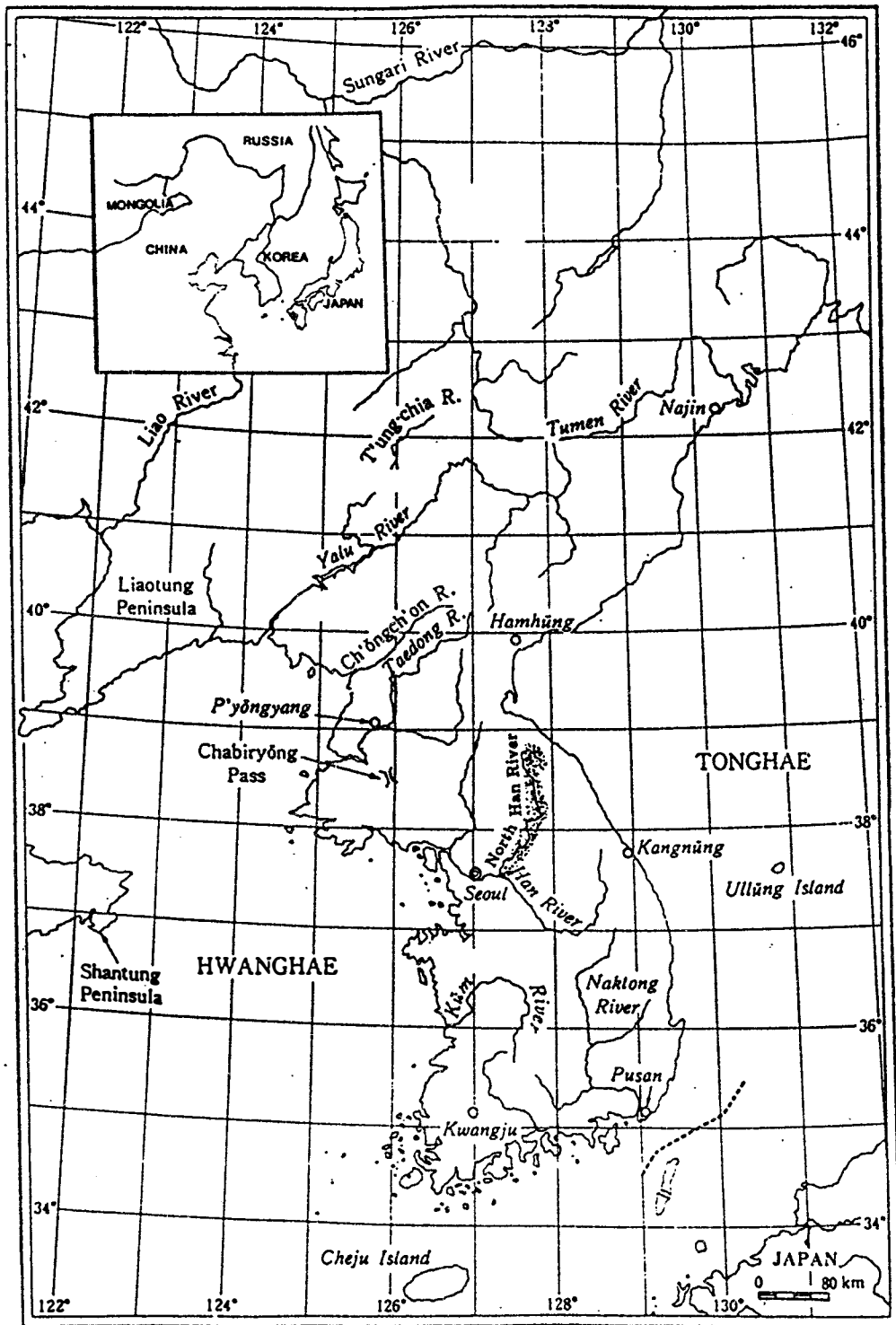


Figure 1. Map of Korean peninsula (After Lee 1984:18).

dissertation is a synthetic interpretation of material remains from the North Han River Valley's prehistoric and protohistoric periods.

Theoretical Framework

It has long been recognized by anthropologists that there has been a close relationship between cultural behaviors and the natural environment (Rathje and Schiffer 1982:127-154; Watson, LeBlanc, and Redman 1984:113-154; Fagan 1978:287-288). On the one hand, people and their societies have existed within their natural environment, impacted by the latter in terms of their settlement pattern, economy, and technology, but on the other hand, the cultural tradition has, in time, come to affect their ecosystem, ultimately controlling and modifying it.

In considering the nature of prehistoric sociocultural development, it has been assumed that people existing in similar ecosystems tend to follow a similar path in their societal development (Aikens 1981:261-273), while those in different ecosystems followed different paths and changed at a different pace. In terms of prehistoric subsistence, Watson, LeBlanc, and Redman(1984:151-152) have posited that humans generally adapted "by exploiting multiple ecosystems". At the societal level, saturation of natural resources within a

circumscribed environment had profound effects on prehistoric human adaptation resulting in societal complexity (centralization and eventual statehood in some cases; Cohen 1981: 105-122; MacNeish 1981:123-156). Rhee and Ch'oi (1992) have suggested that geographical proximity of an autochthonously evolving society to one with a more advanced culture inevitably influences and shapes the former's sociocultural development.

Working Hypotheses

In light of these theoretical considerations and the observed archaeological data, the following hypotheses are set forth in regard to sociocultural development in the North Han River Valley during the prehistoric and protohistoric period. 1. The North Han River Valley's unique ecosystem brought about a subsistence pattern marked by some regional variations. 2. The prehistoric inhabitants of the North Han River Valley adapted by exploiting multiple resources. 3. The North Han River Valley's connection with the Lower Han River Basin, by way of the river system, brought it under the influence of the latter's more advanced cultural elements. 4. As the environment of the North Han River Valley became increasingly circumscribed under continually expanding agrarian economy and population, there appeared

by 200 B.C. societal centralization and its attendant complexity; however, because of environmental limitations, the local culture failed to evolve into a state-level society.

Research Methods

Essential to this prehistoric sociocultural reconstruction are material remains from the past, particularly from the periods between ca. 6000 B.C. and A.D. 300. Therefore, the writer has reviewed all existing literature on archaeological studies of the North Han River Valley and also studied material remains of the period, including some chance finds, and particularly those uncovered by professional archaeologists. In addition, the writer carried out an intensive surface survey of the entire North Han River Valley and excavated several major prehistoric sites between 1980 and 1996. The surface survey involved an examination of all habitable sites for the purpose of identifying the presence of any prehistoric cultural remains.

The archaeological data of the North Han River Valley will be fully discussed, and will be compared with those from other regions of the peninsula with a view toward ascertaining common traditions as well as local traits. Finally, they will serve as the basis for reconstruction of the North Han River

Valley's prehistoric and protohistoric sociocultural development, with a special focus given to the dynamics of prehistoric sociocultural processes in the valley.

CHAPTER II

AN OUTLINE OF KOREAN PREHISTORY

Introduction

This chapter outlines Korean prehistory and protohistory as a background for the classification and reconstruction of prehistoric as well as protohistoric cultures in the North Han River Valley (see Table 1). A description of Paleolithic culture is not included here, because it is believed that Paleolithic cultures in Korea had no relation to the earliest cultures appearing in Korea in the Holocene Era, owing to a large temporal gap between the latest Paleolithic sites (ca. 30,000-25,000 B.C.) and the earliest known Holocene archaeological remains (ca. 6000 B.C.).

Korean archaeologists agree that after the termination of the Pleistocene Era around 10,000 B.C., the Korean Peninsula remained unpopulated for several millennia. They also agree that from around 6000 B.C., the earliest

Table 1. Chronology of Prehistoric and Ancient Korea.

668 A.D.	Unified Silla
300 A.D.	Three Kingdoms Period (Koguryo, Paekche, Silla)
200 A.D. 100 A.D. B.C./A.D.	
200 B.C. 300 B.C.	State Formation Period Korean Agrarian Bronze Age
500 B.C.	
1000 B.C.	(Liaoning Bronze Age)
1500 B.C.	Mumun Period
2000 B.C.	
3000 B.C.	
4000 B.C.	
5000 B.C.	
6000 B.C.	Chūlmun Period

aboriginal people who had contributed to the formation of Korean culture came into the peninsula. This consensus has resulted because the latest date of Upper Paleolithic sites discovered until now is older than 23,000 B.C. (P. K. Sohn 1973), and the oldest date of sites belonging to the early Holocene Era is no older than 6000 B.C. (H. J. Im and H. S. Kwōn 1984). Therefore, even though there is a possibility of discovering sites dating between these two endpoints, we must postpone further discussion of this possibility until more evidence is discovered.

In addition to this disjunction in cultural continuity, another reason for not discussing the Korean Paleolithic here is that not only is there a great deal of controversy about the authenticity of some sites, but also, even regarding the undisputed Paleolithic sites, there are large discrepancies in interpreting their absolute age and their cultural stages.

I shall base discussion on a periodization framework established in accordance with the indigenous nature and autochthonous developmental process of Korean prehistory.

The Period of the Chŭlmun Hunter-Fisher-Gatherers (6000-1500 B.C.)

Definition of Chŭlmun Culture and the Problem of Its Origin and Chronology

Definition

The name Chŭlmun derives from the geometric designs on the surface of pottery of this period. The Chinese letter Chŭlmun means "comb patterned design." The appellation of Chŭlmun culture was first coined by Japanese archaeologist Fujita Ryosaku, who thought that the origin of the pointed-bottom pottery with geometric designs discovered in Korea could be related to the "Kammkeramic" pottery tradition in northern Europe (Fujita 1948:140-141). Therefore, he translated "Kammkeramic" into the Chinese characters for the "Chŭlmokmun pottery," which later was abbreviated into "Chŭlmun pottery."

Thereafter, Chŭlmun --or "Bitsalmun", which is the Korean translation of Chŭlmun --became the preferred terminology among Korean as well as Japanese archaeologists.

On the other hand, J. H. Kim (1968) advocated a different terminology. He pointed out that, considering the tremendous geographical distance between the Kammkeramic culture in northern Europe and the Chŭlmun culture on the

Korean Peninsula, archaeologists could presume little cultural relationship between them. J. H. Kim argued that it is baseless to suppose that Korean Chŭlmun pottery and culture had originated from European Kammkeramic pottery and culture. Consequently, he proposed to use the term "Gihamuntogi" (geometrically designed pottery) instead. Many others (W. Y. Kim 1977; Nelson 1973; Sample 1974) agreed that Korean Chŭlmun and European Kammkeramic cultures were unrelated. Since the 1970s, indigenous origin of Chŭlmun culture on the Korean Peninsula has been established as an authorized theory in North Korea, and North Korean archaeologists have used the indigenous terminology of "Saegimmunitogi," which means pottery designed by incision (Institute for Historical Studies 1977a, 1977b, 1979a, 1979b).

However, now Chŭlmun or Bitsalmun seem to have become the most preferred terms, as is apparent by the adoption of these terminologies by W. Y. Kim in his book, *Introduction to Korean Archaeology* (1973, 1977, 1986a). This work has been the only comprehensive, as well as most the popular, introduction to Korean archaeology and prehistory for more than two decades.

In brief, Chŭlmun pottery can be defined as handmade pointed-bottom pottery whose surface is decorated with various geometric designs of points, small circles, and various linear designs such as curvilinear, rectangular, and straight lines, which were wrought by various designing tools, including comb-

shaped implements (Figure 2).

The Problem of Origin and Chronology

Fujita Ryosaku (1948) first claimed that Chŭlmun culture was a result of the diffusion of the northern European Kammkeramic pottery tradition, an assertion simply based on superficial similarity in the surface designs of pottery. However, as mentioned earlier, this idea soon drew criticism from Korean archaeologists because of the enormous distance between the two culture areas. Instead, the importance of approaching this subject--i.e., the origins of the Chŭlmun culture--as an autochthonous process is increasingly emphasized (W. Y. Kim 1977; Nelson 1973; Sample 1974; Institute for Historical Studies 1977a, 1977b, 1979a, 1979b).

In dealing with the basic nature and various characteristics of Chŭlmun culture, I would first like to delineate the interpretations for which there is consensus among Korean archaeologists, and then examine particular issues, controversies, and future tasks.

Radiocarbon dates from Chŭlmun sites in South Korea range from 6000 B.C. to 1500 B.C., as illustrated in Table 2. In reference to this range of radiocarbon dates, there is general consensus among Korean archaeologists that



Figure 2. Typical Chūlmun pottery from Amsadong, Seoul (Height: 25.9 cm).

Chūlmun culture began before 6000 B.C. in the Korean peninsula and continued until c. 1500 B.C. (Table 2).

Two Major Regional Traditions in the Chūlmun Culture Period

Although the initial phase of Chūlmun culture is still obscure, its distribution inside the Korean Peninsula shows certain patterns. This differential distribution pattern has been studied primarily according to typological variation in Chūlmun potteries. First of all, Chūlmun sites discovered so far can be divided into two broad regional types generally known as the Pre-Chūlmun and Chūlmun Periods (W. Y. Kim 1977).

Recently, I proposed calling the former "eastern-type Chūlmun culture" and the latter "western-type Chūlmun culture," because, not only does the site distribution of both culture types show close relationship to their geographical territory, but, also, their archaeological assemblages reveal strong correlations with both regions' distinctive natural conditions (Ro 1994b).

As illustrated in the map (see Figure 3), the Korean Peninsula is primarily divided into eastern and western regions by the Hamkyōng and T'aebaik Mountains. Historically these eastern and western regions have been called "Yōngdong" ("the Eastern Region") and "Yōngsō" ("the Western

Table 2. Radiocarbon Dates from Chūmun Sites.

Site Name	Feature	Material	14C Date (bp) (Half Life)		Calibrated Date (Cal AD/BC)
			5568	5730	
Osanni, Yangyang, Kangwondo	Residential Floors	Charcoal	6910 ± 700	7120 ± 700	BC 7310-4350
		"	6580 ± 1000	6780 ± 1000	BC 7610-3290
		"	5900 ± 210	6080 ± 210	BC 5240-4350
		"	5570 ± 210	5740 ± 210	BC 4850-3970
		"	5950 ± 50	6130 ± 50	BC 4940-4720
		"	5890 ± 30	6070 ± 30	BC 4890-4710
		"	6840 ± 120	7050 ± 120	BC 5950-5490
		"	11650 ± 50	12000 ± 50	BC 11870-11450
		"	4230 ± 50	4360 ± 50	BC 2920-2620
		"	5520 ± 120	5690 ± 120	BC 4610-4040
"	"	3260 ± 180	3360 ± 180	BC 1960-1040	
Dokchonni, Jongson, Kangwondo	?	Charcoal	5180 ± 80	5340 ± 80	BC 4220-3790
		"	5720 ± 90	5890 ± 90	BC 4770-4370
Amsadong, Seoul	Residential Floors	Charcoal	9510 ± 110	9680 ± 110	BC 4580-4040
		"	5000 ± 70	5150 ± 70	BC 3950-3660
		"	4730 ± 200	4870 ± 200	BC 3940-2920
		"	4610 ± 200	4750 ± 200	BC 3800-2870
		"	6230 ± 110	6420 ± 110	BC 5420-4910
		"	6050 ± 110	6230 ± 110	BC 5220-4720
		"	4950 ± 200	5100 ± 200	BC 4240-3320
"	3430 ± 250	3530 ± 250	BC 2400-1130		
Misari, Hanamsi, Kyonggido	Cultural Layer	Charcoal	4950 ± 140	5100 ± 140	BC 4000-3370
Oido, Kyonggido	Shellmound	Shells	3960 ± 50	4080 ± 50	BC 2580-2300
Soyado, Kyonggido	Shellmound	Shells	3750 ± 40	3860 ± 40	BC 2280-2030
Sonyudo, Chonrabugdo	Shellmound	Charcoal	4810 ± 40	4960 ± 40	BC 3690-3390
Deheuksando, Chonranando	Shellmound	Charcoal	3420 ± 120	3520 ± 120	BC 2020-1430
Dolsansongdo, Chonranando	Shellmound	Charcoal	5280 ± 170	5440 ± 170	BC 4450-3760
		"	5430 ± 170	5590 ± 170	BC 4680-3820
Jangchonni, Chonranando	Residential Floors	Charcoal	4140 ± 120	4260 ± 120	BC 3020-2340

Region") (Figure 3).

The Eastern Region is characterized by its narrow coastline, which extends from the northeastern end of North Hamkyŏng Province all the way to the southeastern tip of South Kyŏngsang Province with few mountainous barriers. In contrast to the Western Region, which has a widely spreading coastline and great tidal variation, there is little tidal variation along the Eastern Region coastline, and therefore deep sea begins close to the shore. Moreover, between such a narrow shoreline and the steeply rising cliffs of the Hamkyŏng and T'aebaik Mountains, arable lands are only narrow strips. Because of these typical natural conditions, throughout Korean prehistory as well as in the present time, the main subsistence economy of peoples in towns and villages along the east coast has been marine fishing with some subsidiary agricultural activity, in contrast with an agricultural economy prevalent in the Western Region.

Therefore, it is reasonable to expect that this binary geomorphological division of the Eastern and the Western Region, as well as various other minor geographical differentiations must have been the substantial factor in the formation of regional variations in the Chŭlmun culture.

Indeed, the role of this binary geographical differentiation between the two geographical zones in the formation of both eastern- and western-type

Chūlmun cultures is clearly indicated by site distribution patterns and different archaeological assemblages between the two regions. Archaeologically, western-type Chūlmun culture is characterized by its typical pointed-bottom pottery with full surface decoration and various geometrical design, and eastern-type Chūlmun culture, which used to be known as Pre-Chūlmun culture, is characterized by the distinctive shapes of the so-called "primitive plain pottery," "applique pottery," and "rim design pottery," all of which have either round or flat bottoms (Figure 4).

Regarding the distribution pattern of both traditions, typical pointed-bottom pottery of the western type Chūlmun culture has been discovered not only in the Western Region but also in the Eastern Region. In contrast, the distribution of eastern type Chūlmun culture, characterized by its distinctive pottery, is confined to Eastern Region. Compared to the number of western type Chūlmun sites, eastern type Chūlmun sites discovered so far are very few. Nevertheless, a division between eastern and western-type Chūlmun cultures can be observed in their stratigraphical division in addition to different pottery types.

The stratigraphical division between these two cultures is well demonstrated in the stratigraphy of Tongsamdong shell mound, which is the best known index site of Chūlmun culture in Korea. The Tongsamdong site

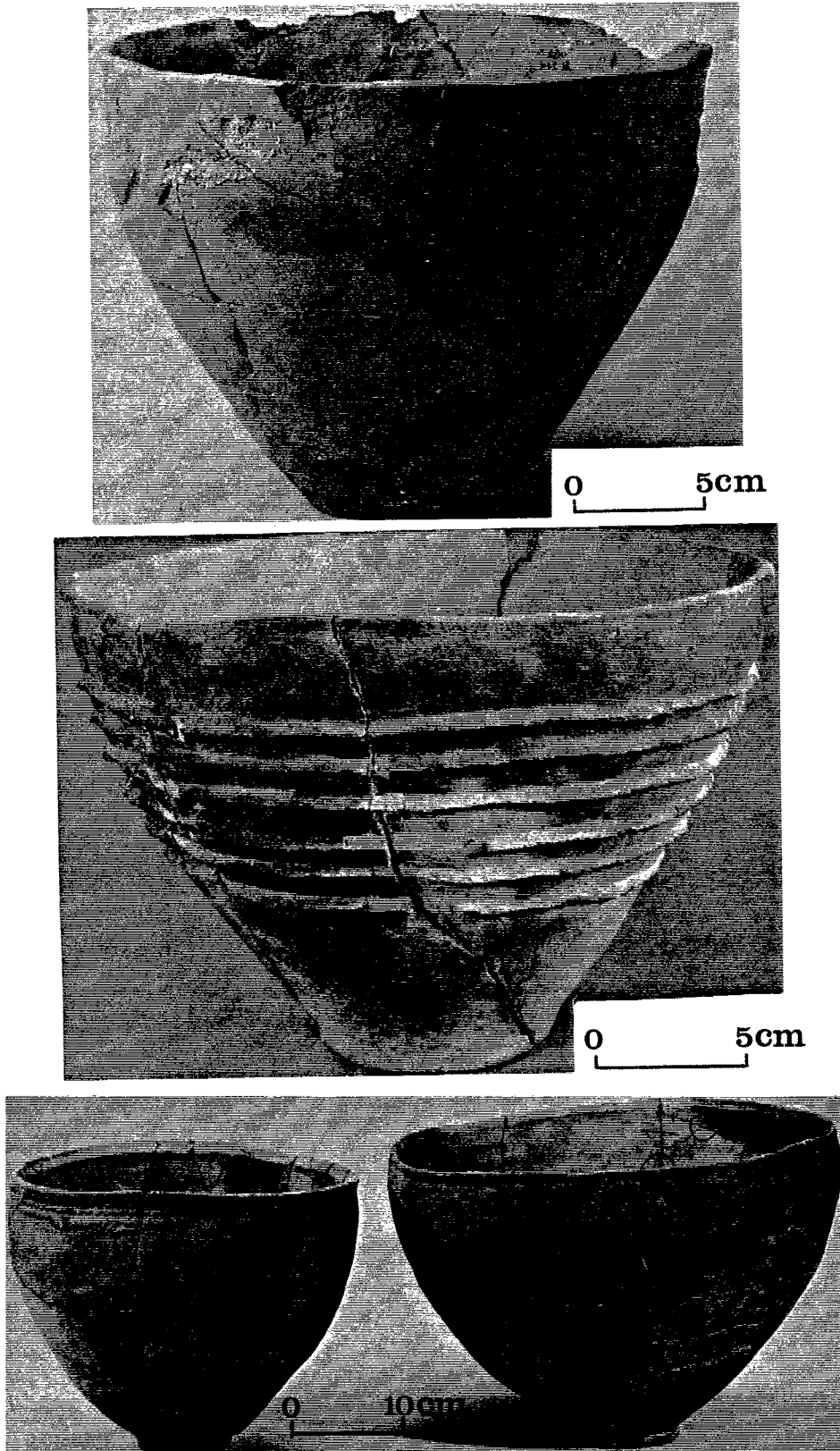


Figure 4. Examples of eastern-type Chulmun pottery.

was first reported in 1933, and a small part of it was excavated by L.L. Sample in 1962. From 1969 to 1972, the Korean National Museum carried out full-scale excavations. However, no excavation report has yet been published (W. Y. Kim 1988).

In the Tongsamdong shell mound, three layers containing different pottery styles were identified. Pottery in the upper two layers conformed to the typical western-type pointed-bottom style with incised fishbone surface designs. Pottery in the lowest layer consisted of three distinctive types, which were later termed "applique pottery" (yunggimuntogi), "primitive plain pottery" (wönsimumuntogi), and "rim design pottery" (agarimunitogi) which bore impressed or incised designs confined to the rim.

Such stratigraphical division between two different traditions was identified also at the Osan-ni site, Yangyang County, Kangwön Province, which is now ranked as the most representative site of eastern-type Chŭlmun culture. The archaeological culture of the Osan-ni site will be described later.

Based on this stratigraphical sequence and different pottery types in both the Tongsamdong and Osan-ni sites, W. Y. Kim (1986a) established a chronological framework which has been widely quoted by Korean archaeologists. His framework divides the entire period of Chŭlmun culture into four stages: the pre-Chŭlmun stage (Tongsamdong I Period: 5000-4000

B.C.); the Early Period (Tongsandong II, Bitsalmun I: 4000-3000 B.C.); the Middle Period (Tongsandong III, Bitsalmun II: 3000-2000 B.C.); and the Late Period (Bitsalmun III: 2000-1000 B.C.).

Of these four stages, the later three belong to the western-type Chŭlmun culture, which is represented by the pointed-bottom fishbone-design pottery, and the first stage belongs to the eastern-type Chŭlmun culture. Kim's (1986a) four-stage classification and other more subdivided classifications (S. M. An 1988; Y. H. Han 1983; Sample 1974) share in common the acknowledged existence of two major regional Chŭlmun types.

Archaeological Cultures and Lifeways of Eastern Type Chŭlmun Culture

Eastern type Chŭlmun culture, confined to the Eastern Region, shows distinctive characteristics in lifeways and archaeological culture compared to those of western type Chŭlmun culture.

The main subsistence economy of the people of eastern type Chŭlmun culture was marine and/or estuary fishing with subsidiary hunting-gathering and freshwater fishing. This subsistence economy developed from the unique ecological and geographical conditions of the Eastern Region, where the coastline area is conspicuously exploited, but the land area is very narrowly

developed between the shoreline and the ridges of the T'aebaik Mountains.

Although sites of eastern type Chŭlmun culture discovered until now are very few in comparison with those of western type Chŭlmun culture, one bearing the distinctive characteristics of eastern type Chŭlmun culture was recently discovered in Osan-ni. From 1981 on, the Osan-ni site was excavated by archaeologists from the Seoul National University Museum, and the location became famous for its radiocarbon dates (5170; 5100; 4830 B.C.), which marked it as the oldest among all eastern- and western Chŭlmun sites (Paek 1980; H. J. Im 1987; H. J. Im and H. S. Kwŏn 1984; H. J. Im and J. J. Yi 1988; J. S. Kim 1991; W. Y. Kim, H. J. Im and H. S. Kwŏn 1985).

From the Osan-ni site a number of archaeological characteristics give credence to the notion that the eastern type Chŭlmun people practiced a unique lifeway. These included a circular-shaped residential floor structure, typical eastern-type Chŭlmun pottery, and marine fishing implements of stone.

It should be pointed out that because of the geographical location of the Osan-ni site in the very middle of the Eastern Region, the cultural territory of eastern-type Chŭlmun culture became more precisely identifiable. Before the Osan-ni site was excavated, sites of eastern-type Chŭlmun culture were found only in the southeastern and northeastern ends of the Eastern Region.

Therefore, it was difficult to determine that an independent cultural tradition

existed, based on such an uncertain distribution pattern, which left the larger middle portion empty. That is why those sites had been simply treated as representing a subperiod of Chŭlmun culture rather than having been distinguished as representing an independent tradition. However, as the Osan-ni site was excavated, the behavioral territory of typical eastern-type Chŭlmun culture, apparently in conformity with the geographical territory of the environmentally distinctive Eastern Region, became more clear.

Two cultural layers containing different types of pottery were identified at Osan-ni. Western-type Chŭlmun potteries, characterized by the fishbone-pattern-incised design were found in the upper layer, and eastern-type Chŭlmun potteries such as rim-incised flat-bottom ones and applique-attached flat-bottom ones were found in the lower layer. This depositional pattern, as well as pottery composition in the Osan-ni site, basically conforms to the patterns ascertained in the Tongsamdong shell mound. Moreover, radiocarbon dates (5170; 5100; 4830 B.C.), which rank as the oldest among those obtained thus far from Chŭlmun sites, were calculated from the lower cultural layer, where eastern-type Chŭlmun pottery was contained.

Based on the evidence of absolute dates and stratigraphy, the conclusion has been promulgated that before western-type Chŭlmun culture spread into the Eastern Region, eastern-type Chŭlmun culture already had been scattered

widely in the region. However, how the two cultures interacted or how the latter was absorbed into the former is uncertain for the present.

The typical lifeways of eastern-type Chŭlmun people are well represented in archaeological remains from the Osan-ni and Tongsamdong sites. In the Tongsamdong shell mound, fishing gear made of animal bones was identified, along with many bones of marine fish such as shark, red snapper, herring, tuna, cod, as well as marine animals such as whale and sea lion, in addition to oysters and other shellfish. This abundance of marine remains is sufficient to indicate that marine fishing and sea hunting had been the major subsistence economy of the eastern-type Chŭlmun people.

This marine-oriented subsistence economy is revealed in the archaeological remains of the Osan-ni site, as well. Stone tools excavated from the Osan-ni site include polished or chipped stone axes and harpoon heads and much fishing gear such as heavy net-sinkers and stem parts of the composite fishing gear (Figure 5). Included among these fishing implements from the Osan-ni site were large, heavy net-sinkers. A cone-shaped, stone-made net-sinker was found, the likes of which cannot be found in the Western Region. It is certain that it had been used for marine net-fishing and/or catching large fish in the estuary region.

In addition to this, the uniquely shaped fishing gear later identified as the

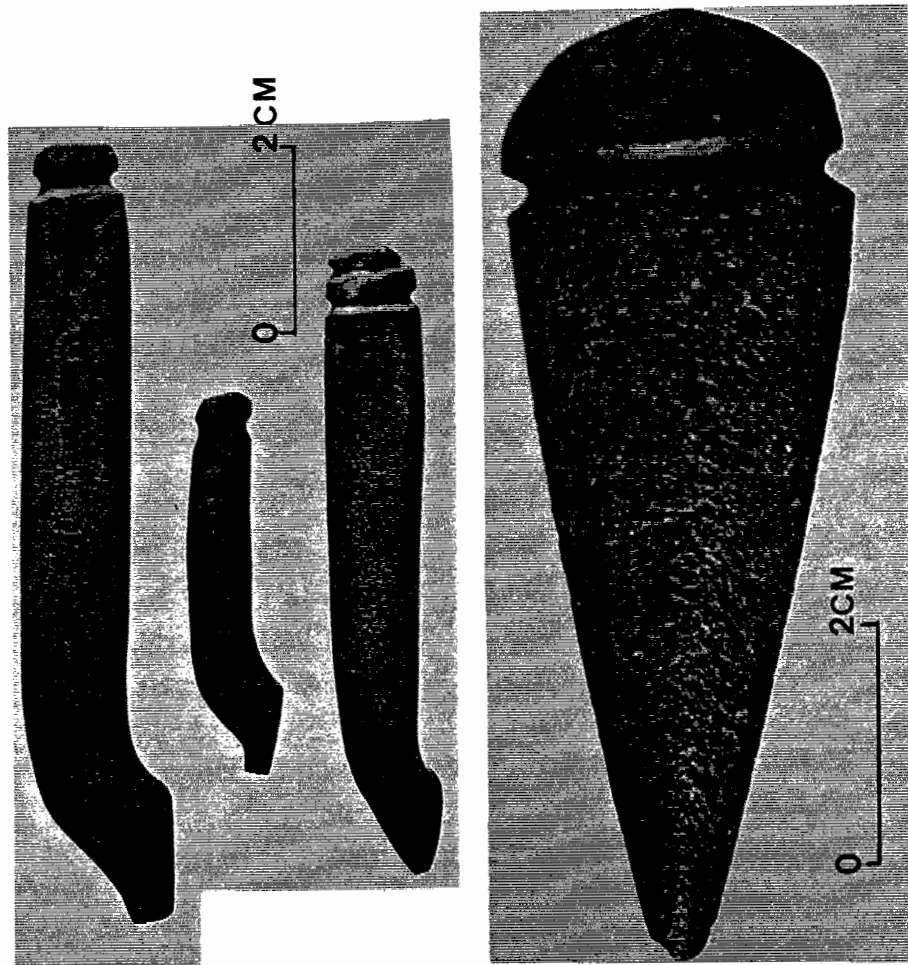


Figure 5. Shanks of the composite fishhook and a stone net-sinker excavated from Osan-ni.

shank of a composite fish hook was discovered at the Osan-ni site. This hook shank, which had been made by polishing elongated shale flakes, is also certain to have been used for catching strong and big fish. This hook shank cannot be seen in riverine or marine areas in the Western Region, except for one specimen discovered in the cave site in Ch'unch'ŏn in the North Han River Valley, which will be explained in the description of cultures in the North Han River Valley in the next chapter (Figure 6).

The presence of elements such as marine fishing tools and fish bones in the Osan-ni and Tongsamdong sites, combined with the unique environmental features of the Eastern Region, strongly supports the view that the main subsistence economy of eastern-type Chŭlmun fisher-hunter-gatherers had been marine and/or estuary fishing.

In the Osan-ni site, nine house floors were excavated. All those houses had circular or ovate-shaped floors on a sandy surface layered with a thin coat of red clay. It is supposed that cone-shaped roof structures had been built above these floors. Of course, nine houses do not represent the entire size of the settlement, because excavations were carried out only in a confined area in the open plain. Because the Osan-ni site is located in an open sand plain, where the wind is very harsh, and because of its proximity to the east coast (4 kilometers to the east), it is believed to have been a temporary occupation area



Figure 6. Illustration of the composite fishhook.

for seasonal estuary and/or marine fishing.

One thing that must be considered regarding the Osan-ni people's location and subsistence economy is that the Namdaech'ŏn stream flows into the East Sea less than 1 kilometer from the Osan-ni site. Namdaechon is known as one of two streams on the Korean Peninsula where salmon return from the sea. Today, in autumn, residents in modern Osan-ni village catch salmon, and release salmon fries. Also, the only salmon-culturing institute in Korea is located at Osan-ni.

Therefore, despite the lack of archaeological evidence such as salmon bone, or of ethnohistorical records about salmon fisheries in ancient times, such proximity of the Osan-ni settlement to the largest salmon migration stream in Korea strongly indicates that a primary purpose of the Osan-ni people's presence there was to catch salmon, as well as to practice other estuary fishing. Furthermore, due to the cycle of salmon migration, it is highly probable that the Osan-ni settlement was occupied in accordance with that seasonal cycle.

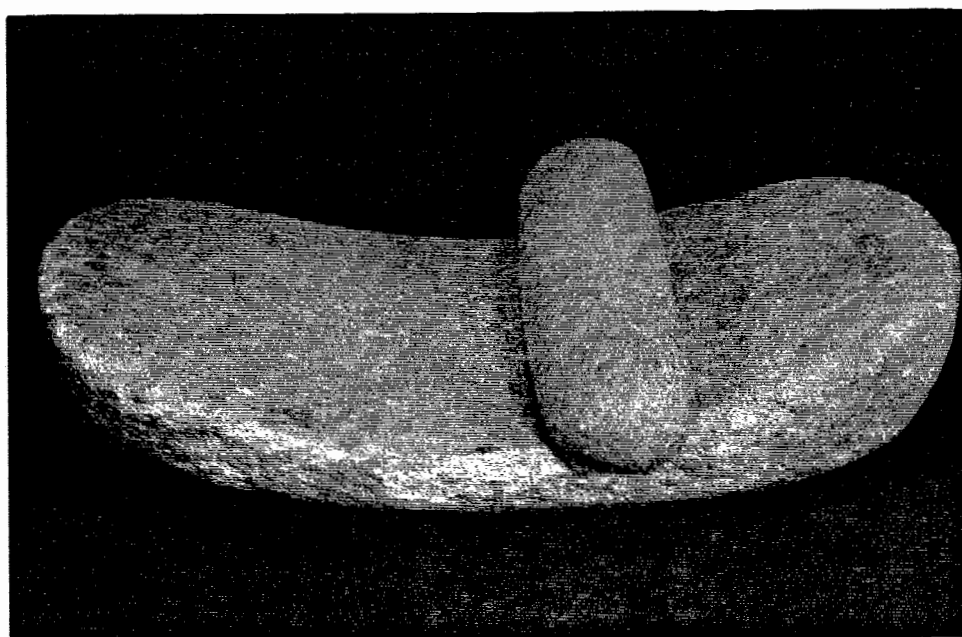
In light of the Osan-ni example mentioned above, the general life pattern of eastern-type Chŭlmun people, including settlement patterns and subsistence economy, will be presented below. The eastern-type Chŭlmun people spent the larger part of their yearly cycle salmon fishing as well as estuary and/or marine fishing, especially during spring, summer and fall. In winter, they retreated into

the T'aebaik Mountains to escape the harsh cold and wind of the open sand plains along the coast. During spring, summer, and fall, while spending much time marine and/or estuary fishing, they also practiced wild-animal hunting and wild-crop gathering, especially in the deeply forested wilderness of the T'aebaik Mountains.

All over the mountain ranges in Korea, various species of oak comprise most of the forest. Even today, and historically, acorn jelly is enjoyed as one of most popular traditional foods among Korean people, whether they live in rural or urban areas. Thus, acorns must have been a good food resource for Chŭlmun gatherers in the Western and the Eastern Region. Although direct archaeological evidence for acorn gathering or processing has not been discovered in the Osan-ni and other Chŭlmun sites in the Eastern Region, several Chŭlmun sites in the Western Region contained grinding stones, which must have been used for acorn processing (Figure 7).

The mixed subsistence economy of the eastern-type Chŭlmun people is well indicated in food remains from the Tongsamdong shell mound, where bones of land animals such as Korean water deer, reindeer and wild boar, in addition to large amounts of shell and fish bones, were identified.

In conclusion, clarifying the details of the entire subsistence system of eastern-type Chŭlmun culture based on archaeological data from only two



0 20 CM



Figure 7. Grinding stone sets from Chit'ap-ni, Hwanghae Province (top), and Amsadong, Seoul (bottom).

sites is very difficult at present. It is especially so considering that no other evidence of residential sites has been found, which could testify to such seasonal life-patterns as, for example, winter camps in the mountains or inland sites related to hunting-gathering and riverine fishing activities. Nevertheless, if we synthesize all the environmental conditions and several specific indications from the archaeological remains accumulated so far, a certain reasonable extrapolation is possible in reconstructing the basic pattern of eastern-type Chūlmun people's lifeways and subsistence economy.

Archaeological Cultures and Lifeways of Western-Type Chūlmun Culture

The Origination Problem of Western-Type Chūlmun Culture

Unlike eastern-type Chūlmun culture, western-type Chūlmun culture has a relatively long history of archaeological study. As noted in the previous descriptions of eastern-type Chūlmun culture, before it was recognized as an independent tradition, the eastern type used to be interpreted simply as the pre-Chūlmun stage or part of a single Chūlmun culture tradition. However, as the existence of an eastern-type Chūlmun culture predating western-type Chūlmun culture was disclosed, based on a series of excavations at the Osan-ni site,

questions arose about the view that both eastern- and western-type Chŭlmun cultures belonged to different stages in a homogenous Chŭlmun culture.

Whether the division between those two regional traditions stems from their different origins or from strong regionalization due to geographical isolation by the T'aebaik Mountains remains to be investigated. Likewise, the ontological relationship between eastern- and western-type Chŭlmun cultures is uncertain, but, as for the origination of western-type Chŭlmun culture alone, much investigation has been undertaken and a consistent scenario has emerged.

In 1930, Fujita Ryosaku first raised the idea that Chŭlmun culture was a local variation of the far northeastern Asian circum-polar Kammkeramic culture (Fujita 1930). Later, J. H. Kim (1968, 1992) suggested that the pottery's diffusionary course followed two paths: one going from Lake Baikal in mid-Siberia, through Mongolia, western Manchuria, and finally into western Korea, and the other going from Lake Baikal via eastern Siberia, the Amur River, eastern Manchuria and finally into eastern Korea. This dual diffusion seems similar to the dual division of eastern- and western-type Chŭlmun cultures which I have proposed. However, J. H. Kim (1968, 1992) presented no archaeological evidence supporting his proposition regarding how such a binary process progressed.

On the other hand, Nelson (1973) criticized both the theories of

Kammkeramic and Siberian origination, and emphasized the importance of focusing on the autochthonous origination of Korean Chŭlmun culture on the Korean Peninsula. W. Y. Kim (1988), who at first had agreed with the Kammkeramic theory, gave it up and supported the Nelson's idea. Kim viewed all regional types in Chŭlmun culture as variations occurring inside Korea, and he identified the eastern-type Chŭlmun culture as the initial phase of the chronological sequence of such variations.

Kim also hypothesized that the emergence of western-type Chŭlmun pottery, which is characterized by full decoration, was the result of the evolution of rim-designed pottery in the assemblage of eastern-type Chŭlmun pottery. That is, he argued that typical Chŭlmun pottery, which has full surface decoration, had evolved from typical rim-designed pottery in the eastern-type Chŭlmun culture by including more designs in the body and bottom under the rim.

However, in actuality, this typological interpretation has many logical difficulties. First of all, it thoroughly denies most generally acknowledged views that western-type Chŭlmun culture is a local variation of a broad tradition going back to Siberia, regardless of whether or not it came from Lake Baikal, as traditional theory holds. And, as W. Y. Kim (1986b) noted, there is no other archaeologically persuasive evidence except typological matching of surface

decoration. Therefore, there is no explanation of why the flat-bottom tradition of eastern-type Chŭlmun pottery changed into the pointed-bottom tradition of the western-type fully decorated stage. Moreover, why did traditions such as applique-attached pottery and primitive plain pottery, which had been made in conjunction with rim-designed pottery in the Eastern Region suddenly disappear, leaving only rim-designed pottery to survive and evolve into pointed-bottom and fully decorated pottery in the Western Region? Furthermore, W. Y. Kim mentioned nothing about possible diffusionary routes from the Eastern to the Western Region.

In summary, the problem of the origins and distinction of both eastern- and western-type Chŭlmun cultures must await more relevant data. What can be said at this point is that there existed two different regional traditions in a Korean Neolithic Period, and, considering the stark geographical distinction between the Eastern and the Western Regions as well as the discontinuity of their material cultures, we can reasonably state that they must have come into Korea via different routes and developed separately for a long period of time before western-type Chŭlmun culture spread into the Eastern Region. Given this scenario, the task confronting us must be to expound upon the details of both cultures based upon their different archaeological data, which will subsequently lead to a clarification of the origination problem.

Fieldwork investigation into western-type Chŭlmun sites has a long history. Since the first discovery of Yŏngpan-ni and Monggumpo by Torii Ryuzo in 1916, during the course of surveying Hwanghae Province and North P'yŏngan Province, many sites have been discovered and excavated (S. M. An 1988). Because of this long history of archaeological investigation, compared to that of eastern-type Chŭlmun culture, various details of western-type Chŭlmun culture were ascertained. These include spatio-temporal variation, subsistence economy, residence patterns, and pottery typology.

Subsistence Economy and Settlement Pattern

The subsistence economy of western-type Chŭlmun culture covered a broad spectrum, characterized by the practice of marine as well as riverine fishing, shellfishing, animal hunting, and plant gathering in accordance with local environmental conditions. In addition, in its later phase, primitive crop cultivation had been practiced in the confined region of northwestern Korea, as revealed at the Chit'ap-ni site, Bongsan County, Hwanghae Province, where carbonized millet grains were found with a mano and metate set as well as stone sickle (Institute for Archaeological and Folklore Studies 1961).

This practice of agriculture in a confined region of Korea is seen as a

result of the diffusion of Neolithic agriculture from northern China, where grain agriculture had appeared before 6000 B.C.. However, few Korean archaeologists believe that the basic hunting-fishing-gathering subsistence of the Chŭlmun people in northwestern Korea, as well as on the entire Korean Peninsula, had remained unchanged. On the other hand, some Korean archaeologists proposed that Chŭlmun people originally practiced primitive agriculture, in light of lithic artifacts which resembled a digging stick, stone hoe, or spade (S. M. An 1988). However, such tools do not necessarily imply agricultural practice, because they also may have been used for digging out wild roots.

As eastern-type Chŭlmun sites show a distinctive distribution pattern which is closely related to the distinctive natural conditions in the Eastern Region, western-type Chŭlmun sites also show a certain pattern which reflects a close relationship to the unique environmental characteristics in the Western Region. Chŭlmun sites so far discovered in the territory of the Western Region are grouped into three sorts: (a) riverine residential houses, (b) shell mounds and temporary camps on the coast, and few burials.

Of these, the shell mounds are distributed along the western and southwestern coasts of the Korean Peninsula. This distribution pattern is closely related to the natural feature of those regions. The difference of rise and

fall of the tide on the west coast and western half of the southern coast of the Korean Peninsula is very great, and many small and large islands are formed along the coastline. This coastal environment is most adequate for the habitation of shellfish and must have attracted many Chŭlmun foragers.

Although house remains on the coast have not been discovered yet, the wide distribution of shell mounds along the west and southwest coasts in the Western Region indicates that temporary settlement for the purpose of shellfishing must have been one of a variety of subsistence strategies the western-type Chŭlmun people practiced.

Another strategy is suggested by the fact that there are many large rivers in the Western Region, such as the Yalu, Ch'ŏngch'ŏn, Taedong, Han, Kŭm, and Yŏngsan, all of which flow into the Yellow Sea. Many species of fish inhabited these rivers and must have provided a good food resource for the western Chŭlmun people too. This fact is well substantiated by the wide distribution of houses along the banks of those rivers in the western Region. Riverine settlements are composed of several semisubterranean pit-houses. Because none have been completely excavated, it is difficult to estimate the size and structure of an entire settlement. However, one commonly observed feature of all sites found along riverside is that they are located only on the sand alluvium. Such settlement on the sand alluvium indicates that inland Chŭlmun

people depended primarily on riverine fishing subsistence (Figure 8).

Furthermore, those Chŭlmun people who practiced riverine fishing must have also practiced hunting and plant food gathering.

In summary, the western-type Chŭlmun culture can be defined as a mixed pattern of hunting and plant food gathering, riverine fishing, shellfishing and marine fishing, giving roughly equal importance to each--unlike the eastern-type Chŭlmun people, who depended primarily on estuary and/or marine fishing.

Little research has been conducted into the question of how the Chŭlmun people may have organized all these subsistence practices into a systematic pattern. Considering the great distances between the territory of coastal Chŭlmun people and that of inland riverine Chŭlmun people, we can propose that there existed certain tribal-level community divisions in a broad western-type Chŭlmun society.

On the other hand, we can also propose, as H. J. Im (1977) did for the Chŭlmun people in Midwestern Korea, that one community of Chŭlmun people practiced a wide-ranging migratory subsistence covering a large region of both coastal and riverine areas. Based on the typological similarity of the pottery, Im's assumption was that Chŭlmun people in Midwestern Korea had practiced an annual migratory life, and their territory had extended from the Lower Han

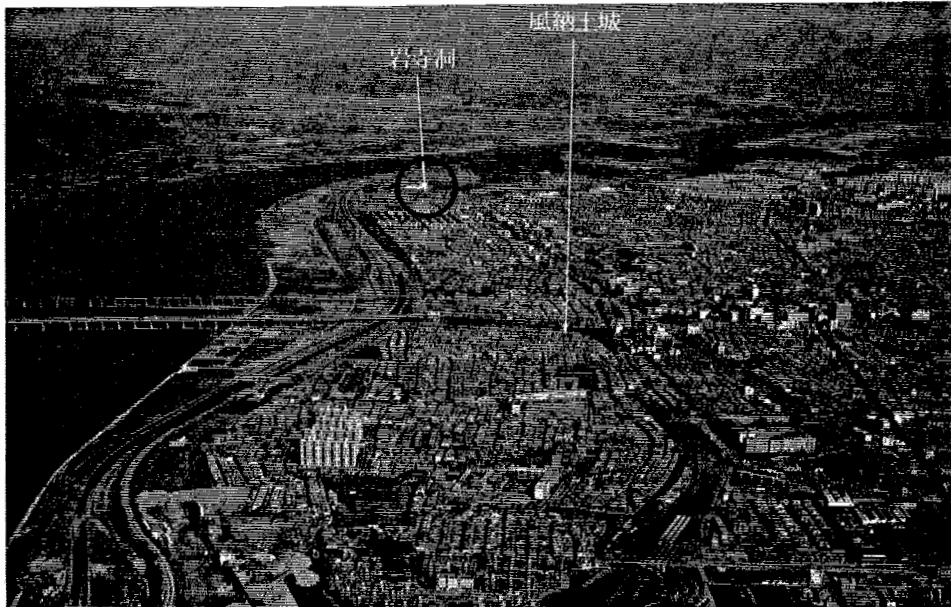


Figure 8. A Chulmun settlement at Amsadong, Seoul.

River to the coastal region of Midwestern Korea, all of which had been connected by the Han River.

Until now, only three burial sites have been discovered in the Western Region. For the inland zone, only one example of a Chŭlmun people's burial has been discovered; the other two sites were found in the coastal region. The inland site is Kyodong Cave in Ch'unch'ŏn, which had been used to entomb human bodies. This cave site is located within the territory of western-type Chŭlmun culture. However, archaeological findings here conform to the typical eastern-type Chŭlmun culture. This site will be discussed in detail in the next chapter. Of the two sites found in the coastal region, one was located under the shell mound in Sido island, Kyŏnggi Province, on the Midwestern coast (Korean National Museum 1970). The Sido burial reflects simple treatment of the deceased by covering the body with a pile of stones. The second site, containing five individual burials, was found in the shell mound in Yokji and Yŏndae islands, South Kyŏngsang Province, on the southeastern coast (Y. H. Han and H. J. Im 1991). This site also reflects a simple practice of digging earthen, amorphous pits. Inside each simple pit a body was placed and covered by a pile of small stones.

Compared to the sedentary, Mumun society, which had left more than 60,000 dolmen burials all over the Korean Peninsula, the number of Chŭlmun

people's burials yet discovered is surprisingly few. This contrast seems to be closely related to the seasonal migratory or semi-sedentary pattern of Chŭlmun society.

The Problem of Interaction Between Eastern- and Western-Type Chŭlmun Cultures

Regarding the interaction relationship between eastern- and western-type Chŭlmun cultures, opinions so far raised among Korean archaeologists have converged into one of two positions. As discussed previously in dealing with the origins of western-type Chŭlmun culture, W. Y. Kim (1986b) claimed that typical geometrically designed western-type Chŭlmun pottery had developed from the rim-decorated pottery which belonged to the pottery assemblage of typical eastern-type Chŭlmun culture. This position implies that the western Chŭlmun people had diffused into the Western Region from the Eastern Region, in the process transforming their lifeways, including their pottery tradition. However, as discussed previously, this hypothesis about the connective succession between the two cultures was based only on the change of surface design of only one type of pottery.

The alternative viewpoint is that differentiation between both traditions progressed outside the Korean Peninsula. This means that both western- and

eastern-type Chŭlmun peoples had come into the Korean Peninsula through different routes. Therefore, the two societies had no relationship to each other as far as their diffusionary routes onto the Korean Peninsula are concerned. However, no one can explain exactly when and where such a division occurred outside the Korean Peninsula. Resolution of this remains a future task of Korean archaeology, which seems very important in that it is connected to the emergence of the earliest aboriginal people in Korea.

As far as archaeological traits show, it is apparent that western-type Chŭlmun culture later spread into the Eastern Region as indicated in the stratigraphy of the Osan-ni and Tongsamdong sites. This supports the claim that, before western-type Chŭlmun people spread into the Eastern Region, eastern-type Chŭlmun people had been scattered widely along the coast of the Eastern Region, following the coastline from northeastern-most North Hamkyŏng Province down to southeastern-most South Kyŏngsang Province. How both peoples interacted in the Eastern Region, however, is a question which must await the discovery of sites containing the elements of both cultures.

The Period of the Mumun Agrarian and the Liaoning
Bronze Cultures (1500-300 B.C.)

Mumun Agrarian Culture

Definition of Mumun Agrarian Culture

The basic constituents of the Mumun agrarian cultural complex consist of (a) the routine use of various types of "handmade undecorated plain pottery" for a variety of purposes typical of a sedentary life; (b) the flourishing of numerous types of polished stone tools, including weapons, woodworking tools, farming implements, and other ordinary and special-purpose tools; © sedentary village settlements, which mainly subsisted on grain agriculture. including rice cultivation; and (d) the megalithic burial practice known as "Goindol," or dolmen (Ro 1994a).

"Mumun" literally means "no design (in the surface of pottery)," and Mumun pottery is characterized as handmade, plain earthen pottery, which, without exception, is flat-bottomed. It was fired in open air at 600 to 800 degrees centigrade (Figure 9).

Mumun pottery was first identified by a Japanese archaeologist, Fujita

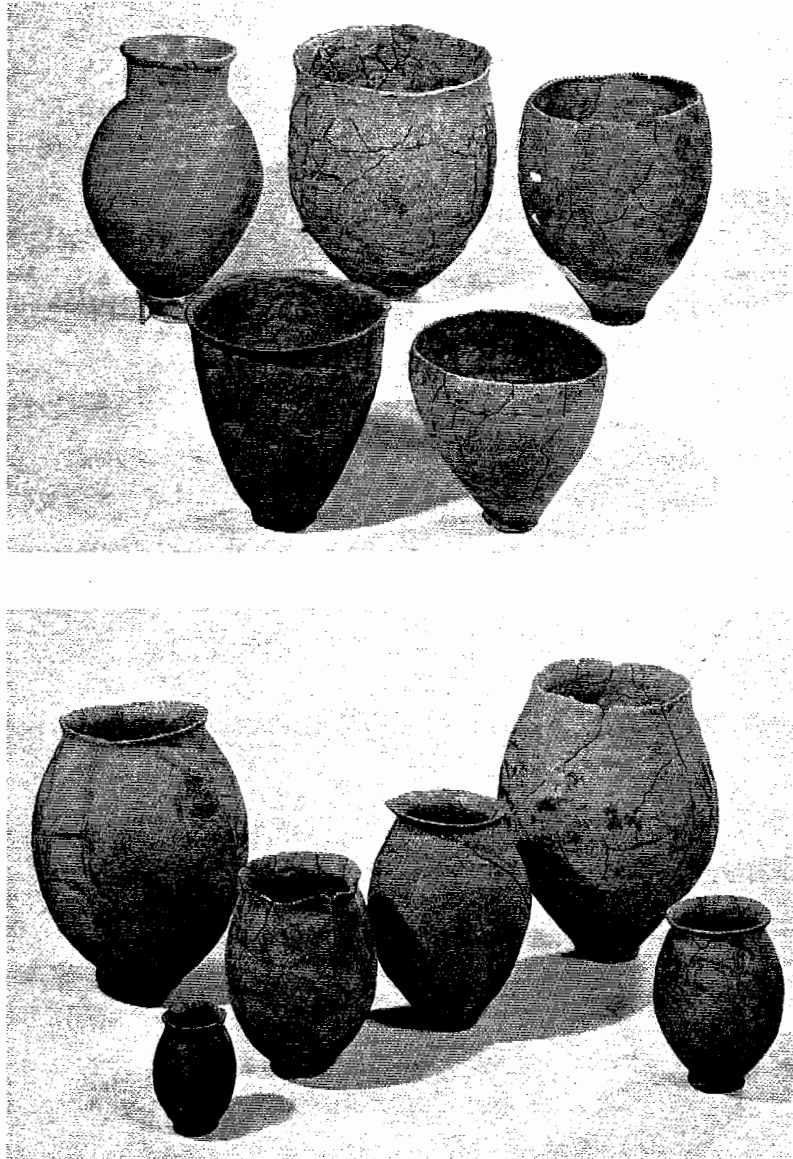


Figure 9. Examples of Mumun pottery (top leftest: 49.8cm; bottom second from right:43.5cm).

Ryosaku during the Japanese Colonial Period. When he was traveling around the Korean Peninsula, Fujita observed two obviously different types of pottery scattered across the same region. He named one "Chŭlmokmun Togi," meaning, "pottery having comb-patterned linear designs," and the other "Mumun Togi," meaning, "having no surface designs" (Fujita 1948).

At that time, no one, including Fujita had much information about the Korean prehistoric cultures of which these different pottery traditions were a part. Everyone believed that those cultures which produced such differing pottery simply had coexisted during a Korean Stone Age. Thus, only one roughly imagined interpretation was applied to the archaeological phenomenon of the coexistence of Chŭlmun and Mumun cultures. It stated that the Chŭlmun people had primarily lived along riverside and that the Mumun people had lived mainly in the plains and lower mountainsides. After the Japanese Period had ended (1945), during the Korean War (1950-1953), and throughout the 1950s, no further archaeological investigation was undertaken. Not until the 1960s did Korean archaeologists begin to excavate both Chŭlmun and Mumun sites. As stratigraphic excavations increased, it soon became apparent that deposits containing Chŭlmun pottery preceded those containing Mumun pottery, and soon the contrasting facets of both cultures became clearly distinguished.

On the other hand, as bronze-bearing sites began to be excavated in

North Korea during the 1960s, North Korean archaeologists declared the existence of an independent bronze culture and established the Bronze Period in Korean prehistory. This achievement of North Korean archaeologists was soon accepted by South Korean archaeologists without question or correction, and matters regarding bronze tools, including their origination and typological change, became the primary research interest among both South and North Korean archaeologists. As this research trend developed, questions about the independence of the Mumun culture itself came to be ignored. Mumun culture simply was regarded as part of Bronze Age culture.

However, as excavation of Mumun sites increased during the 1970s, it became increasingly apparent that they generally lacked bronze artifacts and that independent Mumun cultural tradition had existed in the Korean Peninsula from c. 1500 B.C. for more than a millennium. Accordingly several South Korean archaeologists (Yun 1972, 1975a, 1975b; B. G. Yi 1974; Ro 1994a, 1994b) have proposed that the non-bronze-bearing Mumun agrarian culture coexisted independently with the bronze-bearing cultural tradition during most of the first millennium B.C. North Korean archaeologists, on the other hand, continue to deny it in favor of Bronze age.

Subsistence Economy and Lifeways of Mumun Society
in Comparison With Those of Chŭlmun Society

The basic subsistence economy of the Mumun people was grain agriculture. Therefore, all aspects of the life of Mumun people reflected sociocultural characteristics based on an agricultural living pattern. Carbonized grains were collected from three sites. In 1974, carbonized rice grains from Hŭnam-ni, Yŏju County, Kyŏnggi Province, were recovered by flotation (Seoul National University Museum 1976). Also, carbonized rice grains were collected from inside pottery taken from Songguk-ni, Puyŏ County, South Ch'ungch'ŏng Province, in 1978 (Korean National Museum 1978). Finally, grains of carbonized rice, millet, beans and sorghum were identified from Namkyŏng, P'yŏngyang City, in North Korea in 1984 (Y. G. Kim and Suk 1984).

The amount of grain remains is very small not only because most organic materials quickly deteriorate in Korea's acidic soil, but also because the analyzing techniques of grain remains, such as flotation and matrix techniques, were not put into practice until after 1974. Because of the ubiquity of Mumun society's agricultural subsistence economy, it is expected that much more evidence of grain remains will accumulate as excavations increase, despite these environmental and technical problems.

Further concrete evidence for grain agriculture in Mumun society is the widespread presence of semilunar-shaped reaping knives, which were used for snapping out heads of grain plants. These knives have been discovered all over the Korean peninsula, thus underscoring the importance of grain cultivation in the life of Mumun society (Figure 10).

In addition to their primary agricultural subsistence economy, the Mumun people practiced riverine fishing and some degree of hunting and gathering, much like other agricultural societies observed ethnographically. Evidence of Mumun fishing is given by the frequent discovery of stone and earthen net-sinkers and a variety of harpoon heads in Mumun sites.

Like the stark contrast between Mumun and Chūlmun pottery styles, the peculiarity of every aspect of Mumun life, which was related to the nature of its agricultural subsistence economy, might best be understood by comparing it to the subsistence economy of the Chūlmun people. The Chūlmun people were semisedentary fisher-hunter-gatherers who migrated in accordance with the cyclic regularities in growth and movement of the plants and animals that were their major food resources. Because of this subsistence strategy, they could not settle permanently in one area or establish permanent burial structures. Therefore, only a small number of Chūlmun burials have been discovered. All of these consisted of a simple accumulation of natural stones piled on the

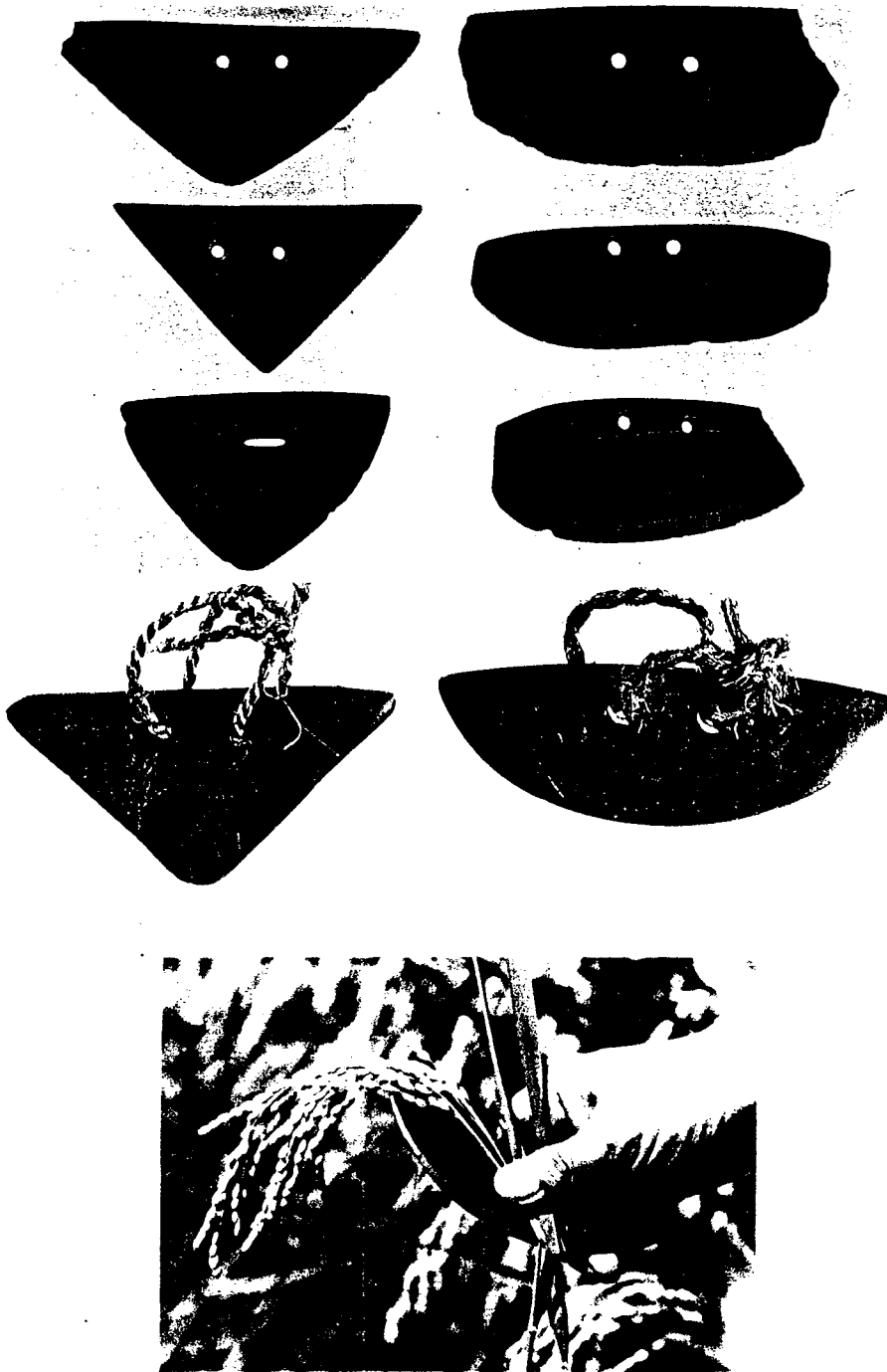


Figure 10. Various types of semi-luna reaping knives.

deceased. This paucity of burial sites is extraordinary, considering the wide distribution of Chŭlmun sites across Korea and the Chŭlmun culture's life span of more than three millennia.

In contrast, Mumun culture, which lasted a little over a millennium, left more than 60,000 well-built dolmen burials(Yi 1995). These impressively constructed megalithic burials were made possible because of Mumun society's sedentary agriculture, which permitted continuously expanding agricultural productivity and stability in the lives of village members. This greatly enhanced solidarity among community members, who most likely were united through a consanguineal tribal lineage system. With a secure livelihood and collective solidarity among village members, special treatment of their deceased members, especially esteemed and/or senior leaders, must have grown. Eventually this atmosphere of community stability and solidarity must have led to a flourishing construction of dolmen burials.

The Mumun people's sedentary lifeway is well represented in their stone-tool assemblage. Stone tools used by Chŭlmun people show a comparatively monotonous pattern, as demonstrated in such features as the polished axe having flaked features, the single type of stemless arrow point, and the functionally undifferentiated adzes and net-sinkers. These characteristics stand in stark contrast to those of the Mumun people's stone-tool assemblage.

Interestingly, a variety of iron tools commonly found in traditional as well as present-day rural Korean homes, can be found in polished stone form in the Mumun assemblage. These include kitchen knives, woodworking knives, various axes, spearheads, arrowheads, adzes, planes, grinding stones, and spindle-whorls. Furthermore, among these implement types there are a number of distinctive subtypes, which had been modified according to differential functional applications.

This contrast between the stone-tool assemblages of the Chŭlmun and Mumun societies reflects the different subsistence patterns of the two peoples. The Mumun people's sedentary settlement life must have required a variety of domestic tools which had been necessary in daily living, as observed ethnographically in ordinary rural agricultural houses (Figure 11), (Figure 12).

In summary, the clear difference between Chŭlmun and Mumun societies observed in every aspect of the archaeological record, including pottery, stone tools, and burial system, can be explained by their basically different subsistence economies and associated settlement patterns.

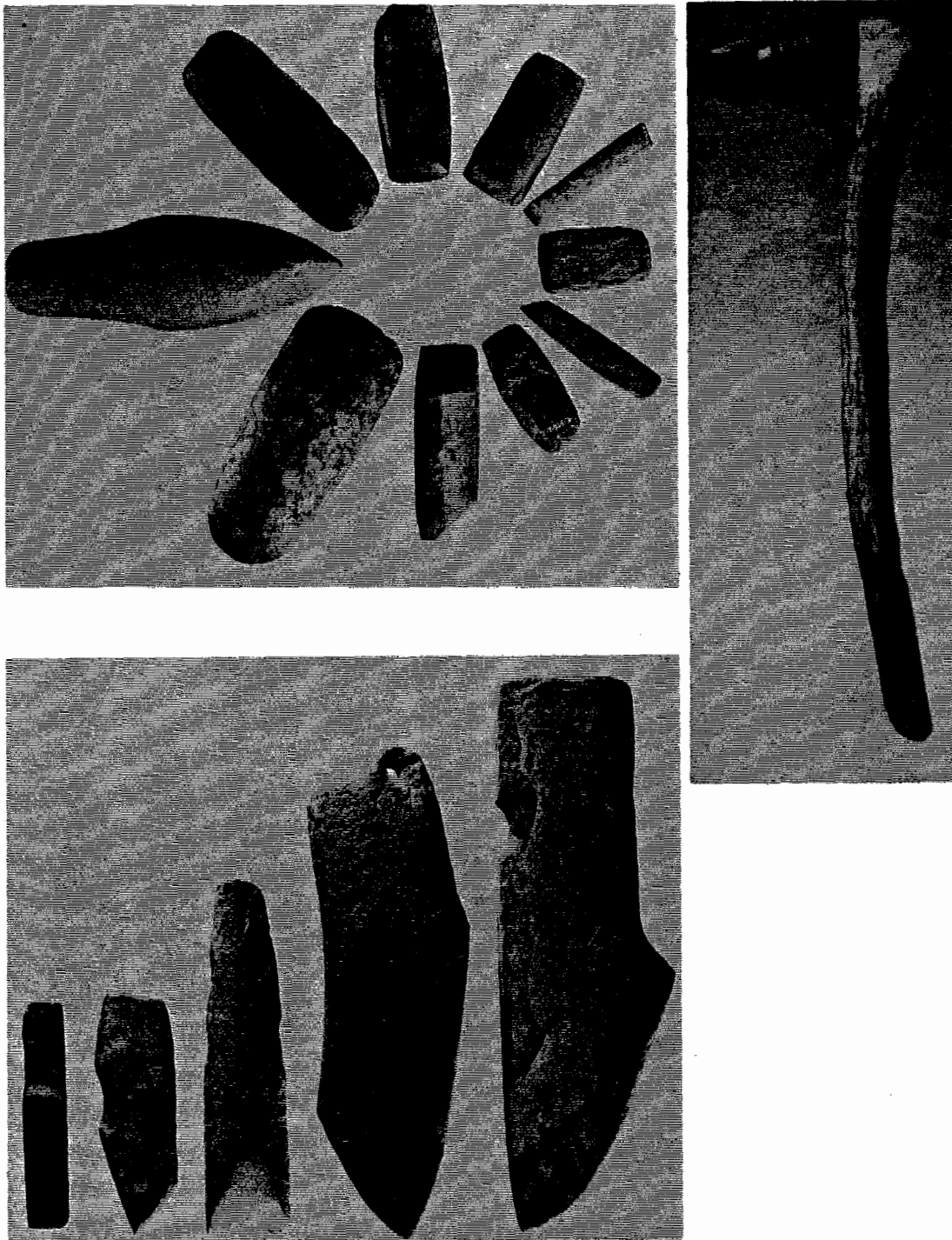


Figure 11. Various polished stone axes and adzes used by Mumun people.



Figure 12. Various polished stone tools used by Mumun people.

Settlement Pattern of Mumun Society in Comparison with
That of Chŭlmun Society

As stated above, the Chŭlmun people left many shell middens, or campsites, along the western and southern coastal regions. However, residential remains and shell middens left along the coast by the Mumun people are very rare as compared to Mumun inland sites. Indeed, residential sites or shell middens of the Mumun people have not been identified in coastal regions except at Cheju Island. Cheju Island consists of steeply rising basalt mountain ranges which converge from all directions toward Halla Mountain (height:1950 m). A wide seashore surrounds the island, and archaeological remains of the Mumun people were found in a shell mound located there (C. G. Yi 1990; 1993).

All known Chŭlmun sites on the inland Korean peninsula are located along major rivers and coast. On the other hand, Mumun sites are located variously on riverbanks, plains, or low hillsides near the rivers. Again, this difference in the settlement location of Chŭlmun and Mumun peoples is directly related to their different subsistence economy--the former being primarily riverine fishing and the latter being sedentary agriculture.

Because of the limitations of current archaeological data and the irregular size of excavated settlement areas, it is very difficult to ascertain the true size of

a Mumun settlement in terms of the total number of individual houses within a boundary. The geographical placement of Mumun villages indicates a well-established pattern, but, because of incomplete excavations and/or chance discoveries, examples of entire settlement boundaries are very rare. However, it is certain that all Mumun village settlements consisted of anywhere from a small cluster of houses to tens, or sometimes hundreds, of individual houses.

For example, at Hūnam-ni, Yōju County, Kyōnggi Province, where carbonized rice grains were collected for the first time in the history of Korean archaeology, 13 houses were unearthed during four consecutive excavations (Seoul National University Museum 1973, 1974, 1976, 1978). Investigators estimated the size of the Mumun village at Hūnam-ni at several tens of houses, based on scattered artifacts observed in the area surrounding the excavation. Also, at the site at Namkyōng, P'yōngyang City, where carbonized grains of rice, bean, foxtail, millet, and sorghum were discovered, 22 houses were excavated (Y. G. Kim and Suk 1984). Finally, in Kōmdan-ni, Ulju County, South Kyōngsang Province, the entire boundary of a Mumun settlement was excavated. In that village, which was encircled by a moat, 90 individual houses were discovered (J. H. An 1990).

Regardless of the size of a Mumun village, one fact common to all Mumun settlements is that they are located in river basins, plains, or low

hillsides. This locational pattern is consistent across the millennium or more of the Mumun culture's existence. The Korean Peninsula is characterized by rivers and mountains, with plains or low hills lying between river valleys and mountain ridges. Everywhere over this landscape, small and large traditional villages, as well as contemporary rural villages and towns, have been placed in similar locales. Indeed, among the Korean people a popular proverb states that the most optimal village placement is "Imsan Baesu": a plain with protecting mountains behind it and a river in front of it. This type of settlement location has been the ideal for millennia, as long as Korean society has maintained a sedentary agricultural subsistence economy. This ideal settlement location, dating from Mumun times, illuminates a significant historical fact: Not only had the subsistence economy and living patterns of Mumun society become the groundwork for traditional Korean society, but the Mumun people themselves had been the major component in the ethnic makeup of the Korean people.

Regional Types in Mumun Culture

Because of the wide distribution of Mumun sites, which became spread over the peninsula in about a millennium, many regional types developed.

Currently, at least three major regional types are confirmed: (a) the "top-shaped

(kakhyŏng) pottery culture" in northwestern Korea; (b) the "pierced-rim (kongryŏl) pottery culture" in northeastern, southeastern and central Korea; and the "Songguk-ni-type pottery culture" in southwestern Korea (Figure 13).

The index artifacts of the top-shaped pottery culture are a deep bowl, called "top-shaped pottery" by North Korean archaeologists, and a long-necked pot, called "transformed top-shaped pottery" by North Korean archaeologists. These two pottery types, which have been classified as a set, both have very small, flat bottoms and duplicated rims (Figure 14). In addition to this pottery type, other elements in the archaeological record are typical of Mumun culture. As stated above, one major element is that of dolmens. In Korea, the area of most concentrated dolmen distribution defines the territory of this culture. Another element is an abundance of polished stone adzes and planes, which signifies the development of woodworking in sedentary village life. Both the concentration of dolmens and the development of polished woodworking tools are regarded as evidence for sedentary village life, which would have been supported by the agricultural productivity made possible by the fertile open plains in northwestern Korea.

The pierced-rim (kongryŏl) pottery culture is another major regional type. The geographical territory of this culture is the widest of the three regional types discussed here. It covers whole Eastern Region and midcentral

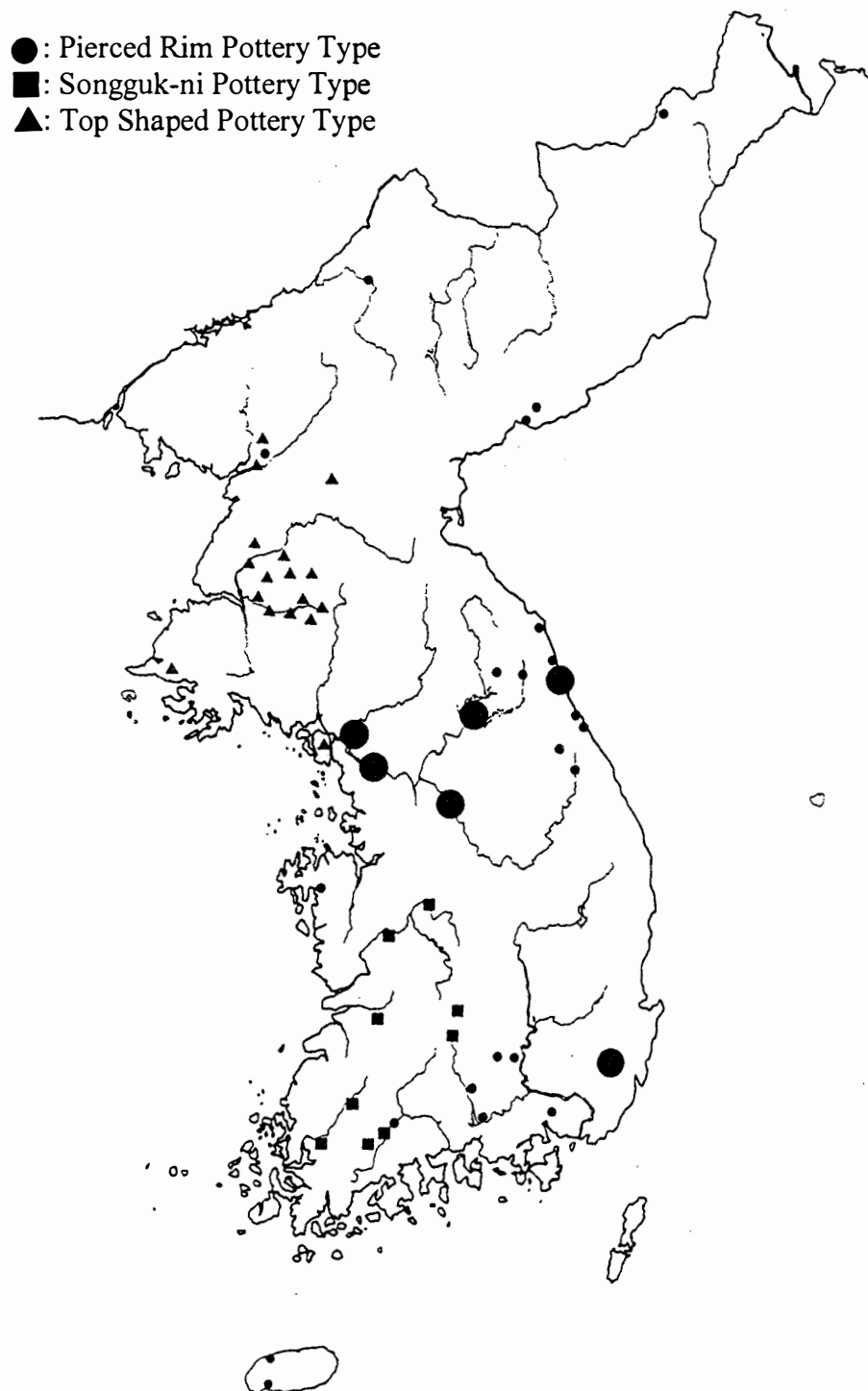


Figure 13. Distribution of regional types in the Mumun culture
(Large circles: excavated settlement site).

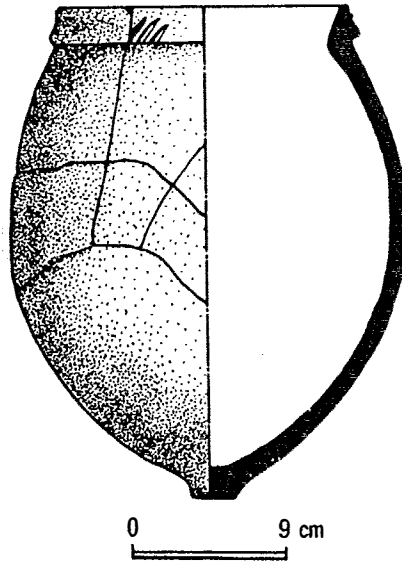
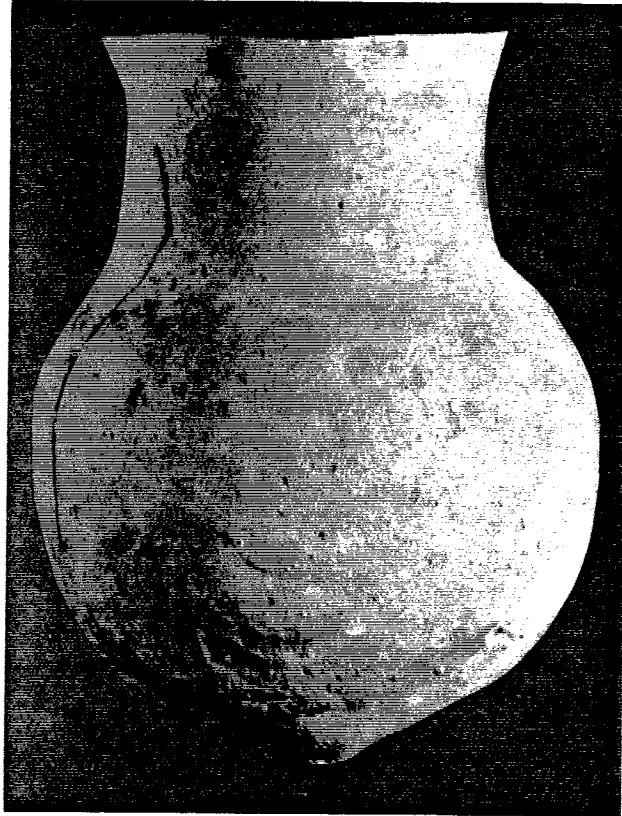


Figure 14. Examples of transformed Top-shaped pottery (top) and Top-shaped pottery (bottom).

Korea as well as the southwestern parts of the Western Region. Just as "top-shaped pottery" is the index artifact for the "top-shaped pottery culture," the index artifact for this culture is "pierced-rim (kongryŏl) pottery," a deep, flat-bottom bowl with an array of pierced holes encircling its rim (Figure 15).

Like the top-shaped pottery culture in northwestern Korea, the pierced-rim pottery culture is regarded as having appeared in an earlier phase of the Mumun Period (B. G. Yi 1974). Unlike the top-shaped pottery culture, however, the pierced-rim pottery culture seems to have spread rapidly over the Korean Peninsula, except in northwestern Korea, which had been occupied by people of the top-shaped pottery culture. Another notable element in the archaeological assemblage of the pierced-rim culture is the so-called "red pottery," which is painted red and has a polished surface (Figure 16).

Among the regional types of Mumun culture, the top-shaped pottery culture and the pierced-rim pottery culture are the most clearly distinguished. There are, however, other major types. The Songguk-ni-type pottery culture is an example. Its cultural characteristics and spatiotemporal boundaries are being delineated as a result of recent excavations. The Songguk-ni site, which was first excavated by the Korean National Museum in 1976, has been excavated intermittently over the years.

According to Korean archaeologists, the Songguk-ni-type pottery culture

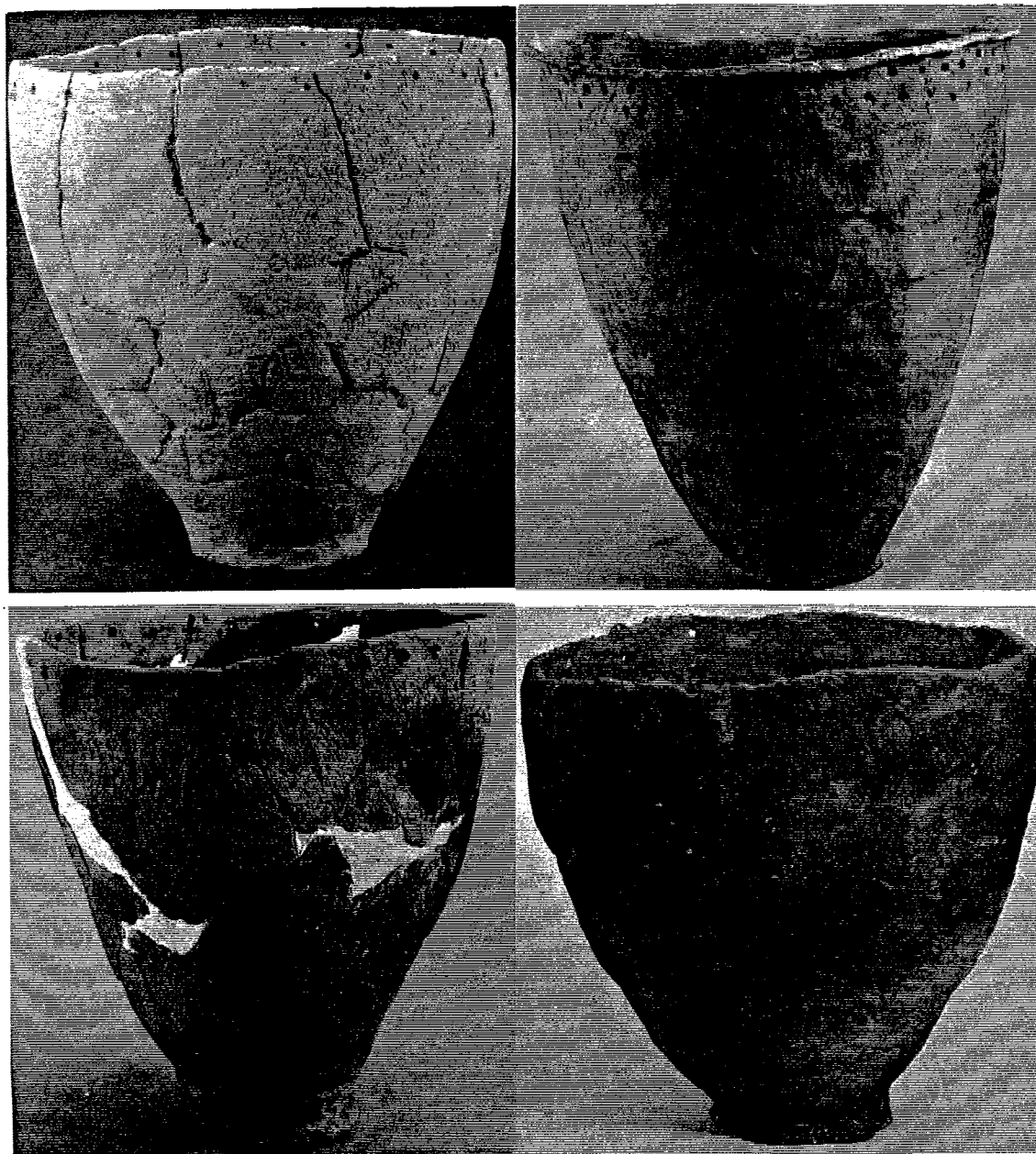
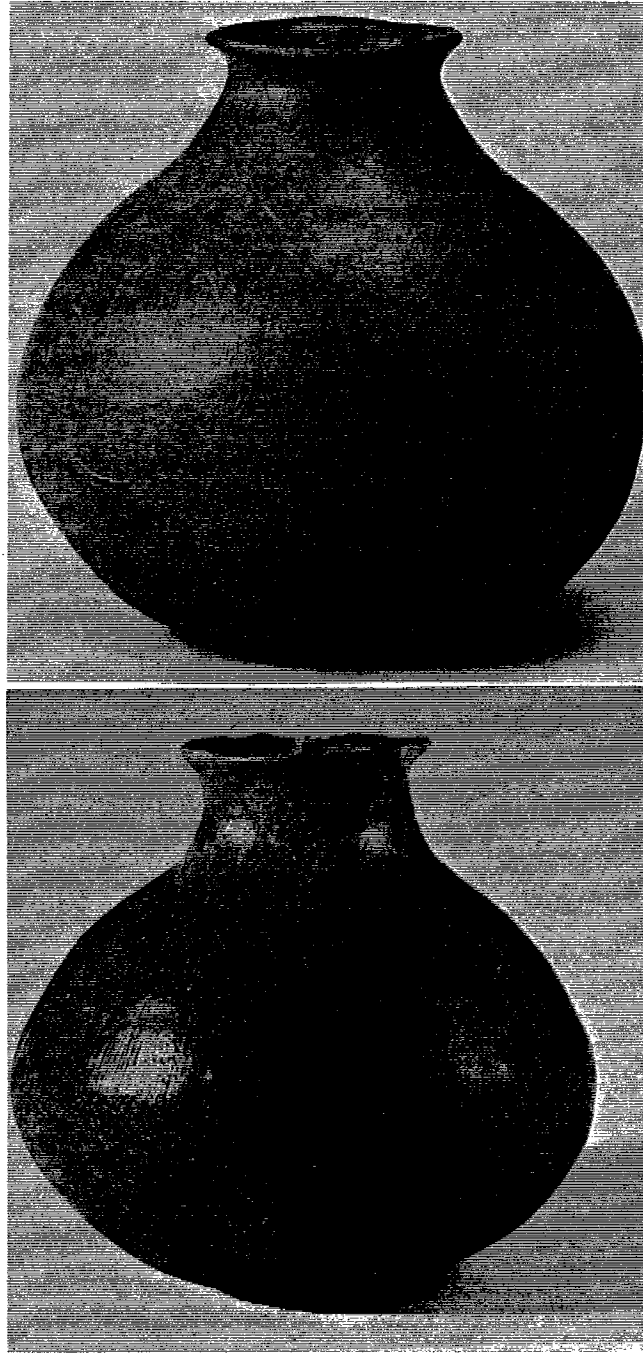


Figure 15. Examples of pierced rim pottery.



0 10CM

Figure 16. Examples of red pottery (Hongdo).

is comprised of several distinguishing characteristics, including territory, shape of house structure, pottery type, and burial structure. All of these characteristics point to an independent regional culture, called the Songguk-ni-type pottery culture.

Just as the top-shaped pottery culture occupied northwestern Korea in the Western Region and the pierced-rim pottery culture occupied the Eastern and mid-central as well as southeastern region, the Songguk-ni-type pottery culture appears to have occupied southwestern Korea. Unlike Mumun houses discovered in other regions, which have a quadrangular shape, houses of the Songguk-ni pottery culture are circular. Moreover, like other regional types, Songguk-ni pottery culture shows its indigenesness in its pottery. The flat-bottom short-necked pot with slightly flaring mouth is now recognized as typical of Songguk-ni-type Mumun pottery and is not observed in pottery of other regions (Figure 17).

Korean archaeologists believe that the top-shaped pottery culture and the pierced-rim pottery culture emerged before the tenth century B.C., while the Songguk-ni-type pottery culture emerged some centuries later (J. H. An 1992; H. J. Jo 1989; Korean National Museum 1978, 1986, 1987). The reason the Songguk-ni-type pottery culture is believed to have emerged much later is that, unlike the top-shaped and pierced-rim pottery cultures, its archaeological

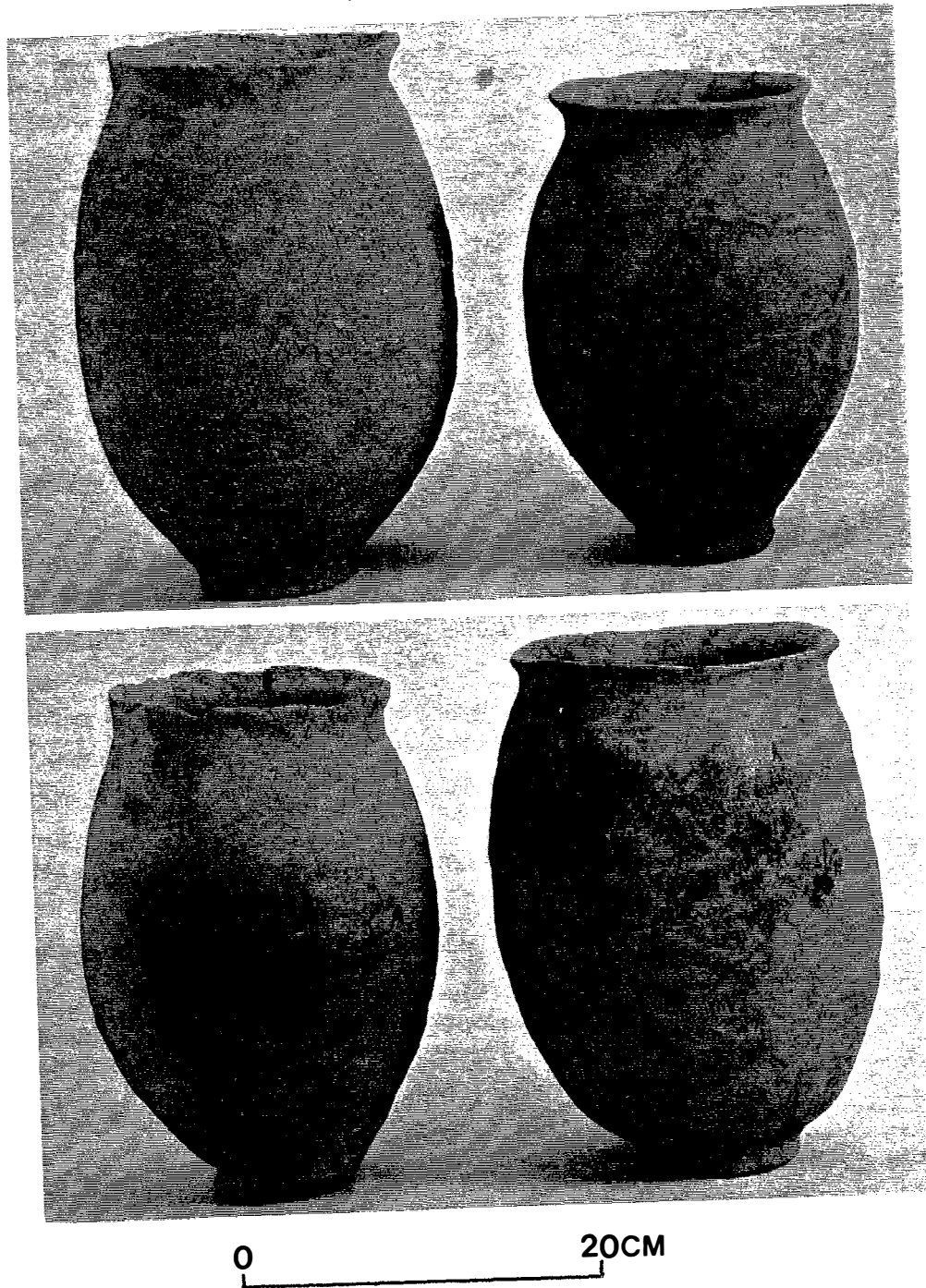


Figure 17. Examples of Songguk-ni type pottery.

assemblage contains some evidence of the production and use of bronze tool.

At the Songguk-ni site, a broken piece of the sandstone mold for a bronze axe was discovered on a house floor.

However, when one considers the great number of stone tools discovered at the Songguk-ni site, the existence of only one broken piece of a bronze axe mold, which was unaccompanied by any actual bronze implements or other structural features of bronze manufacturing, is not sufficient to conclude that the Songguk-ni people produced bronze tools. Nevertheless, more than a few Korean archaeologists have accepted that it must be evidence of Songguk-ni bronze-tool production because the piece was found *in situ*, as opposed to having intruded by chance or having been introduced by trade with Liaoning bronze society. (Liaoning will be discussed in the next section.)

In relation to this, it is notable that an underground stone cist bearing a bronze dagger, a bronze chisel, a stone dagger, and stone arrow points was excavated near the Songguk-ni settlement site (Y. B. Kim and S. J. An 1974). There is, however, no direct indication that this bronze-bearing stone cist had been left by the people who lived in the Songguk-ni settlement. However if these two circumstances of the discovery of the bronze mold on the residential floor and the existence of the bronze-bearing stone cist are considered in association, it seems more probable that Songguk-ni people used bronze tools,

even though such usage would have been limited, with stone tools having been most widely used in their society (Figure 18).

The late emergence of the Songguk-ni-type pottery culture, as suggested by the presence of bronze specimens, was further established in the stratigraphy of Kōmdan-ni, Ulju County, South Kyōngsang Province, where the entire boundary of a Mumun settlement village was excavated in 1990 (J. H. An 1990). The Kōmdan-ni site consisted of two overlapping components of Mumun residential houses. The lower component consisted of quadrangular pit-houses containing a pottery assemblage of the pierced-rim type. The upper component consisted of circular pit-houses containing typical Songguk-ni-type pottery. However, unlike the Songguk-ni site, bronze specimens were not found in the upper component of the Kōmdan-ni site. Thus, based on the stratigraphy of the Kōmdan-ni site, researchers concluded that, at least in southeastern Korea, Songguk-ni-type pottery culture appeared after the pierced-rim pottery culture had been established there.

In summary, three major regional types of Mumun culture have been identified: (a) The pierced-rim pottery culture occupied the whole Eastern Region and the mid- and southwestern region of the Western Region, (b) the top-shaped pottery culture occupied the northwestern region of the Western Region, and © the Songguk-ni-type pottery culture occupied the southwestern



[1.95m (length); 0.80m (width); 0.81m (inside height)]

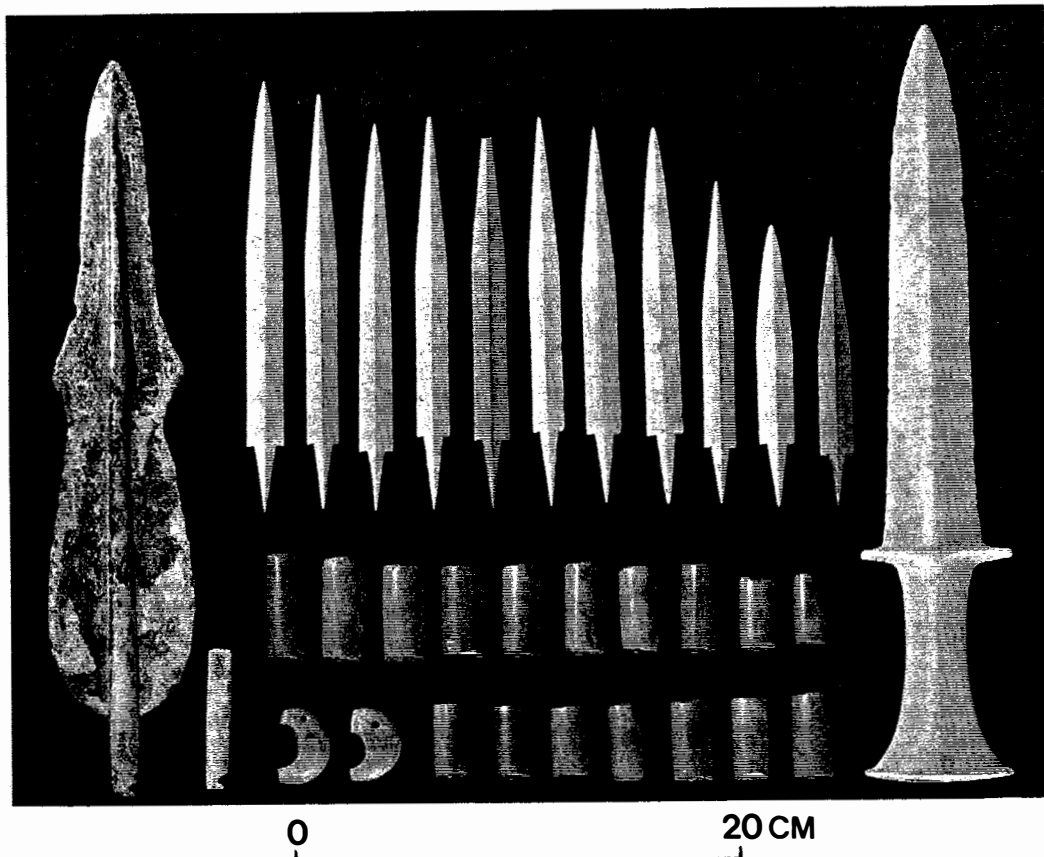


Figure 18. The Songguk-ni stone cist and its entombed objects.

region of the Western Region and later expanded toward the southeastern region where the pierced-rim pottery culture already had been established. Identification of further regional types, as well as classification of various subtypes, must await further study as new Mumun sites are excavated.

Reconstructing the Social Structure of Mumun Culture

Currently, the opinions among Korean archaeologists may be divided into two opposing viewpoints. One sees Mumun social structure as egalitarian, and the other sees as ranked or stratified.

The first viewpoint (B. W. Kang 1991, 1992; Ro 1994b) assumes that there must have existed a difference in power and wealth according to natural differences in human personality and individual talent. However, differences in power and wealth were not fixed legally. Accordingly the Mumun society lacked an established rank system, which is a major criterion of a chiefdom or more advanced stratified social structure.

This view holds that every independent Mumun village had its own political leader who represented the community before other villages, made decisions regarding community affairs, and consulted in the common concerns of village members. This view of the social structure and political nature of

Mumun society is supported by the archaeological record and suggests that Mumun society was relatively egalitarian. Indeed, no archaeological evidence of a privileged social class or hierarchical stratification exists. For example, Kang concluded that the dolmen in Mumun society cannot be taken as evidence of chiefdom-level organization because little significant qualitative difference was observed among grave goods. He assumed that the energy that must have been spent in the construction of a dolmen burial was the exercise of volunteer, cooperative work, similar to the pattern which can be observed in funeral ceremonies of many traditional rural villages in Korea today (B. W. Kang 1992:10). Ro (1994b) agrees that the construction process of dolmens must have been cooperative and that the quality of grave goods points to the egalitarian nature of Mumun society. All grave goods so far discovered from dolmens are ordinary items, such as polished stone tools and pottery used in daily life. No special-looking burial goods, which could be taken as the possessions of a privileged social class, have been found (Ro 1994b). Moreover, archaeological features that might suggest unequal status among house owners cannot be observed. House size and structure, as well as quality and quantity of goods contained therein, suggest Mumun society was egalitarian.

Dolmens have been regarded by many as evidence of a privileged social

class because of the great size of their capstones, which must have required many adult men to move and lift into place. However, aside from its sheer size, closer inspection of the dolmen's capstone as well as its other aspects support the view of an egalitarian Mumun society, which practiced community-level cooperation. For example, regardless of the dolmen capstone's size, which varied, the entombing structure beneath it was always of modest size, adequate to hold only a single body and a few grave goods.

Again, all grave goods, such as pottery, polished stone axes, adzes and arrowheads, and a small amount of beads, indicate that the entombed person belonged to no privileged class. The quality of grave goods in all dolmens so far excavated is quite uniform: one piece of red pottery, several polished stone objects, such as stone daggers and arrowheads, and sometimes a few natural beads comprise the entire assembly of burial goods. This uniformity in the makeup as well as in the amount of burial goods from dolmens strongly suggests that all persons entombed in dolmens belonged to the same social status at that time.

However, it is not necessarily claimed that these megalithic burials were constructed for all community members regardless of gender, age, or other factors. Because of the great amount of labor necessary to construct dolmens, a certain selectivity must have been exercised in determining who among the

dead would be entombed in dolmens. For example, senior persons and/or persons who had shown leadership and had been revered in the community must have been selected for dolmen entombment, considering the egalitarian nature and basically consanguineous kinship organization of Mumun society.

In summary, dolmens are believed to have been reserved for the burial of senior persons and/or community leaders in a consanguineal kin society. In Mumun society, all members must have enjoyed roughly equal rights in their social lives, although there must have been certain patterns of job differentiation according to different individual talents and the functional necessities of society.

On the other hand, Ch'oi views the Mumun society as a ranked chiefdom(M. L. Ch'oi 1981). Based on differential dolmen sizes, some being extremely large, Ch'oi's (1981) interpretation is as follows: In order to build a dolmen, tens of male adults must have been mobilized at one time. Ch'oi demonstrated experimentally that in order to build a normal-sized dolmen, of which the capstone weighs around 6 tons, at least 60 adult males were required for an entire day. Some capstone weighed 50 tons requiring 500 male adults; Ch'oi therefore concluded that the person to be entombed in the dolmen must have possessed sufficient political power to command many people when he was alive. Therefore, the magnificent dolmen burial custom could not have

been accomplished except in a society that had established social ranks.

Another non-egalitarian view is maintained by North Korean archaeologists as the only authorized theory, which is based on a Marxist formula of historical development. This dogmatic formula holds that in prehistoric Korea the social structure of the Neolithic Period was an egalitarian clan-based band society, in which few private possessions existed, and that the society of the Bronze Age was stratified and marked by class divisions that had resulted from the intensifying inequality of wealth possession.

Thus, North Korean archaeologists, who had been unable to recognize the independent existence of Mumun society, simply treated it as belonging to Bronze Age society. Based on such an out-of-date conceptual framework, they believed that an independent Bronze Age people had existed in prehistoric Korea. Applying Marxist formula, they defined Korean Bronze Age society as a class-stratified society in which inequality in political power and wealth possession was firmly established in accordance with the hierarchy of classes. Therefore, according to the North Korean formula, Mumun society, which is seen as being a part of the Korean Bronze Age, was also characterized by a firmly established hierarchy of social classes.

This interpretation is today maintained and taught as the only authorized theory in North Korea. However, in South Korea, opposition about this

viewpoint increased during the 1970s as the archaeological evidence of an independent Mumun steadily increased.

Recently, S. N. Rhee and Ch'oi (1992) has offered an interesting approach to the development of Mumun social structure. He argued that it was not static, whether egalitarian or ranked, but dynamic and progressive. Due to the long duration of Mumun society, more than a millennium, its social complexity must have been changed progressively from an earlier simple stage towards a later, more complex stage. Rhee reasoned that the incipient stages of Mumun society must have been rather egalitarian, but, as agricultural productivity and population increased and various technologies developed, its social structure evolved into something more complex. At a certain point in the later stages of this gradual developmental process, a kind of simple chiefdom appeared in which social ranking was very weak and society in general was still egalitarian in nature. Subsequently, this social evolutionary process resulted in the establishment of a complex chiefdom in association with the development of local bronze and iron technology after 300 B.C.

Rhee and Ch'oi attempted to articulate all the various phases in Mumun social structure according to the differential status of archaeological assemblages in the Mumun culture complex. For example, he inferred that in the advanced stages of Mumun society a two- or three-tiered social hierarchy

had been established, and argued that (a) common people had been buried in simple earthen pit-graves, (b) people in the middle ranks had been buried in small or medium-sized dolmens, and (c) those in the highest ranks had been buried in the few extraordinarily large dolmens (Rhee and Ch'oi 1992:76).

These hypotheses wait to be tested as Mumun archaeological sites increase. Regardless of whether or not the differential size in dolmen capstones can be taken as indicating the differential social status of those entombed, Rhee and Ch'oi's point of view regarding the dynamic evolution of Mumun society seems the best perspective on the reconstruction of the development of Mumun society among those proposed until now. In view of the great longevity of Mumun society, the point in the gradual progression of social development at which an egalitarian society had first appeared and when that society shifted into a more complex configuration, ultimately that of a stratified chiefdom, will be clarified by future research. For purposes of this research addressing such questions, attention should be devoted to other specialized structures, such as the ritual center, the large storage house, the community gathering center, and the chief's house.

Liaoning Bronze Culture

Definition and Basic Archaeological Characteristics of Liaoning Bronze Culture

During approximately the same period that Mumun culture was developing all over the Korean Peninsula, another culture was advancing in southwestern Manchuria, adjacent to the Korean Peninsula. This culture is generally known among Korean archaeologists as the "Liaoning bronze culture." Its archaeological assemblage includes molded bronze implements such as axes, arrowheads, mirrors, horse fittings and various ornamental objects usually found in burials. The index artifact of the Liaoning bronze culture assemblage is a mandolin-shaped bronze dagger.

Thanks to the accumulated archaeological data collected in southwestern Manchuria by Chinese archaeologists and the vigorous reconstruction efforts by North Korean archaeologists during recent decades, the shape and sociocultural characteristics of Liaoning bronze culture are clear enough to identify it as an independent culture in the prehistory of Korea and northeastern Asia. Because most of the areas where this culture left its traces lie within the territories of the Republic of China and North Korea, South Korean archaeologists have been prohibited from doing fieldwork there. Therefore, study of the Liaoning bronze

culture has been completely dependent upon excavations and analyses by Chinese and North Korean archaeologists (Figure 19), (Figure 20), (Figure 21).

When one reviews the investigations and interpretations of Chinese and North Korean archaeologists, a number of shared opinions about Liaoning bronze culture emerge. As shown in the distribution map (see Figure 21), it is centered in the region of present Liaoning Province. Its cultural impact had reached Manchuria to the northeast, Jilin Province, in western China, and even as far south as southern Korea (Institute for Archaeological and Folklore Studies 1987).

Pottery used by Liaoning bronze people bears a unique type and is generally known as "Misong-ni-type pottery." It includes a deep bowl with a folded rim, and a long-necked, large pot with band-shaped handles on the body (Figure 22).

Unlike Mumun sites on the Korean Peninsula, which include residential structures, all known Liaoning bronze sites are burial structures. Liaoning bronze culture burials consist of an underground cist made of stone slabs or accumulated stones. Moreover, some more complex tombs had a large mound of stone covering multiple entombing structures. These complex tombs also included a central tomb surrounded by subcists containing either human skeletons or an abundance of burial goods.

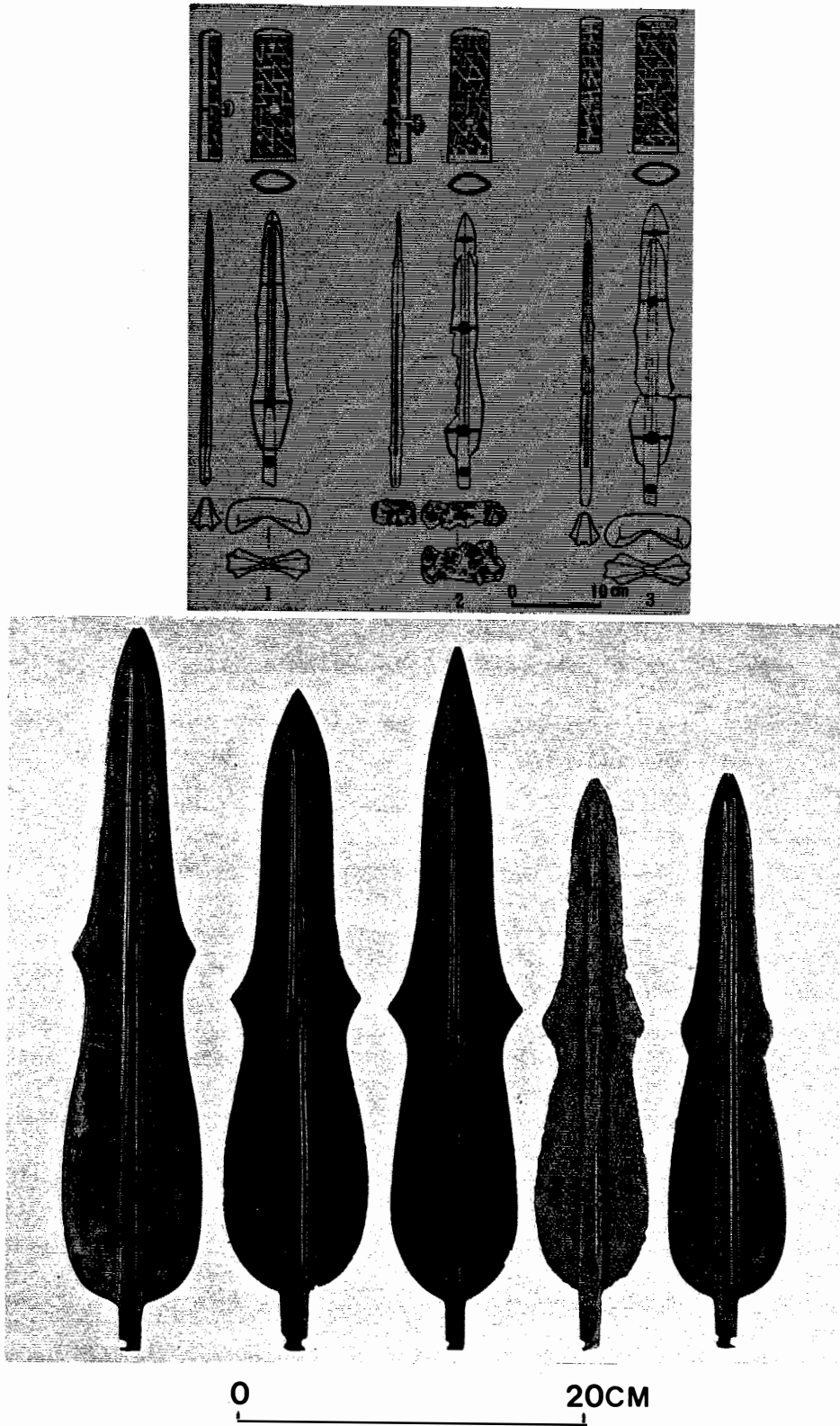


Figure 19. Examples of mandolin-shaped bronze dagger.

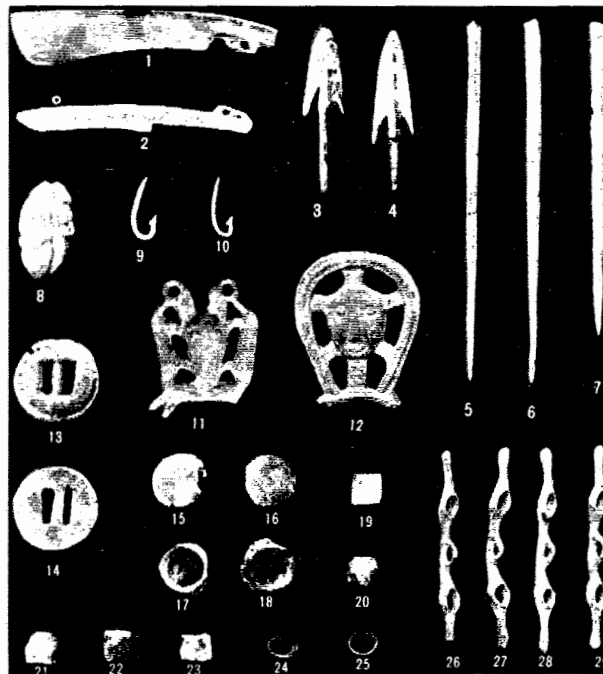
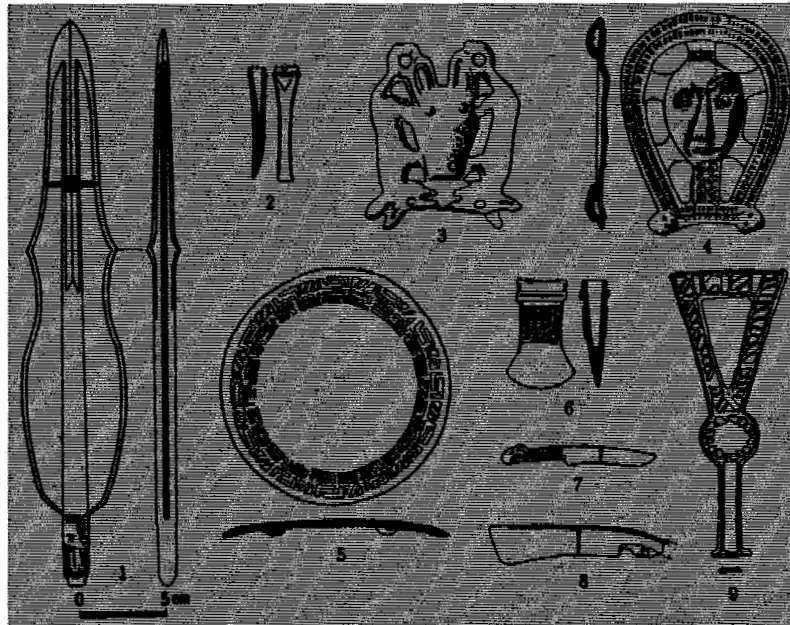


Figure 20. Example of typical bronze assemblage of the Liaoning bronze culture (bronze objects excavated from Shierdaiyingzi tomb, Zhaoyang County, Liaoning Province).

- : Sites in Liaoning Province where Typical Liaoning Bronze Assemblage were Excavated
■: Sites in Korean Peninsula where individual Liaoning Bronze Specimens was Discovered

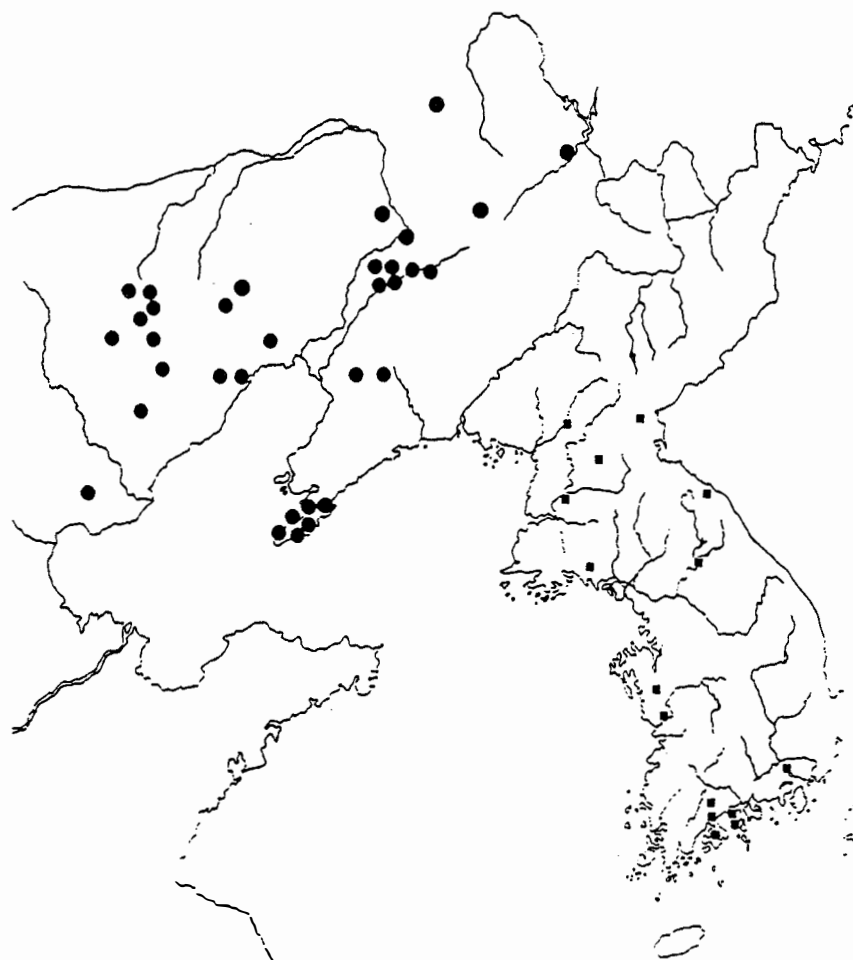


Figure 21. Distribution of Liaoning bronze sites in Liaoning Province and Korean peninsula.

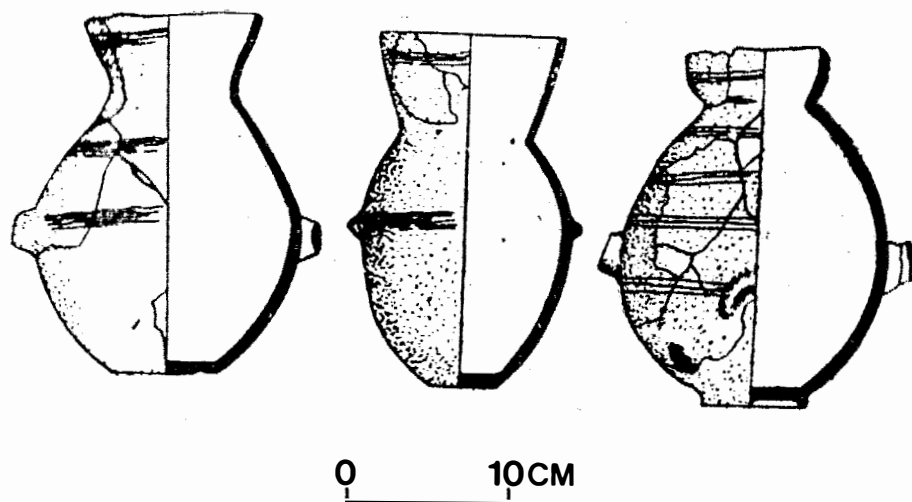


Figure 22. Examples of Misong-ni type pottery.

According to the chronologies of North Korean archaeologists, the Liaoning bronze culture existed between c. 1100 B.C., and 600 B.C. These estimates approximately match the age range of Mumun culture on the Korean Peninsula (Institute for Archaeological and Folklore Studies 1987:17-29).

The Social Nature and Structure of Liaoning Bronze Society

In his recent Ph.D. dissertation (University of Pittsburgh 1996), Gideon Shelach has argued, based on his research, that by ca. 1100 B.C., the Liaoning Region was " a society in which political power was personally associated with the paramount leaders" and that it was one of "chiefdom level societies."

Some archaeological evidence clearly indicates the nature of Liaoning bronze social organization. One remarkable example is that not only were several bronze implements entombed in burials, but frequently such an assemblage included weapons, such as a mandolin-shaped dagger, a fan-shaped axe, sharp arrowheads, horse fittings and special ornamental plates decorated with animals and human-mask designs, and bronze boot buttons. The discovery of these bronze objects has led to the claim that a warrior class existed in Liaoning bronze society. We can imagine warriors astride their horses, fully arrayed in battle costume, including leather boots with bronze buttons, armor

attached with various bronze plates and accessories, and very efficient battlefield weapons such as daggers, a bow and arrows, and axes. Few archaeologists doubt that a warrior class existed in Liaoning bronze society. Those warriors must have belonged to the higher ranking echelons of their society, because, instead of ordinary stone tools, they possessed the exceptionally well-made and efficient bronze implements, exclusive possessions of a privileged class of people.

The privileged status of bronze-possessing people in Liaoning bronze society has been indicated also by the nature of burial structures and in the arrangement of burial goods. Gangshang and Loushang tombs in Liaoning Province provide examples. The layout of cists and the special arrangement of the abundant burial goods plainly show the highly stratified nature of the society that constructed these burials (Figure 23), (Figure 24).

Social stratification is clearly reflected in the Gangshang tomb in the southern end of Liaoning Peninsula (Joint Archaeological Excavation Team of China and North Korea 1965; Pak 1988). At the center of the circular burial structure is a large cist composed of several well-trimmed stone slabs. The dead master almost certainly was entombed here. Surrounding it are about 20 relatively small cists containing the bones of hundreds of people. In one such cist, the bones of 18 people have been discovered, both male and female and

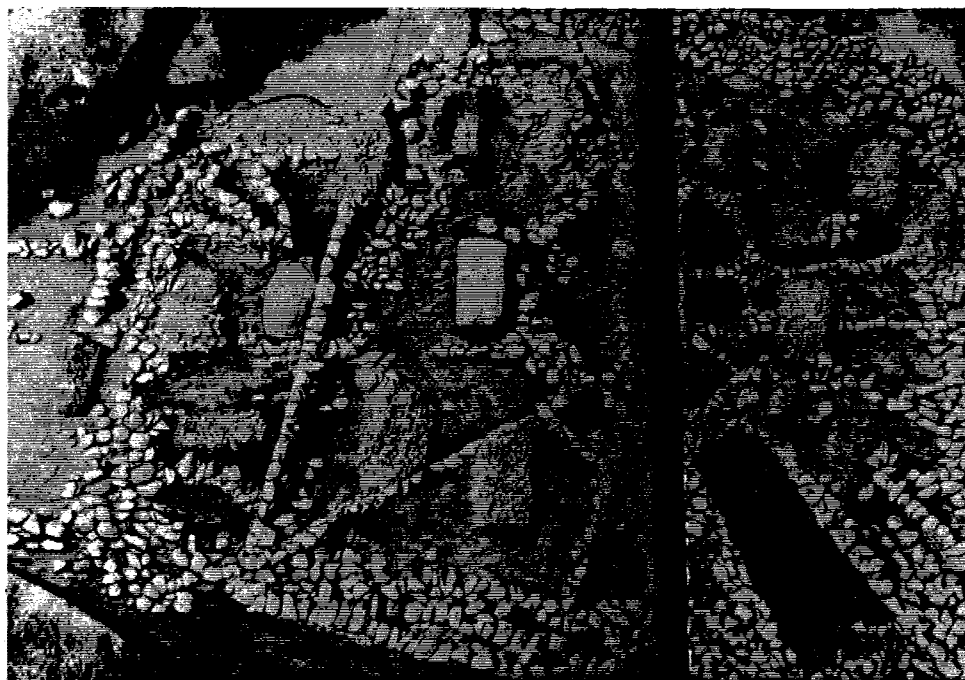
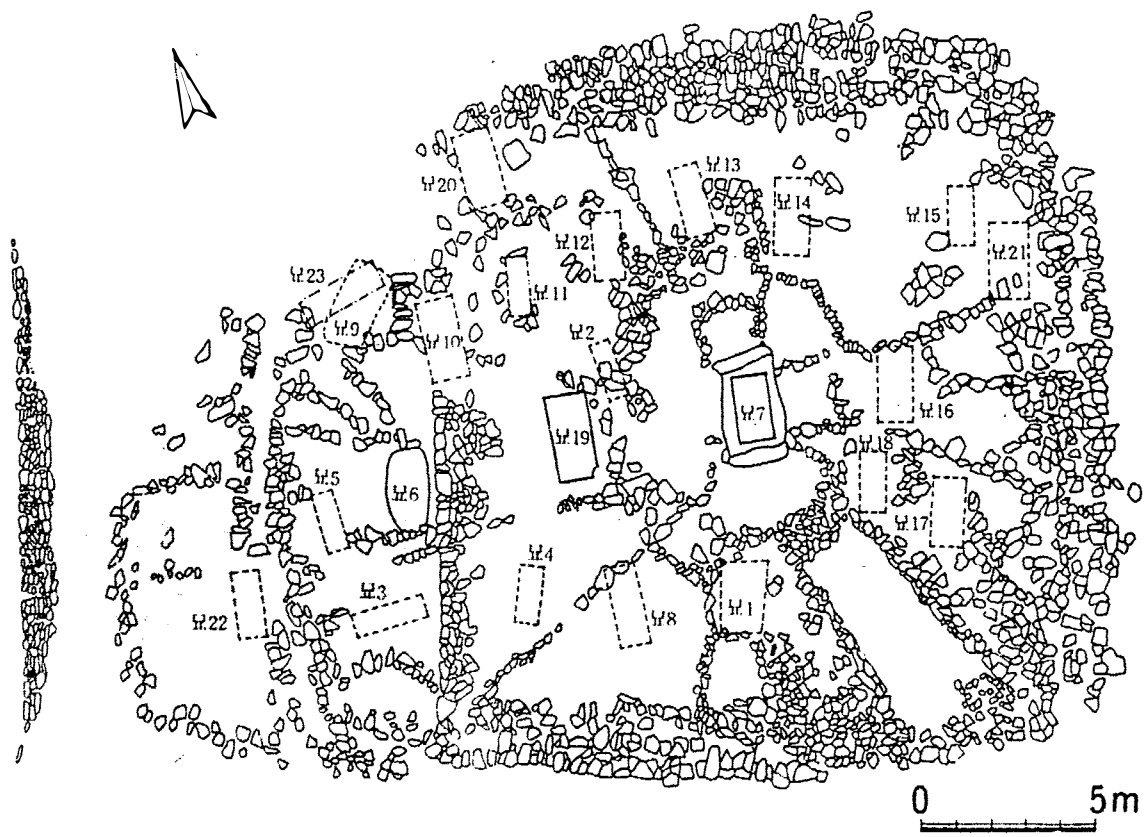


Figure 23. Gangshang tomb, Louda City, Liaoning Province.

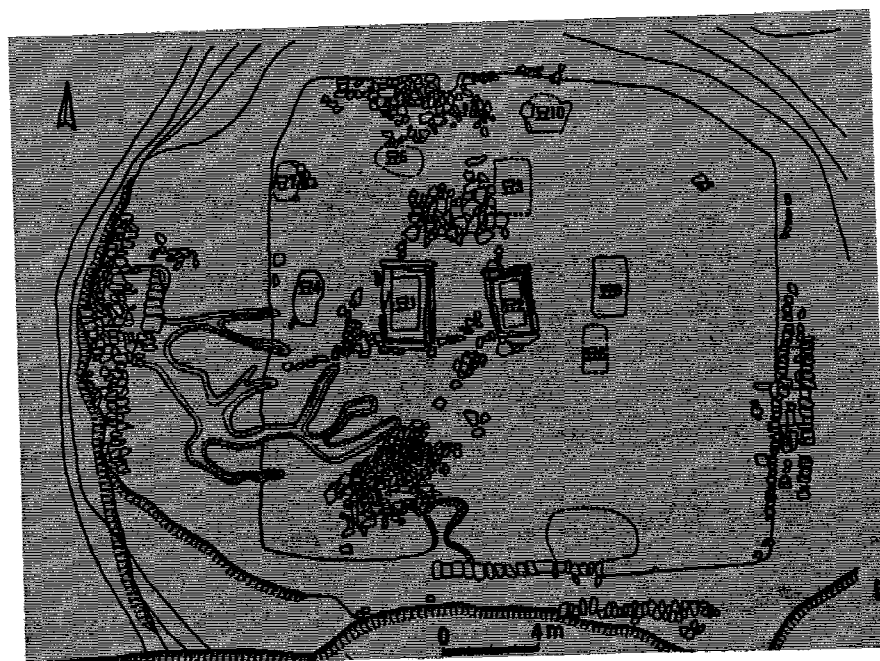


Figure 24. Loushang Tomb, Louda City, Liaoning Province.

including those of children. Moreover, from other pits surrounding the main cist, 867 pieces of fine bronze objects were collected, including such efficient weapons as mandolin-shaped daggers, spearheads, arrowheads, axes, and such miscellaneous decorating accessories as wrist laces, hairpins, and even a finely woven bronze net. The excavators estimate that the actual amount of entombed bronze objects must have far exceeded that which they had collected, due to looting and pillaging.

In the Loushang tomb, the basic structure of which is similar to that of the Gangshang tomb in the same region, eight pits surround the main cist. The bones of some 50 people were found there. In addition, 160 pieces of bronze objects were recovered, including such weapons as mandolin-shaped daggers, arrowheads, shields, axes, horse fittings, and adzes.

In many other tombs dispersed throughout the Liaoning Province--the basic burial structure of which are similar to, if smaller than, the Gangshang and the Loushang tombs--a variety of bronze tools, including weapons such as daggers, axes, arrowheads, horse fittings and others, were discovered.

Several convincing inferences about the structure of Liaoning bronze society have been made based on the patterns represented in those burials. One is that in Liaoning bronze society, when the persons entombed in the main cists were alive, they had possessed many slaves, most of whom had been

slaughtered in order to be buried with their lord regardless of their age and sex. Another is that not only had those bronze objects been owned exclusively by people of the ruling class, but also the relative size of the burial structure and relative amount of such bronze objects entombed therein depended on the level of the entombed person's social status in the hierarchy of Liaoning bronze society. Furthermore, the exclusive ownership of the bronze weapons, all of which are believed to have been used in actual warfare by the ruling class, indicates the important nature of the Liaoning bronze society. That is, Liaoning bronze society was a warring society ruled by a class of people who had been both warriors and rulers at the same time.

In summary, the basic social structure of Liaoning bronze society can be identified as stratified. It was a society that had been ruled by a warrior class armed with a variety of bronze weapons. However, it is not certain at what point in the evolutionary development of Liaoning bronze society it emerged as either a state with a four-tiered class structure (king, ruling bureaucrats, lay public, and slaves) or as a chiefdom with a three-tiered class structure (chief, higher class, lay public, and/or slaves). However, it is certain that, by 1100 B.C. a chiefdom level society had developed.

I believe that a bronze-tool assemblage--characterized, as this one is, by the presence of strong and efficient weapons--must have been the main impetus

for the emergence of a stratified society in prehistoric Liaoning Province, considering the exclusive ownership of those tools by a certain group of people. Therefore, I would conclude that even in the beginning phases of Liaoning bronze society, its social structure was nonegalitarian. Its vertically oriented status differentiation rapidly developed into a stratified chiefdom and finally into a state.

Interaction Between Mumun and Liaoning Bronze Societies

As will be expounded upon in the following description of the Korean-style agrarian bronze culture, Mumun society could have evolved into a more complex society through the decisive influence of Liaoning bronze society. In examining the relationship between Liaoning bronze society and Mumun society, which had been neighbors for several hundred years, I would like to compare briefly the social organization and cultural characteristics of the two societies. Using available radiocarbon dates as a basis, we know that both societies appeared around the thirteenth century B.C., and from about the third century B.C., both societies underwent substantial change due to the introduction of iron technology.

For a long period of time, Liaoning bronze society centered on the mid-

central Liaoning Peninsula, and Mumun society on the Korean Peninsula, had been expanding their territories and are assumed to have interacted in various ways. These two societies must have interacted by trading their indigenous products, sometimes in peaceful ways and sometimes through the intermittent intrusion of the mobile and warlike Liaoning bronze people into the territory of Mumun society. Through peaceful trade, the Liaoning bronze people would have received the Mumun people's indigenous agricultural products in exchange for their precious bronze implements. Also, as a result of the Liaoning bronze people's intermittent intrusion into Mumun territory, they must have left some behavioral traits on the Korean Peninsula.

However, no archaeological evidence exists for the transmission of Mumun behavioral traits to Liaoning bronze society. Such evidence might include, for example, specimens of polished stone tools or typical Mumun pottery having been found in association with the typical archaeological assemblage of Liaoning bronze society. A possible reason why none have been found may be that there was no need for the Liaoning bronze people to trade for Mumun pottery and tools, having been able to make their own. Also, there must have been no problem in acquiring the necessary raw materials or special technical skills. Various agricultural products that they had not been able to produce must have been acquired by trade with the Mumun people. However,

such products represent material that could not have been preserved archaeologically. Therefore, I believe it is not surprising that no evidence of trade with the Mumun people has been found in the archaeological assemblage of the Liaoning bronze people.

For their part, Mumun people must have desired those precious looking bronze objects from the Liaoning bronze society, objects which the Mumun people were not able to manufacture themselves. They also must have coveted stock animals or their products, which the semi-nomadic Liaoning bronze people possessed. Among such trade goods, only the bronze objects can be expected to appear in the archaeological record. Indeed, bronze objects have been found in Mumun sites in association with indigenous tools of Mumun society, although their numbers are very few. Only about 20 specimens are known throughout Korea. (Table 3) presents those bronze objects for which the context of their discovery is certified (Table 3).

In addition to these examples of *in situ* discoveries, several more cases exist in which individual bronze specimens, such as daggers, arrowheads, or axes, were discovered outside of their context, so that their entombing structures were missing or uncertain. All these bronze objects discovered on the Korean Peninsula show a very distinctive pattern when compared to similar items found in Liaoning Province. Bronze objects found in Liaoning Province

Table 3. List of Discoveries of Liaoning Bronze Traits in the Mumun Sites.

No./ Site Location	Structure	Bronze Objects	Site Description
1. Undae-ri Gohŭng County Cholla-Namdo (Arimitzu, 1957)	"Paduk" board-shaped dolmen	One mandolin- shaped dagger	Excavated in 1926, inside the entombing structure
2. Yŏnghŭng-ni Gaechŏn County Pyŏngan-Namdo (Yun, 1987)	"Paduk" board-shaped dolmen (?) [?]	One mandolin- shaped dagger; one bent hand knife	Discovered by chance in 1939, inside the entombing structure, with a polished stone axe and Amazon stone beads
3. Songguk-ni Ch'och'ŏnmyŏn Ch'ungch'ŏng- Namdo (Y. B. Kim and S. J. An, 1975)	Underground slab-stone cist	One mandolin- shaped dagger; one small chisel made of a broken end of a mandolin- shaped dagger	Excavated in 1974, inside the cist and on the floor, with a polished stone dagger, 11 polished stone arrowheads, 17 cylinder- type jasper stone beads, and 2 Amazon stone beads
4. Mugye-ri Kimhaeup, Kyŏngsang- Namdo (W. Y. Kim, 1987)	"Paduk" board-shaped dolmen (?) [?]	Three arrowheads	Discovered in 1962, inside the entombing cist, with a polished stone dagger, eight polished stone arrowheads, three cylinder-shaped beads, several pottery shards

Table 3. (Continued)

No./Site Location	Structure	Bronze Objects	Site Description
5. Usan-ni, Senŭngju County, Cholla-Namdo (Y. M. Lee, 1993)	"Paduk" board-shaped dolmen (?) [?]	Two mandolin- shaped daggers	One mandolin-shaped bronze dagger in a dolmen with natural stone beads and some Mumun pottery shards; one mandolin- shaped bronze dagger in another dolmen; in total, 50 dolmens, including the above 2; no bronze objects were discovered in other dolmens
6. Singi-ri, Posŏng County, Cholla-Namdo (Y. M. Lee, 1993)	"Paduk" board-shaped dolmen	One mandolin- shaped dagger and one arrowhead	A mandolin-shaped dagger was discovered with a polished stone dagger and 29 polished stone arrowheads in a dolmen, and a bronze arrowhead was with some pottery shards in another dolmen; in total, 26 dolmens, including the above 2, were clustered, and only stone tools and Mumun pottery were discovered n remaining 24 dolmens
7. Wŏlang, Bongyedong, Yŏchŏn City, Cholla-Namdo (Y. M. Lee, 1993)	"Paduk" board-shaped dolmen	One tip shard of a mandolin- shaped dagger	In total, tens of dolmens were clustered, and except in one, only stone tools and Mumun pottery were discovered inside the dolmens; a tip shard of a mandolin-shaped bronze dagger was discovered with 16 stone beads

Table 3. (Continued)

No./Site Location	Structure	Bronze Objects	Site Description
8. Sangjuk, Jukyangdong, Yochon City, Cholla-Namdo (Y. M. Lee, 1993)	"Paduk" board-shaped dolmen	Seven mandolin- shaped daggers, and one mandolin- shaped spearhead	In total, 38 dolmens were clustered; in 6 dolmens a mandolin-shaped bronze dagger was discovered, and in 1 dolmen a mandolin-shaped bronze dagger and a mandolin-shaped bronze spearhead were discovered together; with those bronze daggers and a bronze spearhead, beads, Mumun pottery shards, and red pottery shards were collected
9. Sanbon, Pyongryedong, Yochon City, Cholla-Namdo (Y. M. Lee, 1993)	"Paduk" board-shaped dolmen	One mandolin- shaped dagger	In total, 36 dolmens were located in three clusters; among them, only in one was a bronze dagger collected with no other artifacts; in other dolmens, beads, polished stone arrowheads and axes, and Mumun pottery shards were found
10. Orimdong, Yochon City, Cholla-Namdo (Y. M. Lee, 1993)	"Paduk" board-shaped dolmen	One mandolin- shaped dagger	In total, 20 dolmens were clustered, and three shards of a bronze dagger were found with a polished stone arrowhead, Mumun pottery shards, and two cylinder-shaped beads in a dolmen

Table 3. (Continued)

No./Site Location	Structure	Bronze Objects	Site Description
11. Misongri, Yujugun, Pyongan-Bukdo (Y. G. Kim, 1963)	In the deposit of a cave	A fan-shaped socket axe and a rough linear- designed mirror	The ground of the cave consisted of a lower deposit containing Chulmun pottery and an upper deposit containing bronze objects and typical Misongri-type pottery, with a sterile layer intervening; inside both cultural layers, no structural features were ascertained except scattered artifacts
12. Songgukri, Puyogun, Chungchong- Namdo (Korean National Museum, 1978)	Inside a house floor	A broken piece of the sandstone mold of a fan- shaped socket axe	Songgukri site is a large Mumun village settlement which is estimated as being composed of more than several hundred houses, but only 17 houses were excavated; abundant amount of various sorts of Mumun pottery and polished stone tools were collected, but in relation to bronze technology, only this piece of a mold was ascertained

were all located in the stone cist structure, which conformed with the typical burial traditions of the Liaoning bronze people. On the other hand, in Korea, while all bronze objects were found in Mumun sites, the contexts of their discovery vary. Of the 13 items that (Table 3) presents, nine were found in "Paduk" or "Go" board-shaped dolmens, two were found on house floors, 1 was found in a cave deposit, and one was found in a stone cist structure.

Although in the majority of cases the bronze object was found in a dolmen, this is the case only within the region of South Chŏlla Province (with the single exception of Choyangdong, Kangnŏng City, Kangwŏn Province). In other regions of the Korean Peninsula there seems to be no clear contextual pattern in the discovery of bronze objects. Although it seems too small a number to infer any statistical significance in the distribution pattern, it is notable that eight out of the 13 bronze objects presented in (Table 3) were found in "Paduk" or "Go" board-shaped dolmens located in South Chŏlla Province.

Other differences exist between the contextual patterns of Liaoning bronze specimens found in Korean Mumun sites and those found in Liaoning Province sites. For example, all Liaoning bronze objects discovered in the Korean Mumun sites were found apart from the rest of the bronze-tool assemblage. In contrast, in all Liaoning Province sites, all bronze objects were

found in a single assemblage. Moreover, horse fittings, which are common items in the Liaoning bronze-tool assemblage, which contains weapons, ritual-purpose tools, and ornaments, cannot be observed among those objects found in Mumun sites.

These differences between the contextual patterns of bronze objects found in Korean Mumun sites, as compared to those found in Liaoning bronze sites, seem to reflect a certain relationship between the Korean Mumun and Liaoning bronze societies. The writer believes this relationship can be defined as a stage of interaction characterized by trade, intermittent infiltration by the Liaoning bronze horse-riding people into Mumun territory, or various local and individual activities of social intercourse. During such a stage of interaction, influence from the Liaoning bronze society was minor, and the identity and social structure of the Mumun society would not have been significantly influenced.

When this stage of mutual intercourse began is uncertain. However, considering that the oldest known Mumun sites date back to the fifteenth century B.C. and the oldest known Liaoning bronze sites date back to the twelfth century B.C., and that the typical Korean-style agrarian bronze culture had appeared by at least 3rd century B.C., interaction between those two societies can be supposed to have taken place in their earlier phase.

Korean-Style Agrarian Bronze Culture

Definition of Korean-Style Agrarian Bronze Culture

Formerly known as the "slim-type bronze dagger culture" (sehyōng bronze dagger culture), the Korean-style agrarian bronze culture is marked in the archaeological record by the presence of the slim-type bronze dagger, just as the diagnostic artifact of the Liaoning bronze culture is the mandolin-shaped bronze dagger. (Figure 25).

As shown in the map in Figure 26, distribution of the slim-type bronze dagger and its associated artifacts is confined to the Korean Peninsula. That distribution is neatly contained within Korean territory throughout its long history, from the Mumun Period onward. Therefore, we can conclude that this bronze culture originated and developed in Korea (Figure 26).

Considering the apparent geographical boundaries and indigenoussness of the slim-type bronze dagger culture, which had been so named by Japanese archaeologists during the Japanese Colonial Period, G. M. Yi (1990) proposed changing its name to "Korean-style bronze culture." H. J. Ro (1994b) more recently modified it to "Korean-style agrarian bronze culture," in consideration of its subsistence economy and origins, which will be described later.

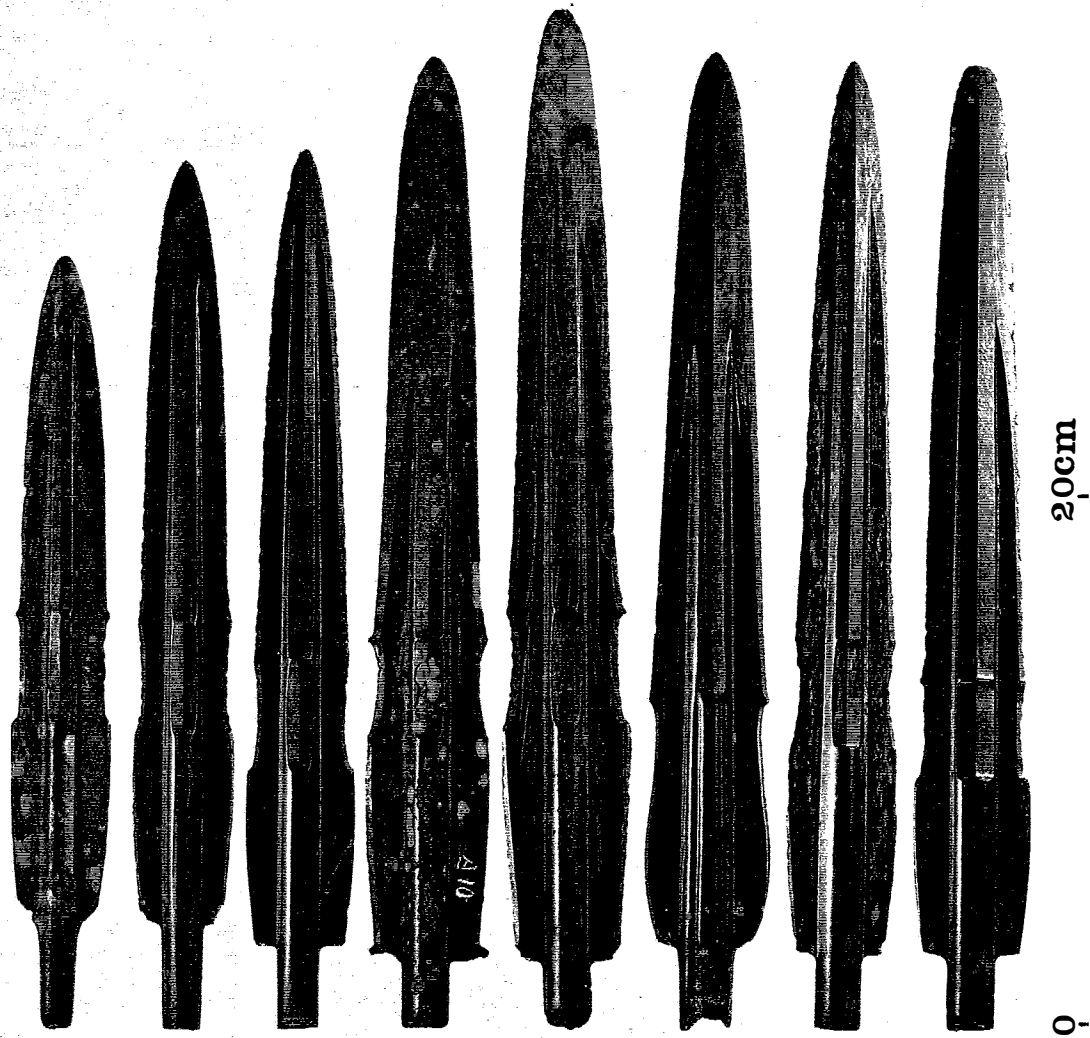


Figure 25. Examples of slim-type bronze daggers.

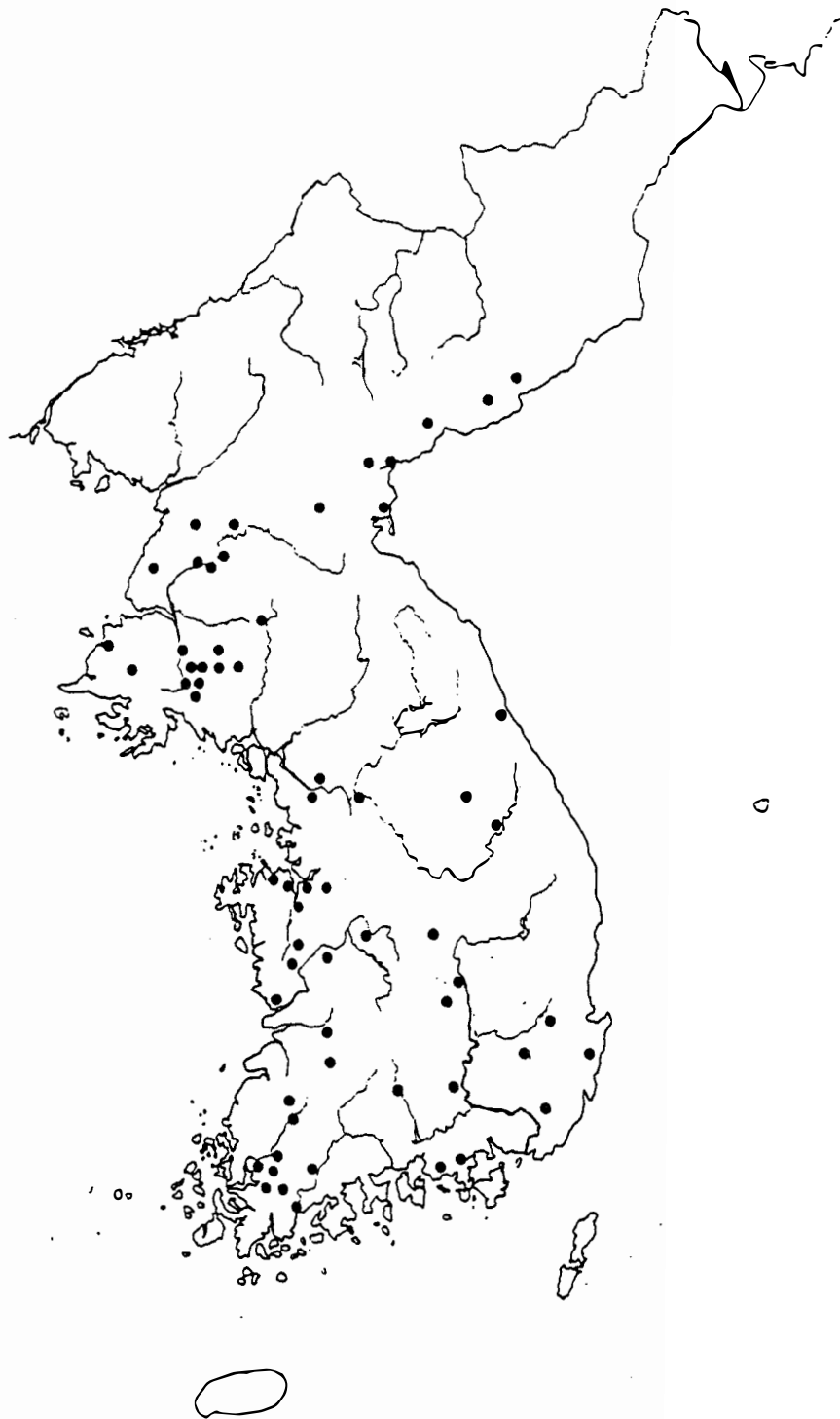


Figure 26. Distribution of the sites of Korean-style agrarian bronze culture.

The important characteristics of Korean-style agrarian bronze culture, which have been clarified by analyzing the available archaeological data, are summarized below. First, with only one exception, all Korean-style agrarian bronze culture sites are located on the Korean Peninsula. The geographical distribution of those sites is confined to the area south of the Ch'ŏngch'ŏn River in northwestern Korea (see Figure 26). The lone exception is a site located in Izvestov in the maritime region of Russia. It is a mystery why this site is located so far from the rest. Neither historical records nor archaeological data have yet been discovered to explain it. Despite this one exception, it is safe to conclude that the territory of Korean-style agrarian bronze culture lies south of the Ch'ŏngch'ŏn River, taking up most of the Korean Peninsula.

The second major characteristic of this culture is its burial structure. Just as the dolmen is considered the typical burial structure in Mumun culture, an underground quadrangular structure comprised of several stone slabs and containing the remains of a single individual is considered the typical burial structure of Korean-style agrarian bronze culture.

The third major characteristic of Korean-style agrarian bronze culture is its bronze-tool assemblage. This assemblage contains many superbly molded bronze objects which surpass in aesthetic and manufacturing quality comparable to items found in the Liaoning bronze culture assemblage. Among

them are the Korean-style bronze dagger and the bronze mirror, which is fully decorated with fine linear designs. In addition to these masterpieces, other finely crafted objects include a quadrangular socket axe, a Korean-style spearhead, various plates used for ritual or ceremonial purposes, and others (Figure 27), (Figure 28).

Finally, Korean-style agrarian bronze culture has a distinct pottery style. Typical pottery includes a black pot with long neck, which is known as "Hükdo" (black pottery), and a plain pot with a ring-attached rim, which is known as "Jömt'odae" pottery. Without exception, these two types of pottery have been found in association with the typical bronze tools described above (Figure 29), (Figure 30).

Korean-style agrarian bronze culture appears to have been ubiquitous on the Korean Peninsula and therefore overlapped Mumun territory. However, compared with the site density of Mumun society, residential settlements of Korean-style agrarian bronze culture are very few in number. Less than 20 sites have been identified (Table 4), (Figure 31), (Figure 32).

In summary, the Korean-style agrarian bronze culture, like the Mumun culture in Korea or the Liaoning bronze culture in Liaoning Province, was an independent culture with a clear social identity, geographical territory, and cultural makeup, as suggested by its distinctive pottery, bronze tools, and burial

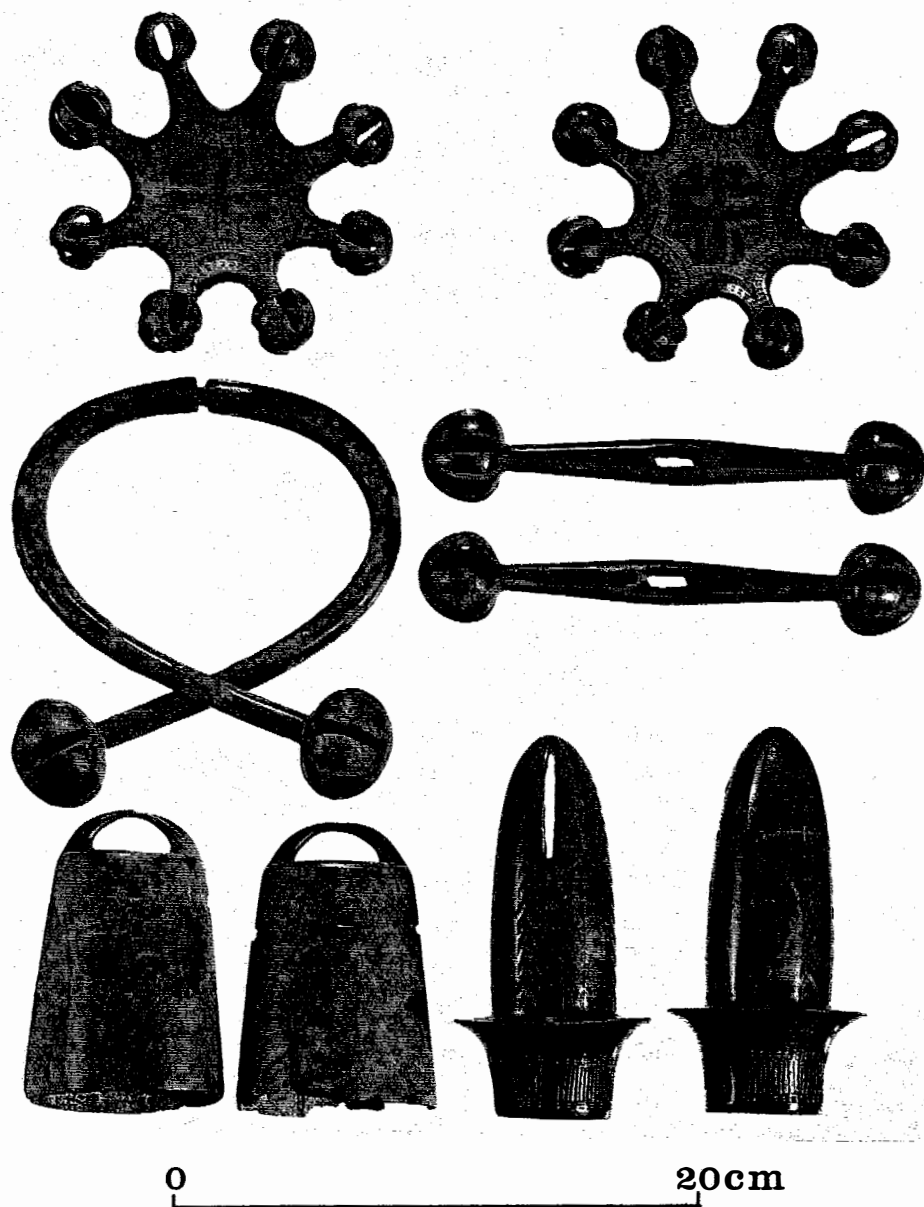


Figure 27. Various ritual purpose bronze objects of Korean-style agrarian bronze culture.

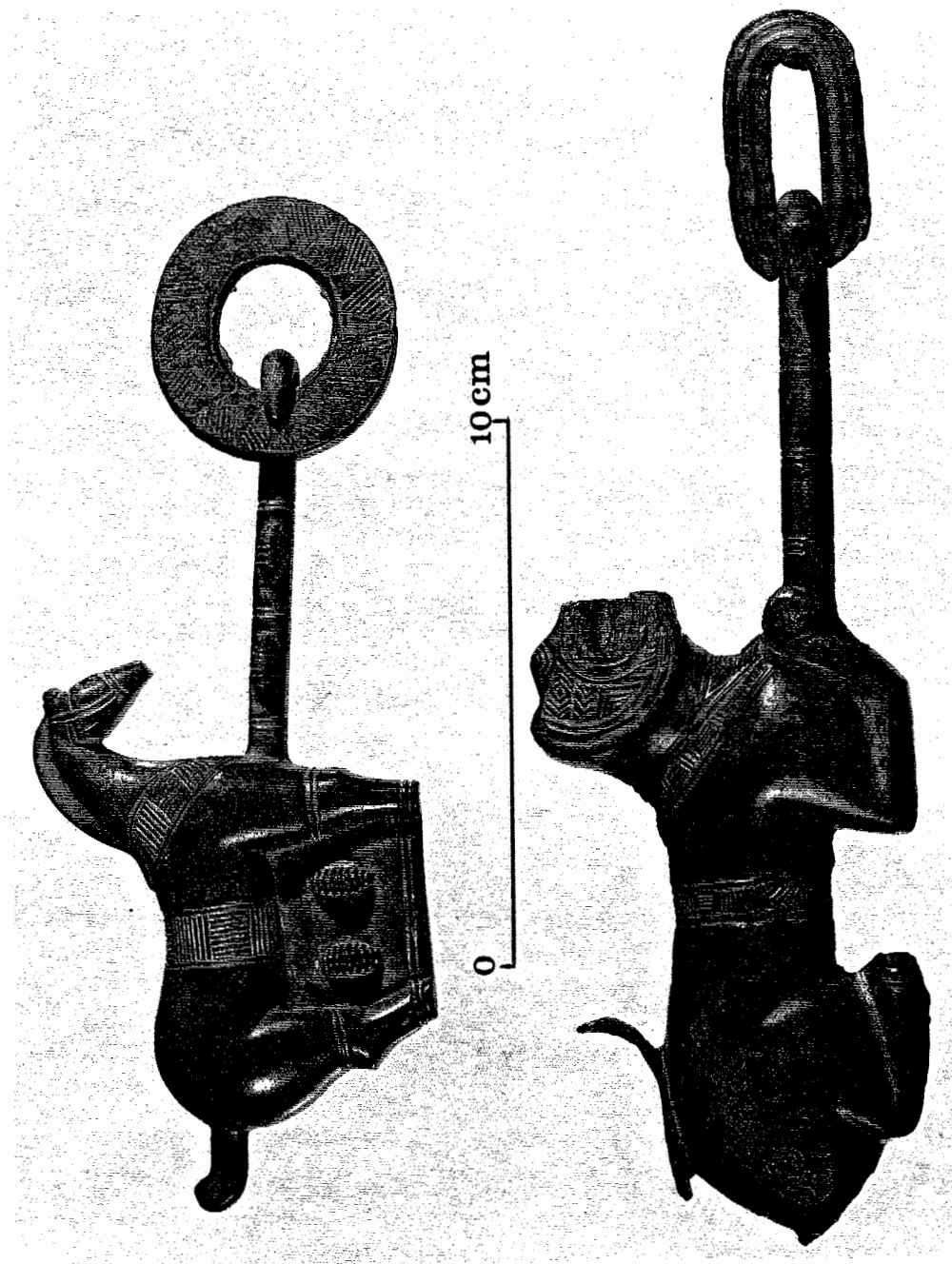


Figure 28. Bronze buckles.

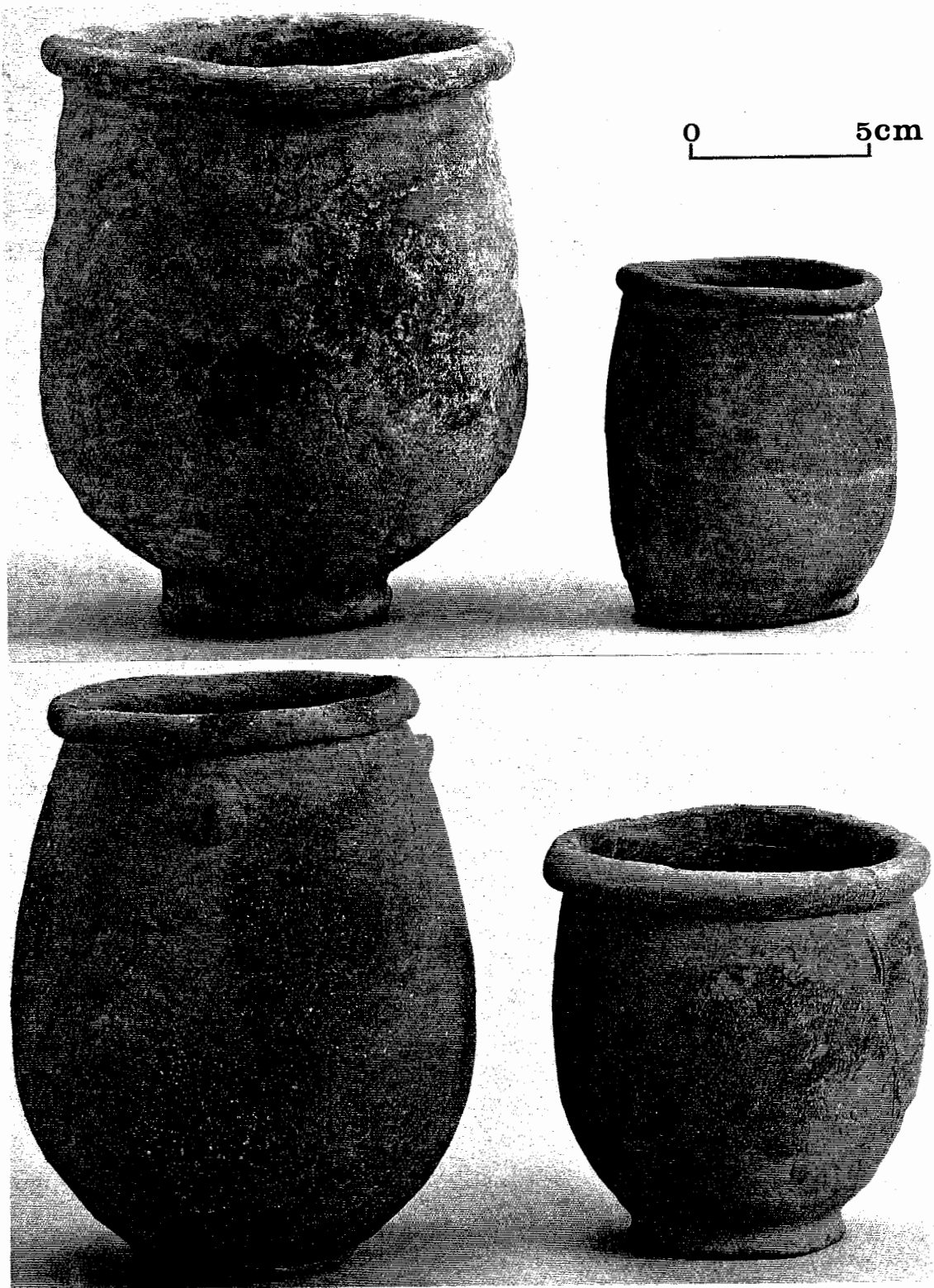


Figure 29. Examples of ring attached pottery.

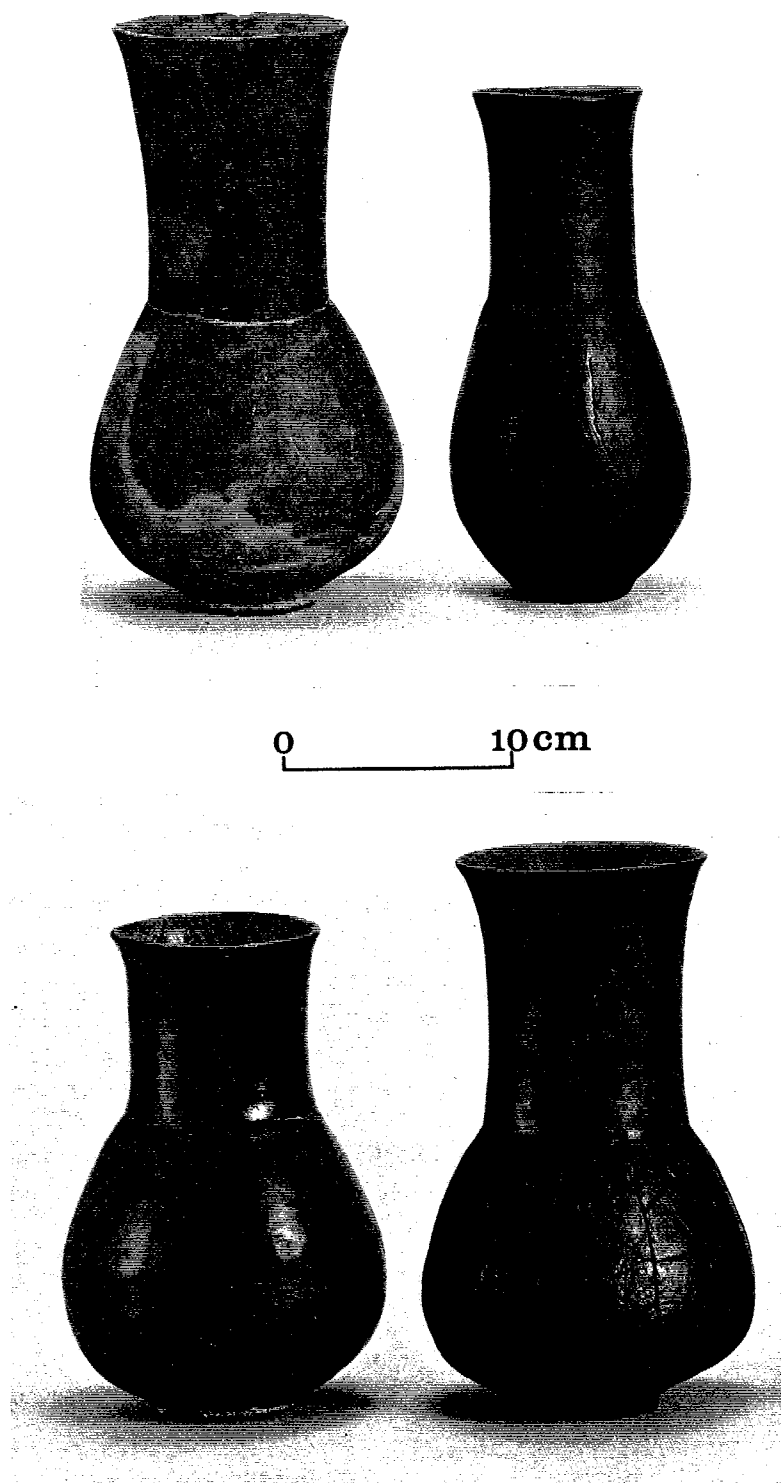


Figure 30. Examples of black pottery.

Table 4. Summary of Korean-Style Agrarian Bronze Culture Sites
Discovered to Date

No./Site Location	Features and Context	Discovered Objects
1. Susŏk-ni, Migŭmmyŏn, Yangjugun, Kyŏnggido (W. Y. Kim, 1966)	Six house floors were excavated in a village settlement by Seoul National University in 1961	Ring-applique-rimmed pot, reddish plain pottery, long- necked plain pottery with ring- shaped handles, black long- necked pot, polished stone axes, polished stone adzes, polished stone arrowheads
2. Osan-ni, Sonyangmyŏn, Yangyangun, Kangwŏndo (Seoul National University Museum, 1983)	Surface collection from the cultural stratum belonging to the time of the Korean-style bronze culture	Ring-applique-rimmed pot, double ox-horn-shaped handle detached from a pot
3. Kŭmchang-ni, Gyŏngokmyŏn, Wŏlsŏnggun, Kyŏngsang-Bukdo (C. G. Yi, 1987)	Gathering from a destroyed cultural stratum belonging to the Korean-style bronze culture	Ring-applique-rimmed pot, Double ox-horn-shaped handle detached from a pot, single ox-horn-shaped handle, bowl attached with stand, long- necked black pot
4. Hŭnam-ni, Yŏjugun, Kyŏnggido (C. G. Yi, 1987)	Gathering from disturbed surface of the cultural layer of the Korean-style bronze culture	Ring-applique-rimmed pot, ring-shaped handle detached from a pot, bowl attached with stand
5. Ŭngbong, Sŏngdonggu, Seoul (B. G. Yi, 1974)	Gathering from the surface of a low hillside of Ungbong Mountain	Ring-applique-rimmed pot, long-necked pot, double ox- horn handle, bowl attached with stand, polished grooved stone adze, semi-lunar-shaped reaping knife, polished stone arrowheads

Table 4 (Continued).

No./Site Location	Features and Context	Discovered Objects
6. Ahasan, Sŏngdonggu , Seoul (B. G. Yi, 1974)	Gathering from the surface of a low hillside of Acha Mountain	Ring-applique-rimmed pot, long-necked pot, double ox- horn-handled pot, bowl attached with stand, earthen spindle-whorl, various polished stone axes, semi-lunar-shaped reaping knife
7. Onŭidong, Chŭnchŏn City, Kangwŏndo (S. G. Im, 1977)	Gathering from the surface of a low hillside	Ring-applique-rimmed pot, ox- horn handled pot, bowl with stand, pierced rim pottery, earthen spindle-whorl, various types of polished stone axes, semi-lunar-shaped reaping knife, polished stone dagger, polished stone arrowheads
8. Chŭlchŏndong, Chŭnchŏn City, Kangwŏndo (Hallym University Museum, 1995)	Excavation of a settlement of the Korean-style bronze culture	Ring-applique-rimmed pots, long-necked pot, various Mumun potteries, earthen spindle-whorl, triangular- shaped arrowhead
9. Ryangchŏndong, Kaejinmyŏn, Kogyŏnggun, Kyŏngsang-Bukdo (C. G. Yi, 1987)	Gathering from the ground surface in a plain	Ring-applique-rimmed pot, pot with ox-horn-shaped handle, various types of polished stone axes, semi-lunar-shaped reaping knife,

Table 4 (Continued).

10. Yunamsan, Daegu City, Kyōngsang-Bukdo (B. G. Yi, 1974)	Gathering from the low hillside of Yunam Mountain	Ring-applique-rimmed pot, pot with ox-horn-shaped handle, pot with double ox-horn-shaped handle, bowl with stand, protuberant-handled pot, other various plain pottery, earthen net-sinkers, earthen spindle-whorls, semi-lunar-shaped reaping knife, various polished stone axes, various polished stone adzes, grooved stone adze, polished stone arrowheads, polished stone spearheads, other polished stone tools
11. Dogokri, Yangjugun, Kyōnggido (B. G. Yi, 1974)	Gathering from the surface of a low hillside	Ring-applique-rimmed pot, protuberant-handled pot, pot with ox-horn-shaped handle, pot with double ox-horn-shaped handle, bowl with stand, various other plain pottery, earthen net-sinkers, semi-lunar-shaped reaping knife, various polished stone axes, triangular-shaped polished stone arrowheads, etc.
12. Wōlgokdong, Sōngdonggu, Seoul (B. G. Yi, 1974)	Gathering from the ground surface	Ring-applique-rimmed pot, pot with ox-horn-shaped handle, bowl with stand, various other plain pottery, semi-lunar-shaped reaping knife, various polished stone axes, etc.

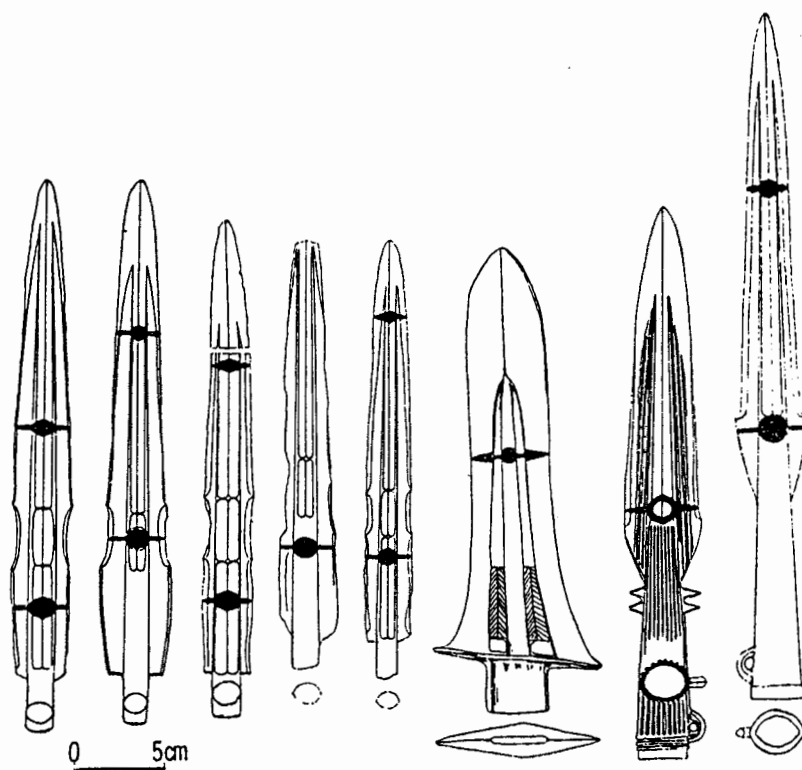


Figure 31. Bronze weapons entombed in the Ipsil-ni stone cist, Kyŏngju.

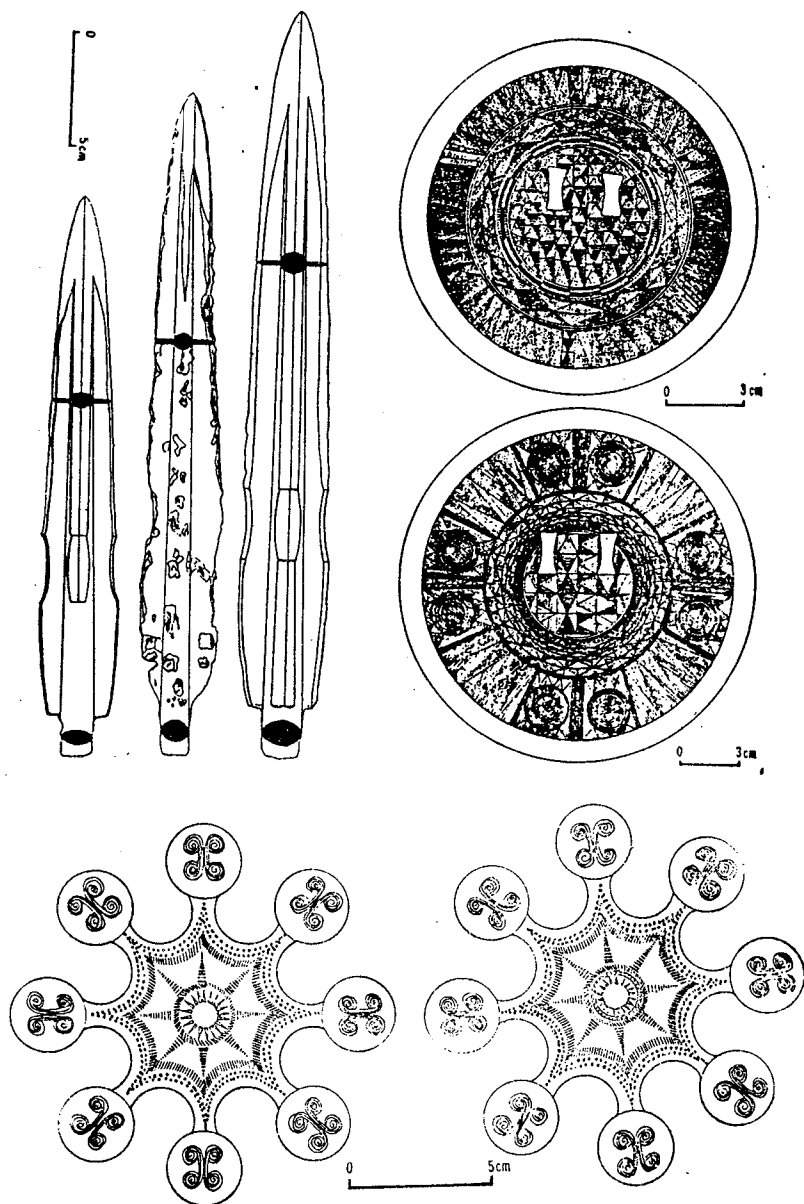


Figure 32. Bronze objects entombed in the Taegok-ni stone cist.

structures. Korean-style agrarian bronze culture is estimated to have originated around the 3rd century B.C, and with the advent of iron and hard-pottery technology from about the third century B.C., Korean -style agrarian bronze society is believed to have developed into a more complex form (Rhee and Ch'oi 1992). (This development will be presented below in the section entitled "State Formation Period.")

Typological analysis of the artifacts in the archaeological assemblage of the Korean-style agrarian bronze culture indicates that this culture is systematically connected to those of Mumun and Liaoning Province. In other words, Korean-style agrarian bronze culture shows a remarkable affinity with both Mumun and Liaoning bronze cultures. Indeed, the author shall argue later that Korean-style agrarian bronze culture developed from the interaction of Mumun and Liaoning bronze societies through certain socio-political processes.

Comparison of Korean-Style Agrarian Bronze Culture With Mumun Culture

Korean-style agrarian bronze culture and Mumun culture share many important features in common. First, the territory of Korean-style agrarian bronze culture is neatly contained within that of Mumun culture.

Second, the settlement patterns of the two cultures are identical. For

example, at the Susök-ni site, Yangju County, Kyönggi Province, five houses have been excavated. They were located on the lower hillside near the main stream of the Lower Han River. Other sites where pottery belonging to the Korean-style agrarian bronze culture has been discovered are located in similar geographical settings. This settlement pattern, which is common to both Mumun and Korean agrarian bronze societies, is the direct result of sedentary agriculture.

Third, both societies shared the same pottery tradition, as indicated by the common usage of several pottery types. Finally, Korean-style agrarian bronze society used various kinds of polished-stone tools that also had been used by Mumun people. These include such typical agricultural tools as the semilunar-shaped reaping knife and the grooved adze. As is commonly known, the semilunar-shaped reaping knife was used for snapping away the kernel part of grains, and the grooved stone adze was used for digging holes in the ground into which seeds were dropped.

In summary, Korean-style agrarian bronze culture has in common with Mumun society (a) geographical territory, (b) settlement patterns, (c) agricultural subsistence economy, and (d) many features of their archaeological assemblages.

Differences between the two cultures include, first, their periods of

existence. Mumun society lasted from the 15th century B.C. to the third century B.C., and Korean-style agrarian bronze society lasted from the 3rd century B.C. to the first century B.C. Second, Mumun culture was a Neolithic culture primarily practicing sedentary agriculture and, from the beginning, lacking bronze technology. On the other hand, Korean-style agrarian bronze culture emerged as a sedentary agricultural society equipped with a highly sophisticated bronze technology. Third, burial structures of Mumun society were dolmens built above ground, while those of Korean-style agrarian bronze society were cist structures built of stone slabs and constructed underground. Remarkably, all bronze objects belonging to Korean-style agrarian bronze culture so far discovered have come from such underground cist structures.

Comparison of Korean-Style Agrarian Bronze Culture to Liaoning Bronze Culture

Korean-style agrarian bronze culture also shows close connections to Liaoning bronze culture. In the overall configuration of its bronze archaeological assemblage as well as in the nature of its individual objects, we can see that Korean-style agrarian bronze culture was a transformation of Liaoning bronze culture. For example, the Korean bronze dagger is a transformation of the mandolin-shaped Liaoning bronze dagger, and the

prototype of the fine linear-design mirror of Korean bronze culture is the rough linear-design mirror of Liaoning bronze culture. In the same way, the square-type socket axe of Korean bronze culture developed from the fan-shaped socket axe of Liaoning bronze culture.

While the consensus is that Korean-style agrarian bronze culture developed out of Liaoning bronze culture, certain differences between them are clear. First, territorially, the center of Liaoning bronze culture is located in present-day Liaoning Province in northeastern China, while the center of Korean-style agrarian bronze culture is confined to the Korean Peninsula. Notably, very few individual bronze specimens belonging to Liaoning bronze culture have been found on the Korean Peninsula, as stated earlier. All of them belonged either to a dolmen or a house assemblage of Mumun society. No bronze specimen belonging to Liaoning bronze culture was found on the Korean Peninsula in the context of Korean-style agrarian bronze culture.

In summary, there is a clear separation in the geographical distribution and discovery contexts of Korean-style agrarian bronze and Liaoning bronze societies. Moreover, the bronze assemblages of the two societies show characteristic distinctions, despite the fact that bronze objects of the Korean-style agrarian bronze culture are considered transformations of those from Liaoning bronze culture.

One conspicuous difference between the two bronze assemblages is that the full armor and horse-riding equipment that had characterized Liaoning bronze society had disappeared from the bronze complex of Korean-style agrarian bronze society. Moreover, in the bronze complex of Korean-style agrarian bronze society, many impractical ornamental accessories that had not been observed in the Liaoning bronze assemblage now appeared. All those ornamental bronze objects, such as bells and various plates, were very skillfully made and were regarded as having been used purely for ritual purposes.

In short, the practical nature of bronze objects in Liaoning bronze culture, as for example those necessary for horseback riding and warfare, had disappeared. In their place, bronze objects of a religious or ornamental nature dominated the bronze complex of Korean-style agrarian bronze culture. While the various commonalities between these two cultures suggest a close historical relationship, the various differences suggest some significant event causing them to separate.

A detailed examination of various bronze tools of the Korean-style agrarian bronze culture reveals certain significant facts. One is that bronze implements used in horseback riding, such as boot buttons, horse fittings, and horse masks, are absent. While these items are common in the archaeological assemblage of Liaoning bronze culture, they cannot be seen in that of Korean-

style agrarian bronze culture. Another significant fact is that such efficient bronze weapons as tri-pronged sharp arrowheads, which had been used by horse riders in Liaoning bronze society, are not part of the bronze assemblage of Korean-style agrarian bronze culture. Moreover, the Korean-style dagger, which was typologically elaborated from its prototype, the mandolin-shaped dagger, was less efficient compared to the mandolin-shaped dagger. However, while the Korean-style dagger's practicality as a weapon was diminished, its decorativeness and elaborateness of manufacture were vastly increased.

In addition to these changes--the disappearance of arrowheads and horseback-riding equipment and the diminution in practicality and efficiency of the Korean-style dagger--the numbers of highly sophisticated ritual bronze objects significantly increased. These ritual-purpose tools included the very elaborate linear-design bronze mirrors, bronze bells decorated with fine linear designs--which had not been found in Liaoning Bronze society and are interpreted as ceremonial spirit-calling devices--and picture-design bronze plates of various shapes (Figure 33), (Figure 34). In sum, as the numbers of practical tools such as efficient weapons and horseback-riding equipment decreased, the numbers of impractical tools such as the various ritual-purpose items mentioned above increased in the bronze assemblage of Korean-style agrarian bronze culture.

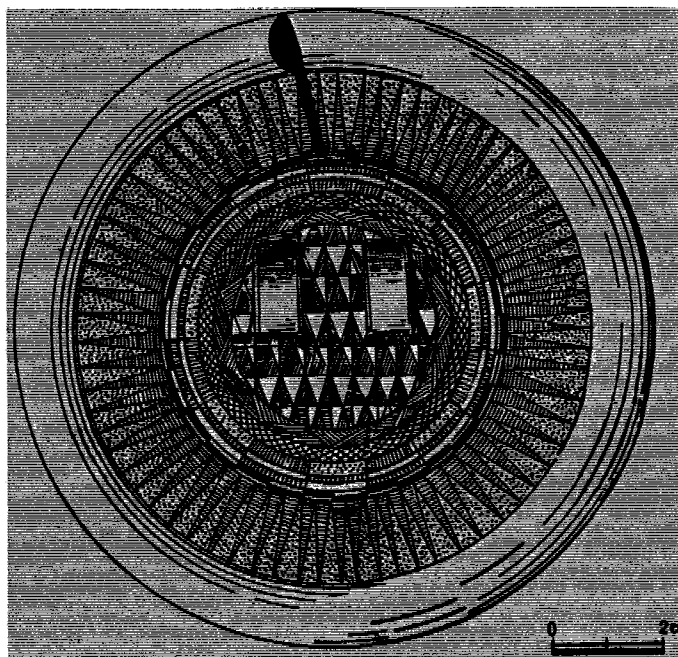


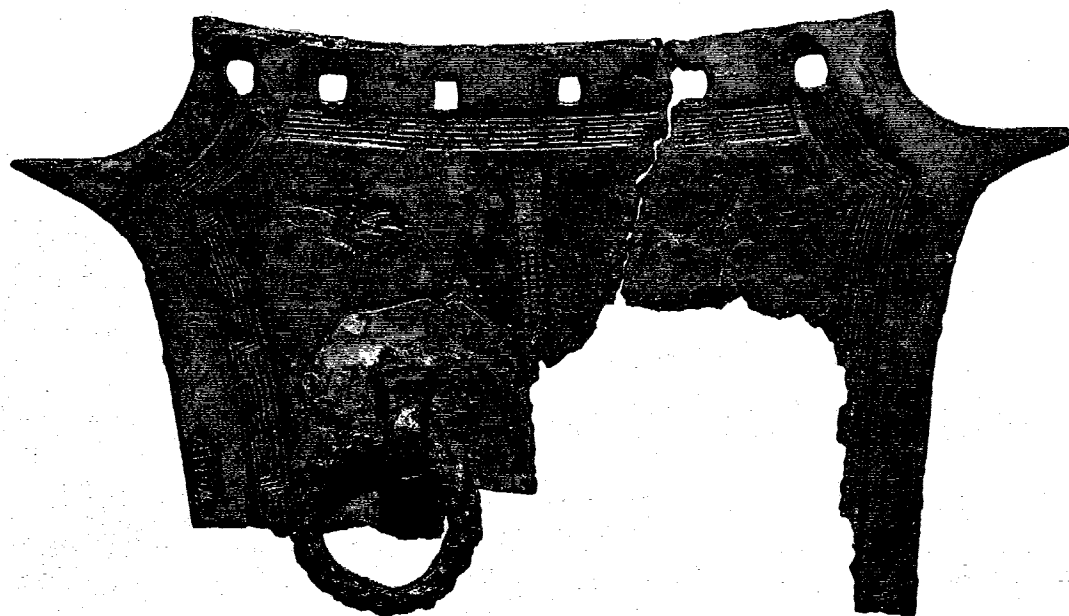
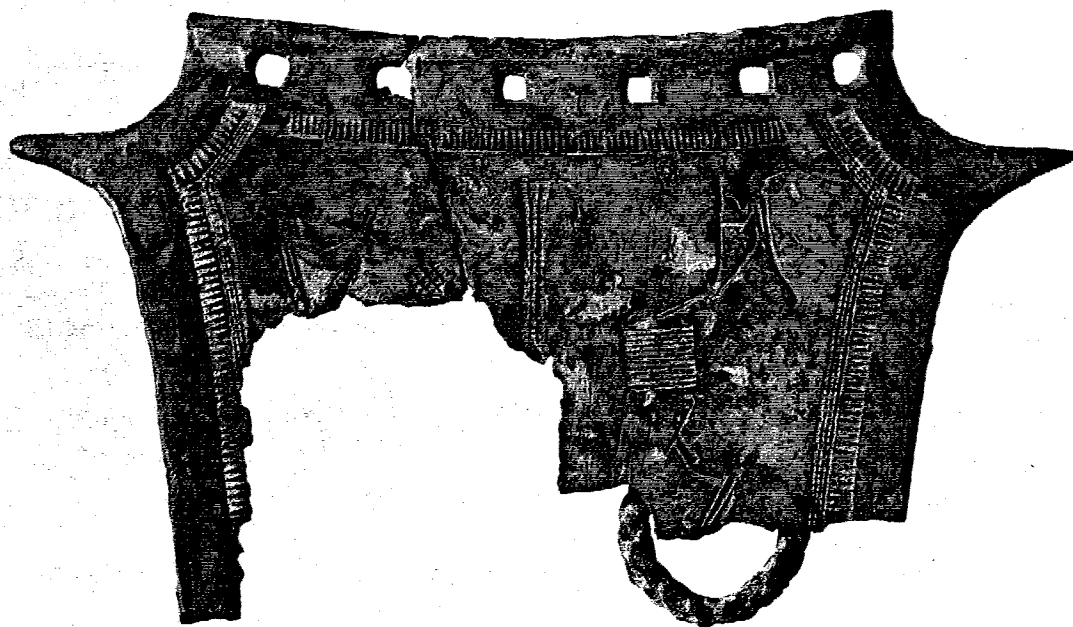
Figure 33. Examples fine linear designed bronze mirrors.



Figure 34. Various ritual-purpose tools.

Another important difference between the Korean-style agrarian bronze and Liaoning bronze societies is in their subsistence economies. While Liaoning bronze society's subsistence economy was characterized by agriculture and stock breeding, that of Korean-style agrarian bronze society was one of completely sedentary agriculture, following the basic traditions of Mumun society. The agricultural nature of Korean-style agrarian bronze society can be observed in its assemblage of bronze objects, despite the fact that the bronze tradition itself had originated from Liaoning bronze society, whose bronze tools reflect only nomadic and horse-riding characteristics and no agricultural attributes. Some bronze objects of Korean-style agrarian bronze society depict scenes of the sedentary agricultural lifestyle. For example, the so-called "cultivating bronze plate" bears on one side, in molded relief, an illustration of a farmer tilling a dry field with a wooden spade, and, on the other side, an illustration of two birds on twigs (Figure 35).

These two illustrations must be symbolic of an agricultural subsistence economy. A scene depicting a farmer tilling a field indicates the importance of the agricultural subsistence economy to Korean-style agrarian bronze society. Moreover, Korean folk history indicates that birds on twigs were signposts of traditional Korean agricultural villages. Even today, in some rural villages, wooden poles with carved wooden birds stand at the entrance of the village.



0 5cm

Figure 35. A bronze plate with the tilling scene and birds on twigs.

In conclusion, the archaeological evidence is sufficient to confirm that the Korean-style agrarian bronze society was one of advanced agrarian economy and sophisticated religious ceremonies. It was a society in which highly advanced bronze technology served religious leaders -- most likely shaman-chiefs -- who performed magic rituals for agricultural prosperity and abundance at various annual feasts such as planting and harvesting of rice.

The State Formation Period (ca. 200 B.C.-A.D. 300)

Koguryo State Formation

In the *Samguksagi [History of the Three Kingdoms]* written by Bu Sik Kim, in A.D. 1145, Koguryo is recorded as having become a state earlier than Paekche and Silla, in 37 B.C. The founding legend tells that Chumong, the founder of the Koguryo and a native son of the king of Puyŏ, moved with his followers and settled in the Hwaren region along a tributary of the Yalu River. There he erected a new kingdom and soon moved again to the nearby region of present-day Jiān County, Jilin Province, in northeastern China. This is the only historical record of Koguryo's establishment as a state society (cited in Lee and Lee 1984:80).

Archaeological evidence of Koguryo's state formation includes stone mound tombs, various iron implements, and castles with protective and/or residential features discovered in the Jiān region. This evidence supports the legend about Koguryo's foundation and its earlier and developmental phases reported in the *Samguksagi*. Korean archaeologists and ancient historians have reconstructed the emerging and developmental phases of Koguryo by combining information from the Chumong legend with the aforementioned archaeological evidence. Their interpretation states that the ancestors of the Koguryo people had come from Puyō and left archaeological remains of stone mound tombs, iron implements, and castles in Jian, where they had constructed a state.

Rhee (1992) recently questioned this interpretation, arguing that the *Samguksagi* legend's claim that ancestors of Koguryo had come from Puyō is groundless and contradicts all the archaeological evidence found in Jiān, where they had first become a state. He pointed out that comparisons of archaeological remains found near the Sungari River of Jilin Province in far northeast China, where Puyō society had established itself, and those found in Jiān near a tributary of the Yalu River of Jilin Province in northeast China, indicate no mutual relationship, which means there was no possible relationship between Puyō society and ancestral people of Koguryo. There is no

archaeological evidence which connects cultures in the two regions. For example, burial types are completely different from each other. In the Puyŏ region, only pit burials are found, and in the Koguryo region, only stone mound tombs are found, completely different in structure and origin from the Puyŏ tombs. He claimed that Koguryo's genesis story, as recorded in the *Samguksagi*, does not contribute to the explication of the origins of Koguryo. Therefore, he approached the subject in ways which could be tested for validity by use of concrete archaeological data.

Among the archaeological remains discovered in Jiān, the stone mound tombs stand out, in terms of their sheer numbers as well as in their structural characteristics, which uniquely reflect Koguryo's status as a state. Therefore, He concluded that the appearance and development of the stone mound tomb and its associated material remains must become the focus of research into the evolutionary process of the Koguryo state.

He postulated that the emergence of a state society was not a short-term event but a long-term evolutionary process in which numerous internal as well as circumstantial factors interacted consistently. In the archaeological remains discovered in the Hwaren and Jiān regions, this consistent development can be discerned from the Neolithic stage through the stage of an incipient Koguryo state. Based upon the convincing archaeological evidence, Rhee's argument is

that the emergence of Koguryo as a state society must be viewed as a basically indigenous development, brought about by political pressure and sociocultural stimulation from neighboring societies that were more civilized and which had already acquired state-level political structures. He believed that Koguryo's state formation belonged to a representative case of the secondary type of state formation in ancient northeast Asia.

Rhee's scheme of the secondary formation of the Koguryo state can be summarized as follows: In the region where the Koguryo people established a state society, people had developed an indigenous culture dating back to the Neolithic Period, about 4000 B.C. They had received bronze and iron technologies successively around the eighth and fifth centuries B.C., and later received political influence from the already-established state societies of China. Stimulated by pressure from these neighboring state societies, the evolutionary development of the Koguryo society accelerated into the state level.

For archaeological evidence, Rhee noted that the stone mound tomb, which is the hallmark of the Koguryo state, is typologically connected to burial structures in Liaoning Province, such as Gangshang and Loushang. Moreover, the bronze culture discovered near Jiān was a local variation of the typical Liaoning bronze assemblage, which includes the mandolin-shaped bronze

dagger. Likewise, archaeological remains such as burial structures support the indigenous development of the Koguryo state.

Regarding the origins of Koguryo's stone mound tombs, North Korean archaeologists first raised the possibility of a connection between the incipient type of Koguryo stone mound tomb and similar tombs of Liaoning bronze society in Liaoning Province. However, the North Korean archaeologists' view of Koguryo's foundation combines two mutually contradicting interpretations in one explanation. They claim that not only was Koguryo founded by Chumong and his followers, who had immigrated from Puyō, but also that, suddenly, they adopted the local burial tradition, which had been maintained in the region for several hundred years. In terms of normal archaeological explanation, it is hard to understand why foreign immigrants would accept an indigenous people's burial tradition. It is clear that the North Korean archaeologists simply tried to combine an untestable legendary account with archaeological remains.

Of course, the symbolic message of the historical record cannot be ignored simply because there is no concrete archaeological evidence to support it. However, if the archaeological remains of early Koguryo society and those discovered in the Puyō region show no trace of a relationship, proper archaeological interpretation cannot accept that they are related based only on legend.

In summary, since the stone-mound-tomb tradition is believed to have developed several centuries prior to the foundation of the Koguryo state, investigations into the emergence of that state must be approached in evolutionary terms. As Rhee proposed, in a consistent evolutionary progression towards state society, the following factors must have contributed to the ultimate shaping of Koguryo state society: (a) indigenous sociocultural influences, which had accumulated from Neolithic times; (b) the impact of bronze and iron technologies, and (c) political pressure from neighboring state societies. As higher civilizational forces and political pressures from neighboring Chinese state societies moved into the Koguryo region in numerous ways, including military attack, Koguryo society rapidly was transformed into a state, enabling it to confront its neighbors and survive.

In terms of absolute dates, the incipient phase of the Koguryo state must have appeared before the third century B.C., because, by that time, iron technology had already spread widely over northeastern Asia, and full state societies had already existed in China (Figure 36).

Paekche State Formation

Unlike the Koguryo situation, the historical record of Paekche's state formation generally is regarded as corresponding to the archaeological evidence. The *Samguksagi* (cited in Lee and Lee 1984:130-131) describes Paekche as having been constructed by immigrants from Koguryo in 18 B.C. Ancient historians believe this account, the only description of Paekche's origins, is authentic, despite the groundless specification of its date. Archaeologists also acknowledge this immigration story as a valid interpretation of the archaeological evidence (Figure 37).

Along the Han River Valley, where the Paekche state was founded, burials of the stone mound type similar to those of Koguryo were concentrated. Although most of them have disappeared, several remain today in Sökch'ondong, Kangdong District, Seoul. This region shows no discrepancy with the region where Paekche was believed to have established its first capital, Uyrae Castle (Figure 38).

Except for the unverified date of 18 B.C. in the *Samguksagi*, there is no other historical reference suggesting when the Paekche founders settled in the Han River Valley. However, considering the time of the founding of Koguryo state, prior to the third century B.C., we can plausibly conclude that the

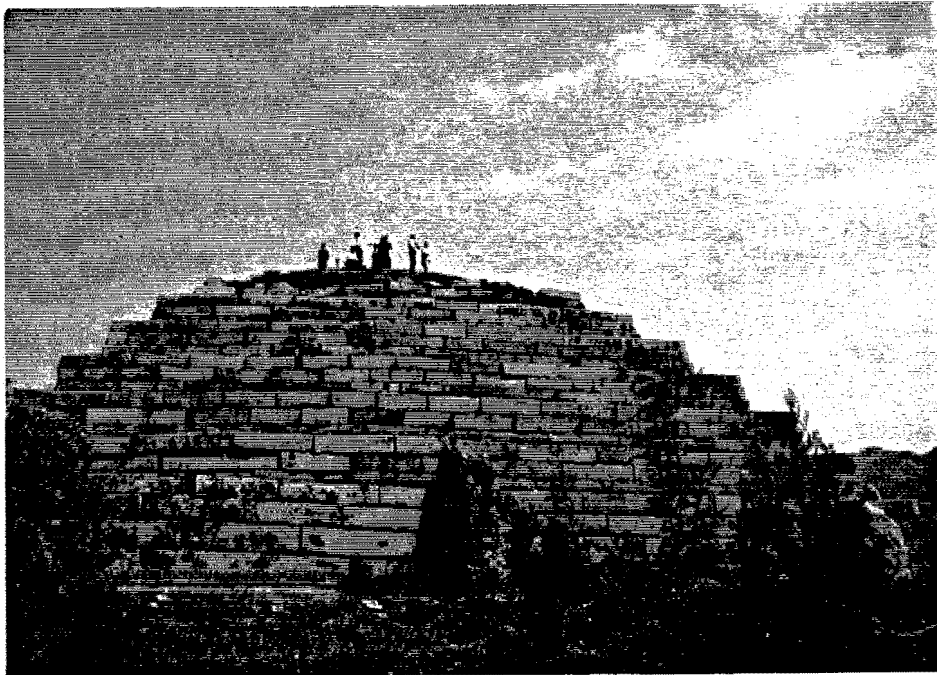


Figure 36. An example of koguryo s stepped stone mound tomb, Jian, Jilin Province.



Figure 37. A stepped stone mound tomb at Sŏkchŏndong, Seoul.

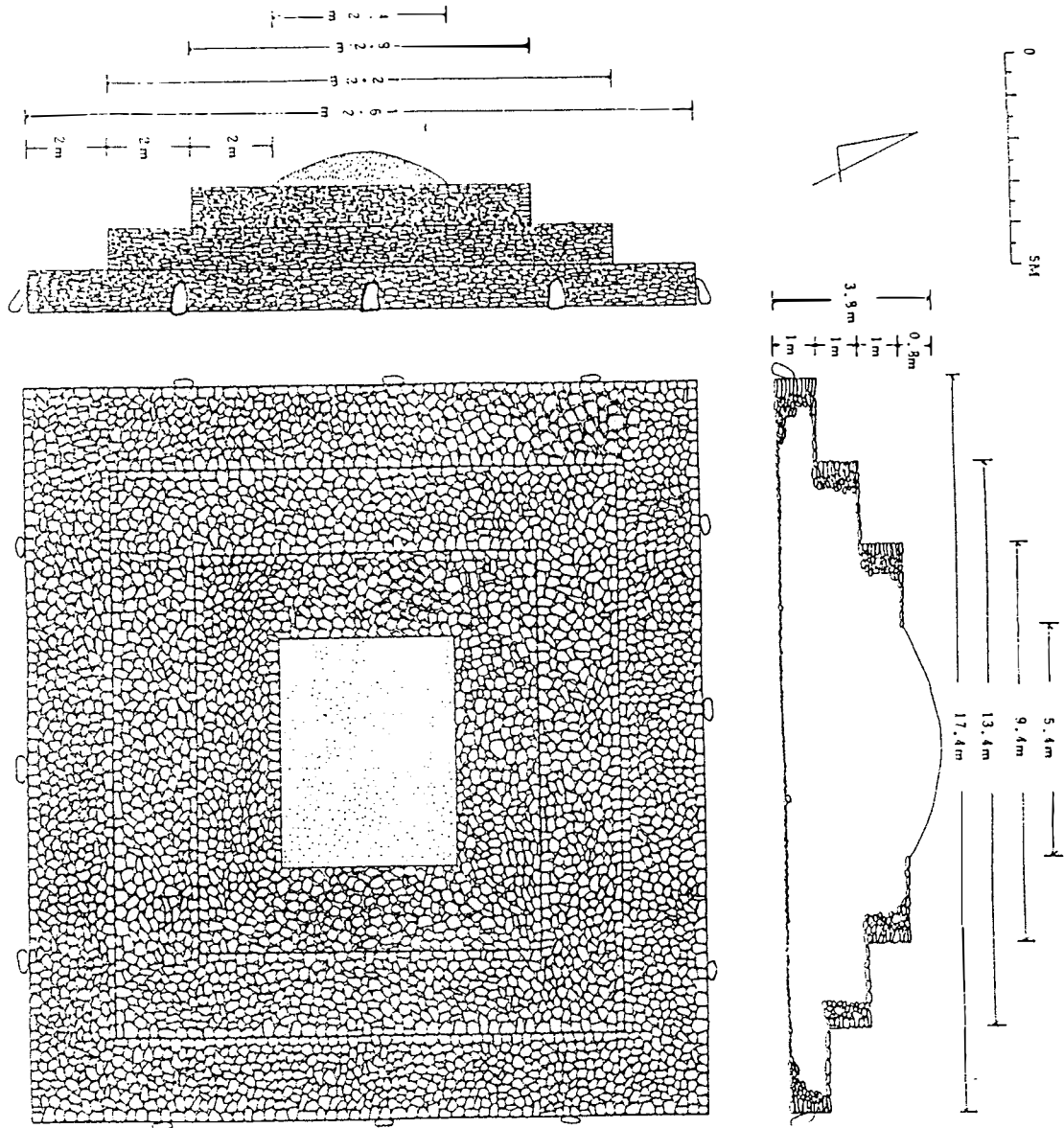


Figure 38. Burial no. 2 in Sŏkchŏndong, Seoul.

formation of the Paekche state occurred one or two centuries before A.D. 0.

After the forerunners of the Paekche people had settled in the Han River Valley, they must have expanded their territory by subjugating neighboring indigenous societies. If we accept the *Samguksagi's* date of 18 B.C. as symbolic, the Paekche must have appeared as a full-fledged state by the latter half of the first century B.C. Therefore, the settlement and expansion of Paekche's forerunners must have begun many years before that time.

Unlike the evidence for Koguryo's age, archaeological evidence for the earlier phase of Paekche society has not been discovered. It is believed that all such evidence has disappeared, due to the Han River Valley's special historical situation. Because it has been the center of government in Korea from the fourteenth century on, it has suffered much destruction. Developed stone mound tombs in Sökch'ondong are generally regarded as being those of kings and their kin. Therefore, they are not believed to be part of the incipient phase of Paekche's settlement and expansion. Thus, the reconstruction of Paekche's state formation in terms of archaeological evidence must await further investigation into the early phases of Paekche's evolution. What is certain at this point is that Paekche's evolutionary process toward the established state began before the first century B.C.

Silla State Formation

The *Samguksagi* (cited in Lee and Lee 1984:141) puts the founding of the Silla state at 57 B.C. However, like the origin dates for Koguryo (37 B.C.) and Paekche (18 B.C.), the date for Silla (57 B.C.) was designated by Bu Sik Kim, the author of the *Samguksagi* in 1145. Moreover, Bu Sik Kim, whose family had descended from the Silla aristocracy and who believed he was a Silla man, is regarded as having given special treatment to the description of Silla, which had succeeded in unifying Koguryo and Paekche in 668. Korean historians believe that Bu Sik Kim's personal background, as well as his recognition of the historical importance of Silla's unification of Koguryo and Paekche, determined the arbitrary sequence of the foundation of the three states.

Korean ancient historians believe that Silla must have emerged the most recently of the three states, because Kyōngju plain, where Silla was located, lies on the southeastern tip of the Korean Peninsula and is geographically isolated by the steep Sobaik Mountains. Because of its location and geopolitical situation, higher civilizational forces from the continent would have arrived there most recently among the three states.

Archaeologically, opinions about Silla's establishment of a full-fledged state society rely on evidence for the emergence of the tumulus, called

chöksök mokguak bun (stone-accumulated wooden chamber tomb), on the Kyōngju Plain (B. H. Ch'oi 1992). A chöksök mokguak bun consists of a high earthen mound covering a stone accumulation which houses a large wooden chamber. Tombs and burial goods are located inside (Figure 39, 40).

Without exception, chöksök mokguak buns contain large amounts of burial goods, such as hundreds of pieces of pottery, various iron implements, and precious ornaments, including golden objects. Therefore, in terms of the scale of the burial structure itself and the amount and content of the burial goods, those tombs are believed to be those of kings and their relatives in a centralized state society. In other words, it can be claimed, based on the archaeological evidence of chöksök mokguak buns, that from the time these structures were built on the Kyōngju Plain, the society there had developed to a full-fledged state society. By the same token, before the emergence of the chöksök mokguak bun, it is not certain when the evolutionary development toward an established state society began.

Considering the general social circumstances reflected in the archaeological evidence, it is probable that about the second century B.C. iron technology had entered the Kyōngju region, like other regions on the Korean Peninsula. As for the earliest date for the emergence of the chöksök mokguak bun, it is generally estimated as being no earlier than the second century A.D.

(B. H. Ch'oi 1992).

After the introduction of iron technology, a highly stratified society must have developed up until the emergence of the chöksök mokguak bun.

Therefore, the evolution of the Silla state must have occurred approximately between the second century B.C. and the second century A.D. However, before the time of the emergence of the chöksök mokguak bun, archaeological evidence sufficient to support the existence of a state society is difficult to identify.

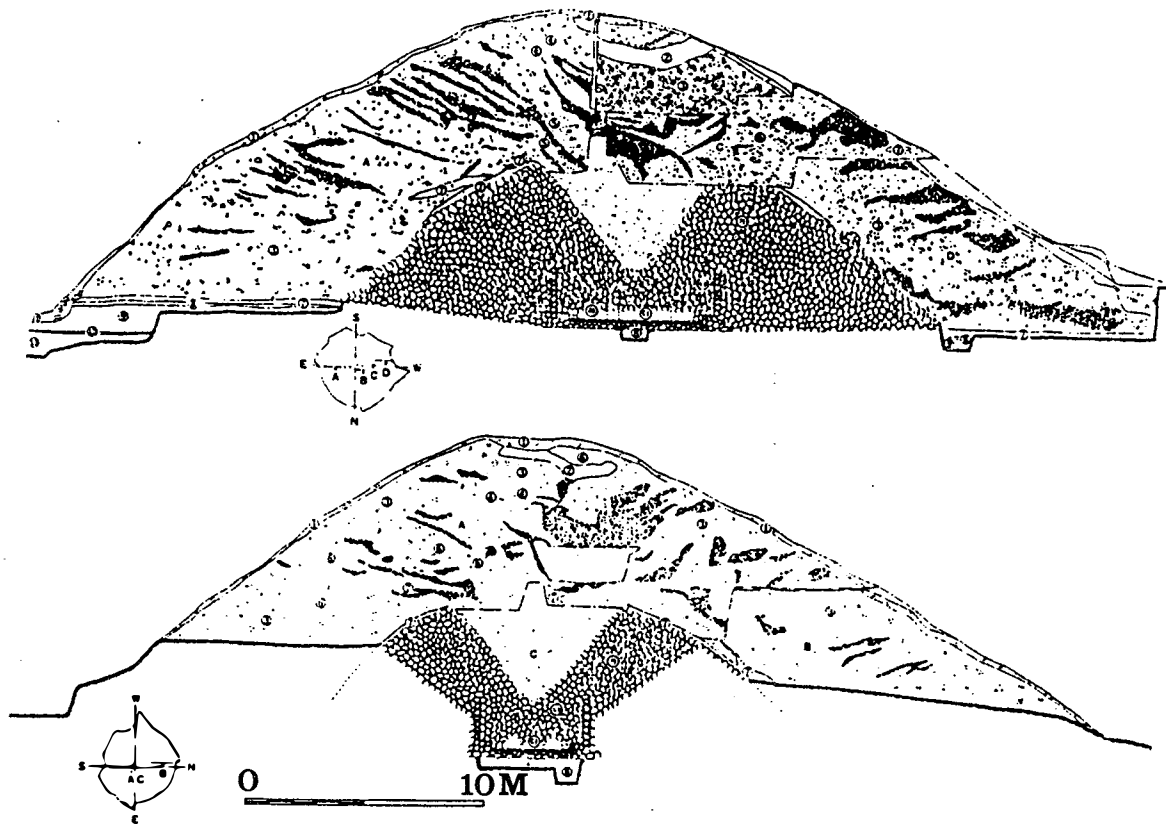


Figure 39. The cross section of the Heavenly Horse tomb, Kyongju.

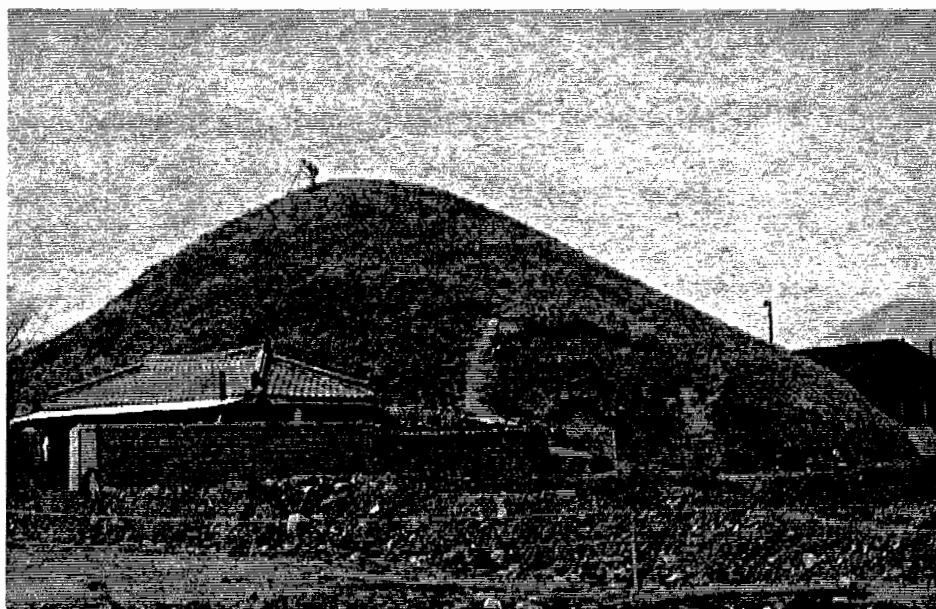
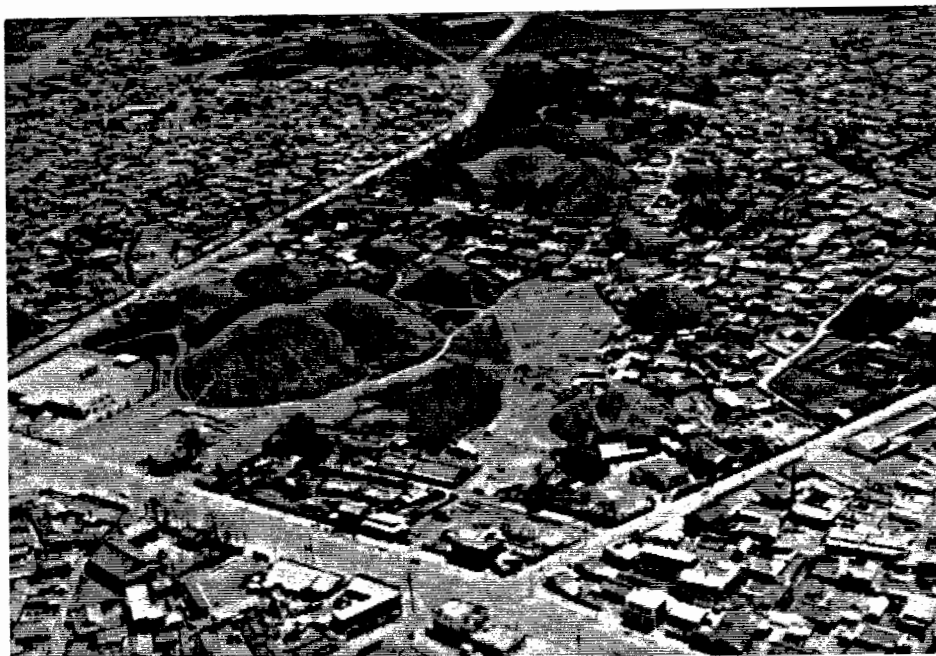


Figure 40. Stone mound tombs in Kyōngju.

CHAPTER III

ARCHAEOLOGY OF THE NORTH HAN RIVER VALLEY

Natural Environment and Its Cultural Ramifications

Environment of Korea in General

Location and Geomorphological Formation

The Korean Peninsula is located at the far eastern end of the Asian Continent, neighboring China to the west and northwest and Russia to the north. To the east lies Japan just across the Korea Strait (see Figure 1). North to south, the Korean Peninsula is 1300 kilometers long, and east to west it is 300 kilometers wide, covering a total area of 220,000 square kilometers. The peninsula is broadly divided into two regions, the Eastern Region and the Western Region, by the east-west-running Hamkyōng Mountains and the

T'aebaik Mountains, which run down the mid-eastern portion of the peninsula (see Figure 2).

In the geomorphological formation of the Eastern Region, the coastline extends south from the region of North Hamgyōng Province, the northernmost province of Korea, to the tip of South Kyōngsang Province, the southeasternmost province of Korea. Historically, and even currently, only small, sparsely located human settlements have ever formed along the coast, all of which have subsisted primarily on marine fishing with some agricultural practices as a secondary resource in the narrow areas between the coast and the abruptly rising mountain ranges.

In contrast to this geomorphological situation in the Eastern Region, the Western Region consists of extensive plains, low mountainous areas, and large rivers and their flood plains. The small, low mountains extend east to west, like the ribs attached to the backbone of the T'aebaik Mountains. Because of this very favorable natural situation for human settlement, from the earliest times up to the present day, large agricultural settlements have prevailed in the Western Region. The socio-cultural patterns associated with agricultural settlement have been typical of indigenous Korean culture throughout the entire span of Korean history.

Climate, Flora, and Fauna

The Korean Peninsula is surrounded on three sides by sea. Therefore, Korea is much affected in summer by monsoons from the Pacific Ocean. Summer is very hot and long, extending from mid-May to mid-September. On the other hand, in winter, Korea is much affected by Siberian continental weather. The cold Korean winter extends approximately from November to March. The average annual precipitation ranges from 600 to 1500 millimeters, and the division between the rainy period and dry period is evident by the fact that more than half of the total annual precipitation comes down during summer when atmospheric pressure is low.

Average annual temperatures are 14° centigrade in the southern coastal region, 8° C in the northern coastal region, and 2° C in the interior. During winter, temperatures usually reach -25° C and during summer reach higher than 30° C. The average temperature during winter in the Eastern Region is higher than that in the Western Region by 2-3° centigrade. The T'aebaik Mountains ameliorate the impact from the cold Siberian continental wind, and the warmer Pacific air keeps the temperature higher than in the Western Region. Coniferous forests dominated by pine trees generally are characteristic of the

flora on the Korean Peninsula. Fauna consist of a mixture of animals typical of a temperate zone along with some animals typical of more frigid zones such as rabbits, wild bore, deer, Korean elk, and wild fowl.

Cultural and Historical Ramifications of the Geography of the Korean Peninsula

Two major geographical characteristics seem to have been most influential in the cultural development of Korea: (a) Korea's peninsular position in the northeastern part of the Asian continent and (b) the east-west division of the Korean Peninsula by the Hamkyöng and T'aebaik Mountains. These characteristics must be taken into account in order to understand such phenomena as the diffusion of prehistoric people across the landscape and their regional diversification.

Because of its placement at the corner of the Asian continent, the Korean Peninsula has been unavoidably and incessantly involved in the cultural formation and socio-political developments of Northeast Asia, including China, Siberia, and Japan. Korean archaeologists and historians commonly acknowledge that proper understanding of the major socio-cultural developments of Korea's prehistory and history is difficult without consideration of the interrelationships between those surrounding areas, and

without the broader context of Northeast Asia as a whole.

Because of the east-west division of the Korean Peninsula by the Hamkyōng and T'aebaik Mountains, a conspicuous distinction between cultural development in the Eastern Region and the Western Region had developed during prehistoric times. Throughout history, and even today, two major regional types--Eastern Region type culture and Western Region type culture--have been recognized. In terms of subsistence economy, their primary difference is that the former relied completely on agriculture and the latter relied primarily on fishing. This strong association between cultural formation and geographic configuration on the Korean Peninsula is believed to have greatly contributed to the unique socio-cultural pattern in the North Han River Valley.

Natural Conditions in the North Han River Valley

The North Han River (Bukhangang) flows into the Han River, joining the South Han River, at Yangsu-ri, Yangju County, Kyōnggi Province. The Korean name Yangsu-ri literally means "the meeting place of two riverflows" (Figure 41). The North Han River itself is formed by the confluence of two rivers at the City of Ch'unch'ōn, Kangwōn Province, where the provincial

capital is located. One of those two rivers is also known as the North Han River, whose headwaters originate at Mt. Kūmkang in the T'aebaik Mountains. The other is called Soyang River, whose headwaters originate from both Mt. Sōrak and Mt. Odae in the T'aebaik Mountains (Figure 42).

In strict geographical terms, the Han River consists of both the North Han River and South Han River and the confluence of these two rivers. In Korea, however, the common understanding has been that the North Han River and South Han River designate separate parts of the upper Han River, and the confluence of the North and South Han Rivers comprises the Han River proper. For purposes of this paper, this writer will use the first definition--that is, the Han River includes both the separately flowing North and South Han Rivers as well as the confluence of these two rivers.

In terms of the present official designation, the North Han River flows through the western part of Kangwōn Province and the eastern part of Kyōnggi Province.

The geographical and geomorphological features of Kangwōn Province must be established first before one can understand those of the North Han River Valley. As stated above, the T'aebaik Mountains longitudinally divide the Korean Peninsula into a relatively narrow and predominantly coastal eastern half, which used to be called the Eastern Region of the Mountain (Yōngdong),

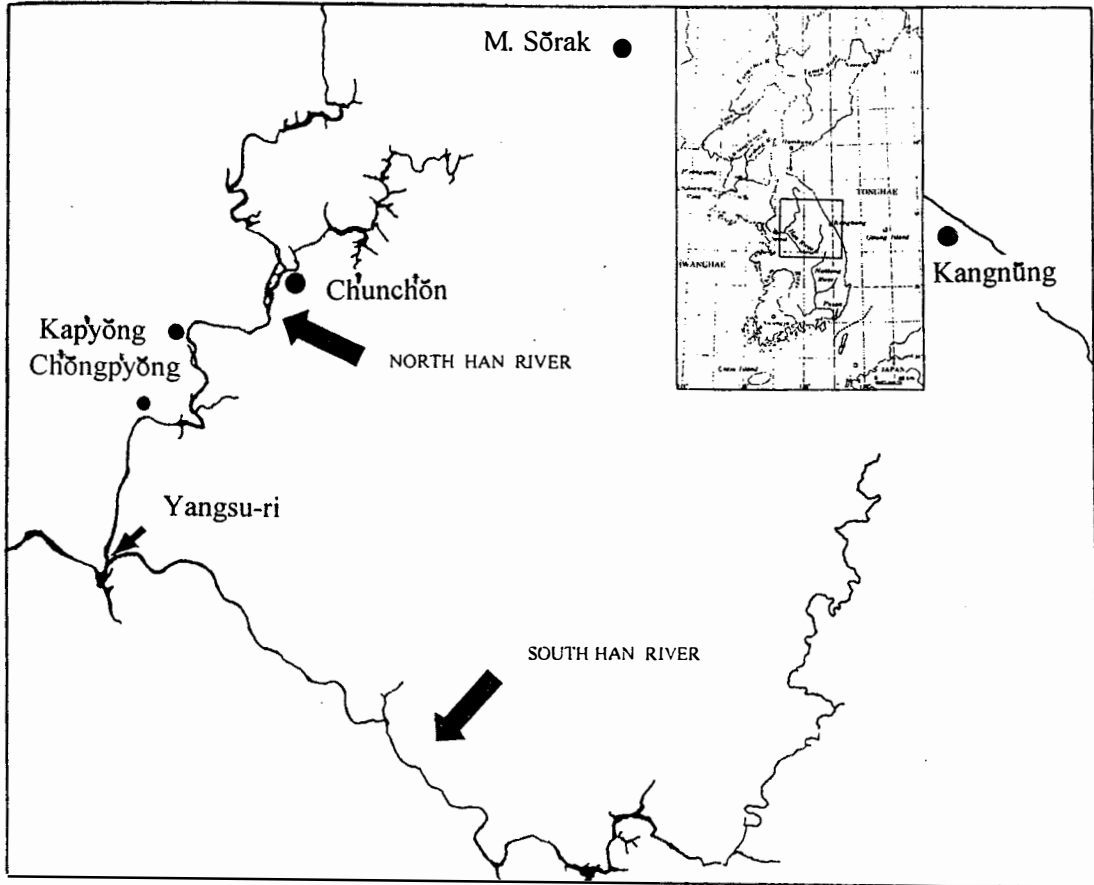
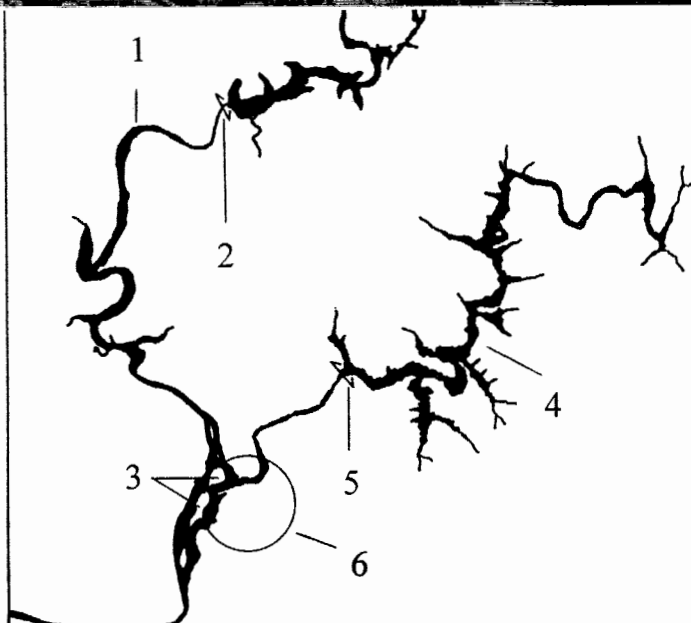


Figure 41. Map of midcentral Korea.



1. North Han River
2. Chunchŏn Dam
3. Chungdo Island
4. Soyang River
5. Soyang Dam
6. Chunchŏn

Figure 42. The geomorphological map of the North Han River.

and a wider western half, the Western Region of the Mountain (Yōngsŏ), comprised primarily of open plains and low mountains. Of all the eight Korean provinces, Kangwŏn Province encompasses the most rugged portions of the peninsula, including the highest peaks of the T'aebaik Mountains.

The North Han River, again, consists of the North Han River, originating at Sŏrak Mountain, and the Soyang River, originating at the Kŭmkang and Odae Mountains. These three mountains are the highest points in the T'aebaik range of mountains. The North Han River flows rapidly down along the narrow and steep mountain valleys, with both large and small tributaries which run down from steep mountain gorges. In contrast to the South Han River Valley, which is characterized by spacious alluvial plains and low mountain ranges, the North Han River Valley is characterized by steep cliffs and narrow strips of sand alluvium deposited by swift river currents.

The portion of the North Han River which flows through Kyŏnggi Province shows some difference in geomorphology as compared to the portion which flows through Kangwŏn Province. In the former portion, the river gradually decreases in speed as it descends the mountain range to the wide valley floor where alluvial plains gradually develop. All archaeological sites bearing unique characteristics of cultures in the North Han River Valley have been found in such alluvial riverside plains (Figure 43).

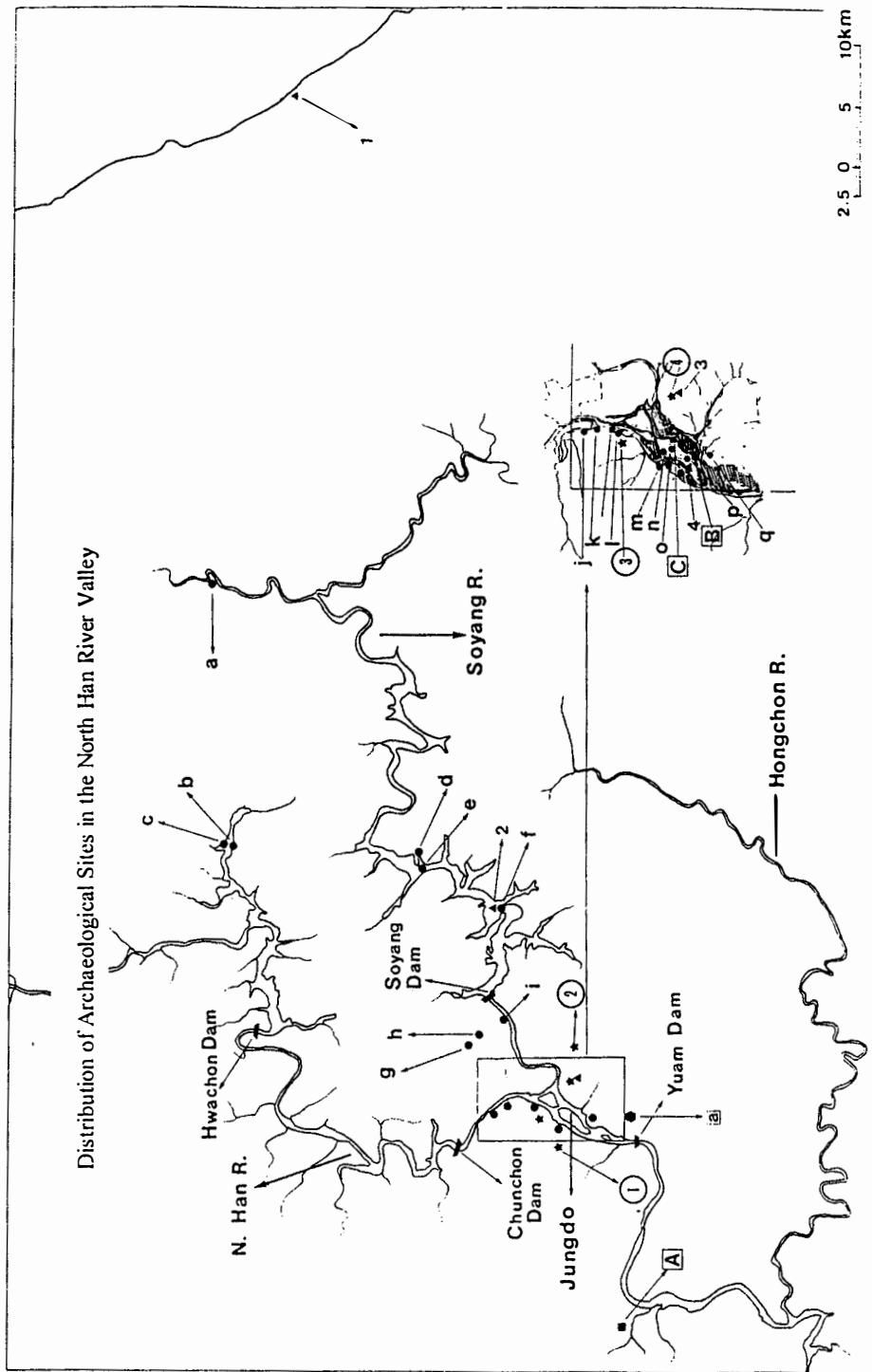


Figure 43. Distribution of archaeological sites in the North Han River Valley.

Note: (Chulmun Period)

1. Osan-ni Residence Site, Sonyangmyŏn, Yangyang County
2. Naep'yŏng-ni Residence Site, Buksanmyŏn, Ch'unsŏng County
3. Sinmae-ri Residence Site, Sŏmyŏn, Ch'unsŏng County
4. Chungdo Residence Site, Ch'unch'ŏn City

(Mumun Period)

- a. Wŏlhak-ni Residence and Dolmens, Bukmyŏn, Inje County
- b. Kongsu-ri Dolmens, Yangguŭp, Yanggu County
- c. Kodae-ri Dolmens, Yangguŭp, Yanggu County
- d. Taegok-ni Dolmens, Buksanmyŏn, Ch'unsŏng County
- e. Ch'uchŏn-ni, Buksanmyŏn, Ch'unsŏng County
- f. Naep'yŏng-ni Residence, Buksanmyŏn, Ch'unsŏng County
- g. Palsan-ni Dolmens, Sinbukmyŏn, Ch'unsŏng County
- h. Sanchŏn-ni Dolmens, Sinbukmyŏn, Sinbukmyŏn, Ch'unsŏng County
- i. Ch'uchŏn-ni Dolmens, Sinbukmyŏn, Ch'unsŏng County
- j. Sinmae 3ri Dolmens, Sŏmyŏn, Ch'unsŏng County
- k. Sinmae 2ri Dolmens, Sŏmyŏn, Ch'unsŏng County
- l. Sinmae 1ri Residence, Sŏmyŏn, Ch'unsŏng County

Figure 43. (Continued)

- m. Kūmsan-ni Dolmens, Sōmyōn, Ch'unsōng County
- n. Chungdo Dolmens, Hobandong, Ch'unch'ōn City
- o. Chungdo Dolmen, Hobandong, Ch'unch'ōn City
- p. Chungdo Dolmen, Hobandong, Ch'unch'ōn City
- q. Onūdōng Residence, Ch'unch'ōn City

(State Formation Period)

- A. Machang-ni Residence, Bukmyōn, Kap'yōng County
- B. Chungdo Stone Mound Tombs, Hobandong, Ch'unch'ōn City
- C. Chungdo Residence, Hobandong, Ch'unch'ōn City

(Three Kingdoms and The Unified Silla Periods)

- 1. Pangdong-ni Stone Chamber Tombs, Sōmyōn, Ch'unsōng County
- 2. Manchōn-ni Stone Chamber Tombs, Tongmyōn, Ch'unsōng County
- 3. Sinmae-ri Stone Chamber Tomb, Sōmyōn, Ch'unsōng County
- 4. Pongūi Mountain Stone Cists, Ch'unch'ōn City

Figure 43. (Continued)

In the North Han River Valley, archaeological sites cluster around two locations: one in Ch'unch'ŏn, Kangwŏn Province, and the other in Kap'yŏng, Kyŏnggi Province. These two towns are the first and second largest towns in the Western part of Kangwŏn Province. The distribution known archaeological sites in the North Han River Valley strongly suggests that the location and the size of human settlements were closely related to the size of alluvial plains that developed along the river's edge.

This correlation between the concentration and/or size of human settlement and the existence and/or size of plains available for human settlement seems to be much higher in the North Han River Valley than in any other region of Korea. The reason for this is that in other regions of Korea, many more alluvial plains had developed that permitted extensive human settlement. However, in the North Han River Valley, such plains were not numerous enough to accommodate extensive human settlement. Only in Ch'unch'ŏn and Kap'yŏng and some other small plains locations were archaeological sites discovered. Indeed, except in the Kap'yŏng plain, where a small portion of an iron-melting prehistoric settlement was excavated, and a few places where artifactual remains were discovered on the ground surface in the course of survey, most known archaeological sites are concentrated in or near Ch'unch'ŏn.

Ch'unch'ŏn, where Kangwŏn Province's provincial government is located, lies along the North Han River on a plateau that developed within the southwestern portion of the T'aebaik Mountains. Just before Ch'unch'ŏn City, the Soyang River and the North Han River unite to form the North Han River proper, and, at that point, Chungdo Island, which contains the highest concentration of archaeological sites (Figure 44).

In summary, the distribution of archaeological sites in the North Han River Valley is closely correlated to the developmental pattern of plains of various sizes along the river. For example, in Ch'unch'ŏn, which is the largest plain in the North Han River Valley, the largest concentration of archaeological sites of different ages has been identified. Likewise, in the second largest plain, at Kap'yŏng, the second largest prehistoric human settlement was discovered. By the same token, in a number of small plains in the North Han River Valley, correspondingly smaller prehistoric human settlements are believed to have been existed.

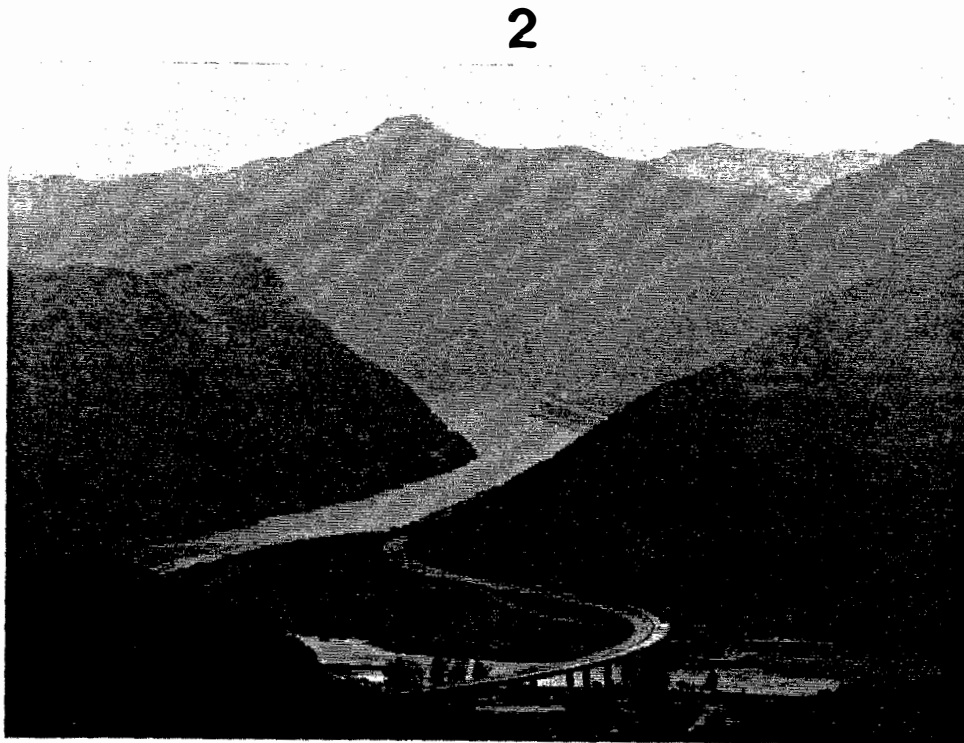
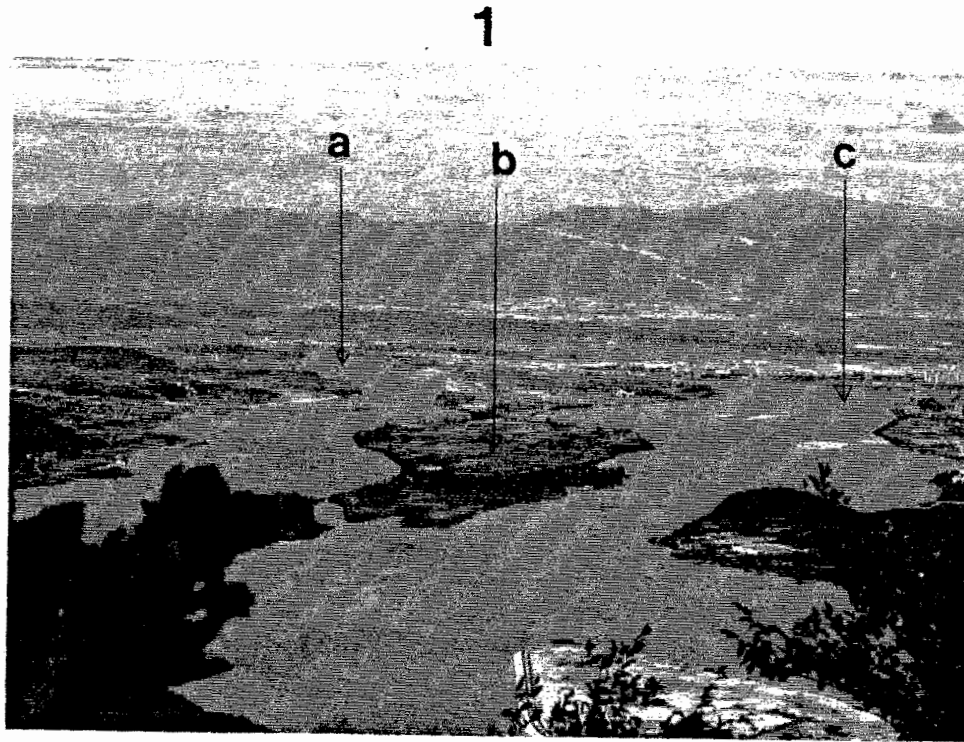


Figure 44. North Han River viewed from different points. (1. North Han River beside Chunch'ŏn City; a: North Han River, b: Chungdo Island c: Soyang River), (2. North Han River flowing down from Chunch'ŏn City)

Archaeological Research in the North Han River Valley

The following is a review of all archaeological investigations in the North Han River Valley, including an examination of data obtained through excavation, surface survey, and chance discovery. The period covered extends from the time of Chŭlmun fisher-hunter-gatherers up to the latter part of state formation period, ca. 300 A.D. In this review, special attention is given to data obtained from archaeological field research in the North Han River Valley that was undertaken by the author from 1980 to the present either as principal investigator or as part of a research team.

As shown on the map of mid-central Korea (see Figure 41), three large towns lie along North Han River. Upstream to downstream they are Ch'unch'ŏn, Kap'yŏng, and Ch'ŏngp'yŏng. Between them lie several small villages, such as Taesŏng-ni, Masŏk, and, upstream from Ch'unch'ŏn, Yangku and Inje. Ch'unch'ŏn, Kap'yŏng, and Ch'ŏngp'yŏng are located on three alluvial plains of successively increasing size. They are the three largest alluvial plains in the North Han River Valley. This general pattern of human settlement in the North Han River Valley--population size correlating to the size of the alluvial plain--has been consistent throughout historical times and is believed to have extended back to prehistoric times.

Thus far, the evidence for prehistoric and early historic human settlement has come from Ch'unch'ŏn and Kap'yŏng, the first and second largest towns in the North Han River Valley, respectively. Particularly in and around Ch'unch'ŏn, where the capital of Kangwŏn Province is located, all those sites are concentrated which show the unique characteristics of prehistoric and early historic cultures that developed in the North Han River Valley (see Figure 43). Descriptions of those sites will be presented in order of their chronology, and the names in the description of sites will follow the official designation now used.

The Period of Chŭlmun Fisher-Hunter-Gatherers (ca. 6000 B.C. to 1500 B.C.)

Kyodong Cave, Ockchŏdong, Ch'unch'ŏn

Description of Sites and Artifacts

Kyodong Cave was discovered in 1969 by chance in the course of construction work at what was then Sŏngsim Women's College. In the course of construction, a portion of the eastern end of a low hillside of Pongŭi

Mountain was to be leveled. As the earth removal progressed, the mouth of the cave was cut away, and the hollow of the cave was revealed. Inside, the construction workers found artifacts and human skeletal remains. They collected all of the skeletal remains, put them into small paper boxes and reburied them. The stone tools and pottery found on the floor of the cave were delivered to the local police; from there they were removed to the Bureau of the Administration of National Cultural Resources and finally were stored in the National Museum in Seoul. Currently the artifacts are being displayed in the gallery of the National Museum.

W. Y. Kim visited the site, and wrote an article entitled "The Ch'unch'ŏn Kyodong Cave Site and Its Artifacts"(W. Y. Kim 1963), which remains the only comprehensive archaeological report about Kyodong Cave. According to W. Y. Kim, the cave was not a natural formation but an artificial dugout in the soft portion of the effloresced granite parent rock. Judging from the skeletal remains and artifacts, W. Y. Kim concluded that it was first used as a residence and later as a burial place. The human skeletons were found lying in a straightened buried position with stone tools and pottery lying about. Also, there was evidence of fire-using on the floor and walls.

It is believed that the cave had been dug on the side of a small valley between two low ridges of Pongŭi Mountain, which now stands in central

Ch'unch'ŏn, surrounded by downtown buildings. The floor of the cave is a circular platform, the diameter of which is about four meters, and at its highest point the ceiling is 2.1 meters. Parts of the ceiling and walls are stained by soot, evidence for the use of fire. However, a fireplace could not be located because the floor was seriously disturbed when construction workers collected the human skeletal remains.

W. Y. Kim (1963) reported that because the human remains already had been collected and reburied at another place, he sketched the skeletons according to witnesses' descriptions. According to them, the skeletons had been found lying outstretched and forming a triangular pattern, their heads converging at the center of the triangle. If this description is accurate, such a strange configuration could be interpreted as a certain kind of burial practice, although its cultural implications are difficult to determine; comparable burial features have not been found in Korea.

In addition to human skeletons, a unique assemblage of pottery and stone tools was collected. Five unbroken pots were collected, all of which were small, plain, coarse earthen pots with flat bottoms. Four had surface designs, confined only to the rim or upper part of the body; the fifth had no surface design at all. The design patterns consisted of short-slant parallel lines, spotted point designs, herringbone designs, and fingernail designs. The size of the

pottery ranged from about 8 to 13 centimeters in height, 5 to 6 centimeters in width at the base, and 6 to 13 centimeters at the widest part of the body. Their rims are classified into two types: straight and outwardly bent. One of the pots has small ring-shaped handles on both sides (Figure 45).

The stone tool assemblage includes axes, adzes, a fishhook-shaft, arrowheads, and knife, all of which are stone. Natural cylindrical beads and some rare stones, such as crystal flakes, were also found (Figure 46). Like the pottery, certain characteristics make the stone tool assemblage distinctive. These are discussed in the next section.

Discussion

As mentioned above, W. Y. Kim (1963) has concluded that Kyodong Cave had been used originally as a residence and then later used as a burial place. The ceiling and walls of the cave were stained with soot, and parts of the cave floor were also charred, all of which indicate the usage of the hearth. Moreover, Kim reasoned that if eyewitnesses' accounts were correct, when the cave had been used as a burial place, certain kinds of ritual activity might have been performed before cremation, which is hinted at by the apparent intentional placement of three bodies in positions forming a triangle. However, for now,

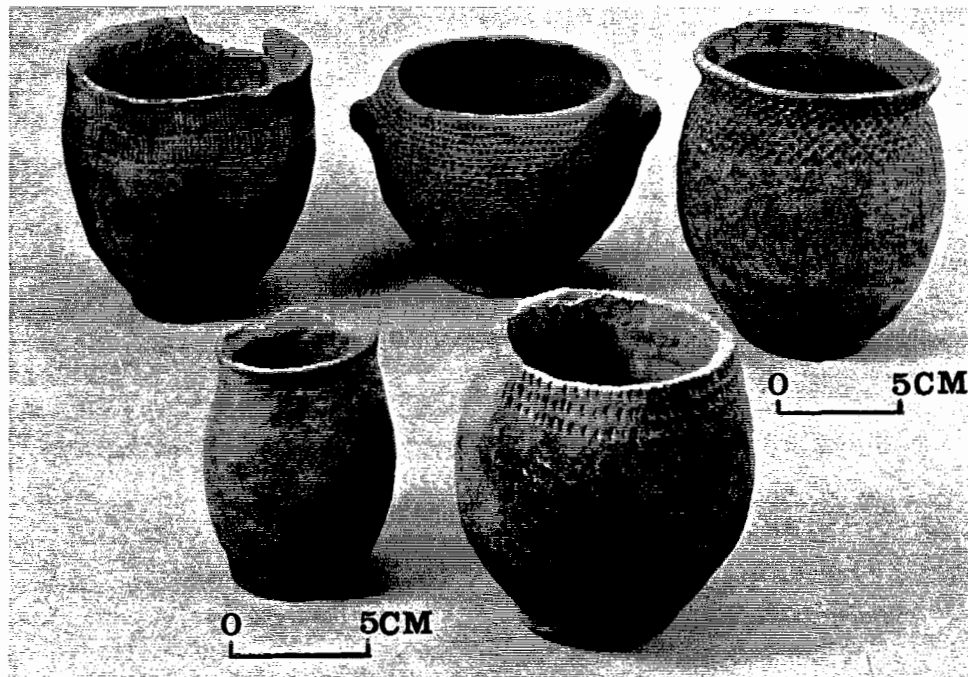
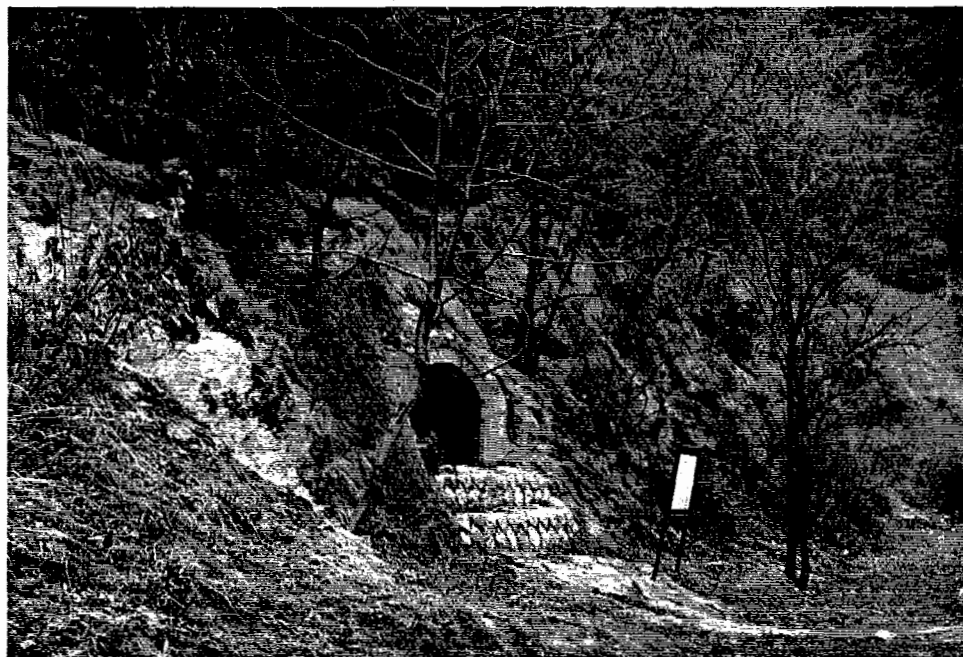


Figure 45. Kyodong cave and the pottery therein.

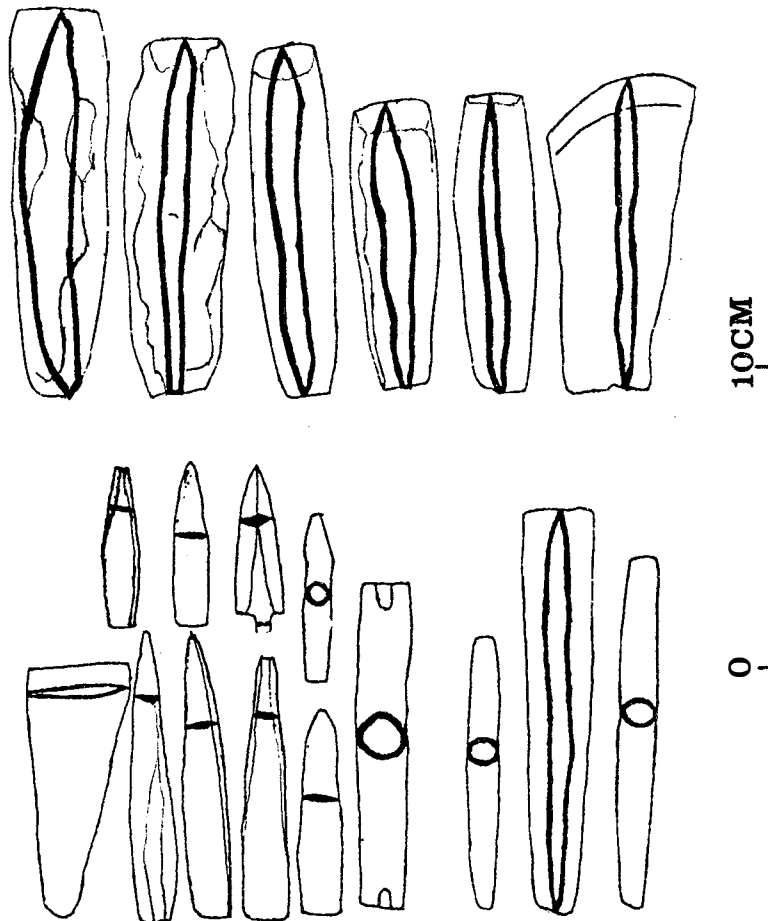


Figure 46. Stone objects from the floor of Kyodong Cave.

the nature of such a ceremonial practice cannot be extrapolated further because no archaeological example of a similar kind has been discovered. On the other hand, the pottery discovered from Kyodong Cave offers an important clue to, and a very intriguing question about, how the Eastern Type Chŭlmun culture advanced into the territory of the Western Type Chŭlmun culture by crossing the T'aebaik Mountains.

Those who accepted Kim's supposition believed that the pottery assemblage from Kyodong Cave must be classified as belonging to the final stage in the developmental sequence of Chŭlmun culture because they showed differences from typical Chŭlmun pottery and similarities to Mumun pottery in certain attributes. All five pots found in the cave had flat bottoms, and their designs--e.g., impressed dots or short linear designs--were confined to the rim or upper portion of the body. It is generally acknowledged that a flat bottom and no surface design on the body are typical characteristics of the Mumun pottery tradition, and a pointed bottom and full surface decoration with various geometric designs are characteristics of the Chŭlmun pottery tradition.

Therefore, in 1963, W. Y. Kim concluded that the flat-bottom pots with designs confined to the rim or upper portion of the pottery represent a local variation, which could have appeared in the final stage of the Chŭlmun Period. During such a stage, the typical Chŭlmun pottery tradition of a pointed bottom

and full surface decoration would have been modified by interaction with the advancing Mumun pottery tradition, which is characterized by a flat bottom and no surface decoration. Taking the Kyodong Cave pottery assemblage as an instance of this transitional phenomenon, W. Y. Kim and others estimated the age of the Kyodong Cave site as between 1500 and 1000 B.C.

However, as described in Chapter III, in the 1980s, with the excavation of the Osan-ni site, Yangyang County, in the Eastern Region, it has become clear that pottery from both Kyodong Cave and the Osan-ni site belong to the same tradition, which this author proposed to call the Eastern Type Chŭlmun culture. Other compelling evidence for positing a direct connection between the archaeological assemblage of Kyodong Cave and that of the Osan-ni site was the presence at both sites of the shank of the fishhook. Made of polished, elongated shale, these shanks were identified in large numbers at the Osan-ni site, which is located in the middle of the Eastern Region, as well as from Kyodong Cave, which is located in the middle of the Western Region.

The presence of these index artifacts at both sites and the evidence for a common pottery tradition support the conclusion that the Kyodong archaeological assemblage, which is distinguished from that of a typical western-type Chŭlmun culture, had come from somewhere in the Eastern Region by crossing the T'aebaik Mountains.

In sum, despite Kyodong Cave's location in the middle of the Western Region, in the center of western-type Chŭlmun culture territory, most of the individual artifacts--indeed, the total assemblage pattern--strongly suggest a direct connection between Kyodong Cave and eastern-type Chŭlmun culture. In contrast, there is a consistent disjunction between Kyodong Cave's individual artifacts, as well as in the total assemblage pattern, and western-type Chŭlmun culture, which, again, is characterized by pointed-bottom, full-surface-designed pottery, but completely lacks complex fishing gear. Particularly notable are the shank of the fishhook discovered in Kyodong Cave--the only such specimens that have been discovered in the region of the Western Region. All of this archaeological evidence leads to the conclusion that the people who lived in Kyodong Cave had come from somewhere in the Eastern Region.

This conclusion about the origins and cultural background of the Kyodong Cave site necessarily requires a new estimation of its age. As discussed earlier, the age at which Osan-ni-type pottery and the stone fishhook-shaft were used began before 5000 B.C., according to several radiocarbon dates obtained from the Osan-ni site (5170 B.C., 5100 B.C., and 4830 B.C.). Therefore, contrary to W. Y. Kim's (1963) original estimate, which regarded Kyodong Cave as belonging to the final stage of western-type Chŭlmun culture, it must be classified as part of the earliest stages of not only eastern-type but

also western-type Chŭlmun cultures.

Assuming that the Kyodong Cave people had come from somewhere in the Eastern Region, the question arises as to which route they had taken through the T'aebaik Mountains. As stated earlier, stratigraphic and radiocarbon data from the Tongsamdong and Osan-ni sites established conclusively that western-type Chŭlmun culture had spread into the Eastern Region after eastern-type Chŭlmun culture had spread widely across the Eastern Region. However, in the case of the North Han River Valley, which is a sort of diffusionary cul-de-sac in the Western Region, it is uncertain whether the Kyodong Cave people had reached the upper regions of the North Han River Valley before or after the settlement of the western-type Chŭlmun people in the same region. A convincing answer to this question must wait until discovery of a site in the North Han River Valley that contains both an artifactual assemblage identical to that of Kyodong Cave and that belonging to western-type Chŭlmun culture.

Whether or not the Kyodong Cave people arrived before or after the western-type Chŭlmun people, two opposing cases can be made regarding their route to Ch'unch'ŏn in the North Han River Valley. One sets them on a course going upriver along the North Han River Valley, and the other sets them on a course going downriver through the Valley. If it had been the former case, we would expect to have found the same type of artifact assemblage as that found

in Kyodong Cave somewhere along the vast territory of the Western Region in the North Han River Valley below the point where Kyodong Cave is located. However, only artifacts and sites typical of western-type Chŭlmun culture have been discovered there. Consequently, the latter scenario, that the Kyodong Cave people migrated downriver through the valley, must have been the case.

The discovery of an archaeological assemblage pertaining to eastern-type Chŭlmun culture at Kyodong Cave has historical significance in that it establishes the earliest route between the Eastern Region and the Western Region, which had been continuously and increasingly traversed through the Mumun and Korean-style agrarian bronze periods, and the State Formation period. This route was traveled even throughout the historical times of the Three Kingdoms--Unified Silla, the Koryŏ and Chosŏn Dynasties--and into the modern era. If other sites containing the archaeological assemblage of eastern-type Chŭlmun culture are discovered near Kyodong Cave and along the North Han River Valley, they will enhance our understanding of the relationship between the eastern- and western-type Chŭlmun cultures.

Naep'yǒng-ni, Residence Site, Buksan-myǒn,
Ch'unsǒng County, Kangwǒn Province

The Naep'yǒng-ni village site was surveyed and partially salvage-excavated in 1971 just prior to its being submerged as a result the construction of Soyang Dam(Bureau of Cultural Properties Administration 1974:457-485). Now the Naep'yǒng-ni site is one of several lying at the bottom of a reservoir formed by the dam (Figure 47).

As shown in the satellite photo of the upper stream area of the North Han River Valley (see Figure 42), the North Han River unites with the Soyang River just in front of Ch'unch'ǒn City. Soyang Dam, whose reservoir contains the largest amount of water of all freshwater reservoirs in South Korea, is 15 kilometers upriver from Ch'unch'ǒn. Of all the Chŭlmun sites thus far discovered in the North Han River Valley, the Naep'yǒng-ni site lies at the uppermost point along the North Han River Valley. Before the construction of Soyang Dam, the Naep'yǒng-ni village had been located in a small basin surrounded by rugged mountains, unlike the area surrounding Ch'unch'ǒn where most of the other sites were concentrated. At the Naep'yǒng-ni site, structural remains, which looked like part of a house floor, were found. This feature looked like part of a platform composed of a quadrangular arrangement of cobbles and pebbles, the size of which was 12.3 meters east-to-west and 4

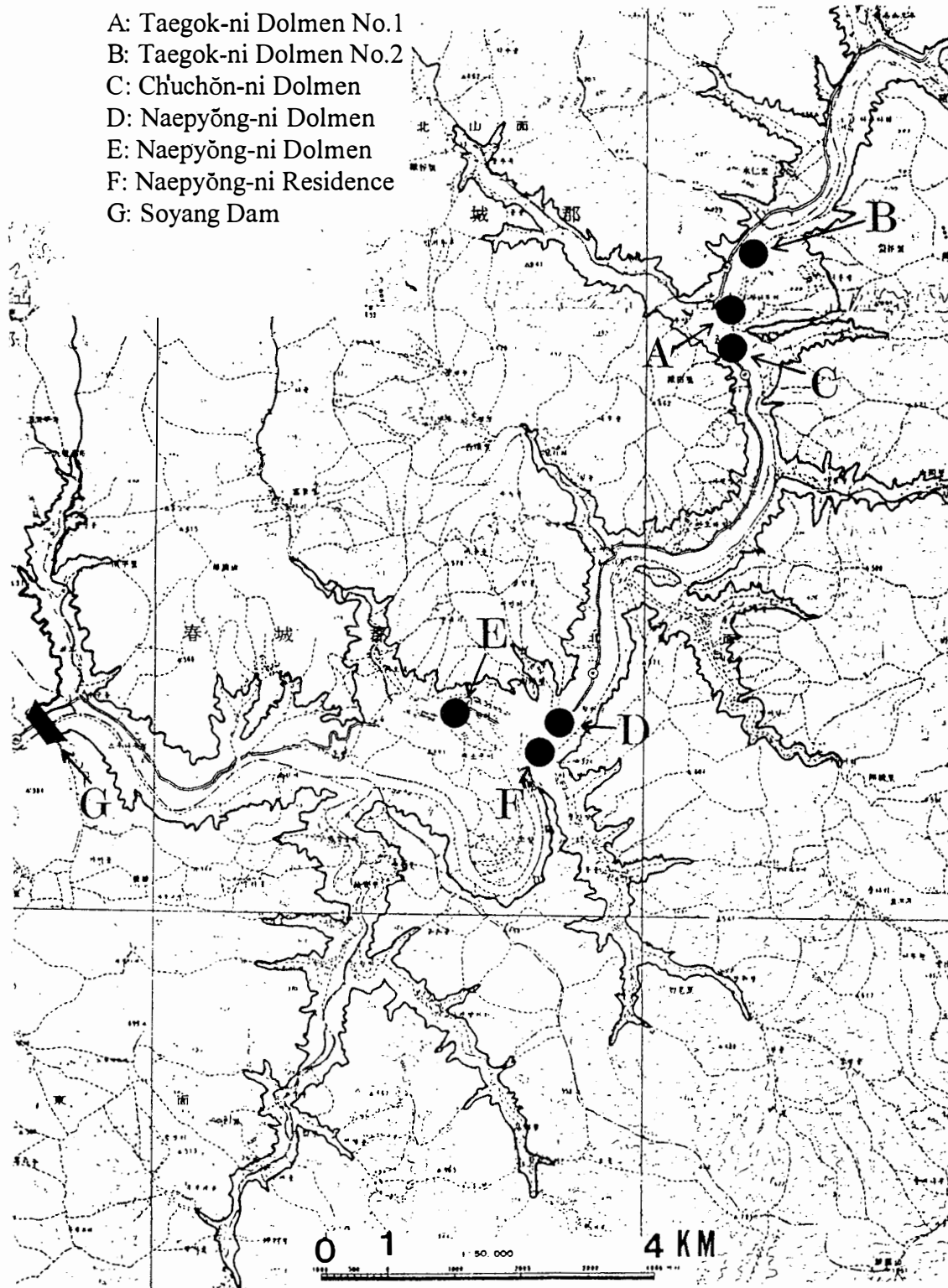


Figure 47. Distribution of submerged sites behind Soyang Dam.

meters north-to-south (Figure 48).

The exact function of this structure is uncertain, but the excavator interpreted it as a kind of ground preparation on top of the pure sand stratum for a living floor. At the eastern side of this structural feature, a fireplace was discovered. An elliptical structure surrounded by small pebbles, it was 1.5 meters by 1.3 meters in crossing diameters and contained fired black soil. Chŭlmun potsherds were scattered on and around the floor structure. Many of them were picked up from between the accumulated stones, but none could be reconstructed into a complete form. All those potsherds were identified as being typical of western-type Chŭlmun culture, with pointed bottoms and the surfaces fully decorated with various incised geometric designs. (Figure 49). In addition, many stone tools were also gathered at the Naep'yŏng-ni site including broken pieces of flaked stone axes, polished only on the edge, and grinding stones with some indications of wear.

Discussion

Investigators at the Naep'yŏng-ni site associated it with the final stage in the developmental process of western-type Chŭlmun culture, based on several characteristics of the stratigraphy and pottery. First, the typical pottery

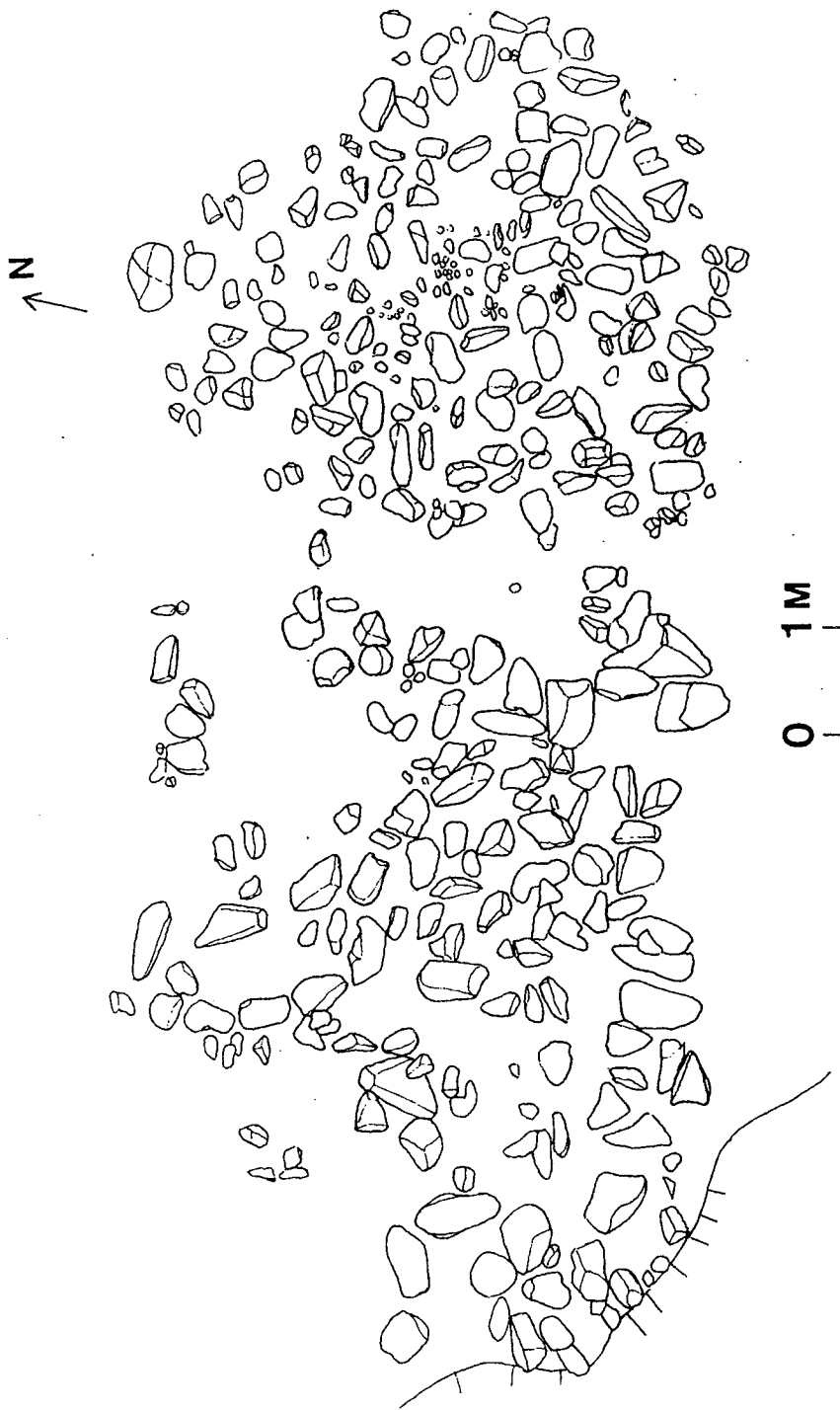


Figure 48. Naep'yong-ni residential structure.

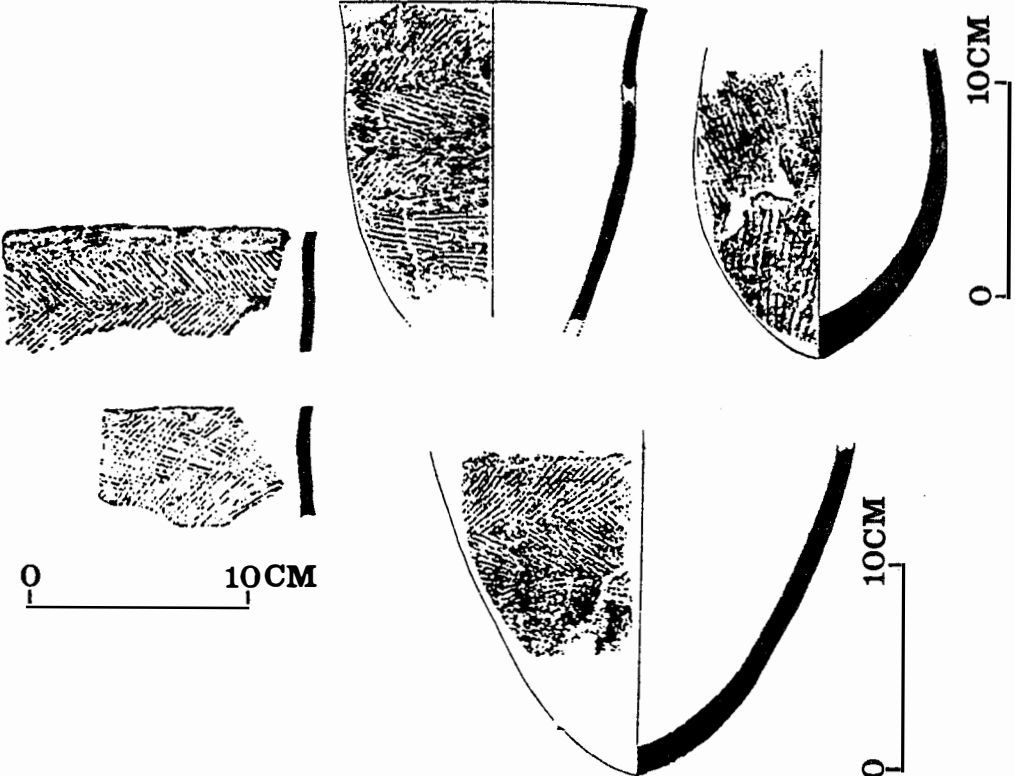


Figure 49. Chūlmun potsherds collected from the Naep'yōng-ni residential structure.

decoration pattern--a variety of geometric designs--was conspicuously disturbed, indicating degradation of the western-type Chŭlmun culture's established design tradition. Second, in terms of the stratigraphical formation of the site, not only was there no stratigraphical discrimination between the layer presumed to correspond to Chŭlmun culture and that presumed to correspond to Mumun culture, but also it turned out that the Chŭlmun layer had been dug out by the intruding activity of Mumun people, and, as a result, some Mumun potsherds were contained in that layer. This mixture of archaeological remains from different cultural periods indicates that only a short temporal gap had separated those two stages. Hence, the societies responsible for those two stages must have coexisted for a certain period of time before Chŭlmun culture completely gave way to Mumun culture.

As further evidence of the coexistence between Chŭlmun and Mumun societies at the Naep'yŏng-ni site, investigators pointed out that the temper and composition of Chŭlmun pottery was no different than that of Mumun pottery associated with the stone-accumulated structure. In general, Chŭlmun and Mumun pottery are clearly different. In most cases, the two pottery types can be easily distinguished by their physical appearance. Chŭlmun pottery contains much more sand than clay, while the opposite is true of Mumun pottery. This difference is ascribed to the different areas in which Chŭlmun and Mumun

societies were located. Chŭlmun people lived along the riverside sand alluvium or on the coast, while the Mumun people lived mainly on the plain or low hillside. This difference in settlement location must have been the primary cause for the acquisition of different soils used for the manufacture of pottery.

The similarity in composition of Chŭlmun and Mumun pottery found in the Naep'yŏng-ni site can be taken as strong support for either of the following interpretations: (a) that there had been only a small temporal gap separating the Chŭlmun and the Mumun peoples in the Naep'yŏng-ni site or (b) that there had been a certain period of coexistence between the Chŭlmun and Mumun peoples there. The excavators concluded that the Naep'yŏng-ni site must pertain to the final phase of western-type Chŭlmun culture, and estimated its founding at somewhere between 2000 and 1000 B.C., although metrically calculated absolute dates are lacking.

In retrospect, regarding the excavation of the Naep'yŏng-ni site as a salvage project prior to the construction of Soyang Dam, the work was conducted hastily, without systematic planning for the entire site because of a tight schedule and lack of adequate funding. Therefore, many functional, contextual, and structural aspects that would have been implied in a prospect of the entire settlement seem to have been overlooked. Thus like acknowledging the inadequacy of the archaeological information from the Naep'yŏng-ni site,

the writer would like to offer some opinions related to the discovery of the Naep'yǒng-ni site. As shown in the site distribution map of the North Han River Valley (see Figure 43), of all Chŭlmun sites thus far discovered, the Naep'yǒng-ni site is located at the uppermost point along the North Han River Valley. As the North Han River Valley rises steeply toward the river's source in the Odae and Kŭmkang Mountains, in the T'aebaik range, the terrain grows more and more rugged. Located in such terrain, the Naep'yǒng-ni site would not be considered as favorable for human settlement as the more open-plain regions in the North Han River Valley. However, there is one feature of the Naep'yǒng-ni area that must have been very attractive to prehistoric people, one which must have been a primary draw for the Chŭlmun people who had lived there. That is the plentiful riverine fishes inhabiting the North Han River. Even today numerous kinds of fish are being caught in abundance, including various kinds of carp, mandarin fish, minnows, and catfish. Even today many villagers living along the upper stream of the North Han River, including the Naep'yǒng-ni people before they were removed because of the Soyang Dam, have subsisted on the net-catching fishery. And most of the people living along the North Han River Valley practice fishing as an important sideline. All of these facts testify to the historical role and importance of riverine fishing for the people who have lived along the North Han River Valley since Chŭlmun times.

Therefore, it is not unreasonable to imagine that the Chŭlmun people who had lived in the Naep'yŏng-ni area must have been fishermen, adroitly adapting themselves to a specially conditioned ecological niche, even though little of the archaeological remains obtained in the course of excavating the confined area of the Naep'yŏng-ni site offer direct evidence of riverine fishing activities, such as fishhooks, net-sinkers, dart points, etc.

As for the matter of tracing the course of the Chŭlmun people's arrival at Naep'yŏng-ni, it is likely that they had come upriver along the North Han River from their diffusionary cul-de-sac, because all attributes of the pottery from the Naep'yŏng-ni site belong also to those of the typical western-type Chŭlmun pottery.

The Chungdo Site, Hobandong, Ch'unch'ŏn

The Chungdo Island, a river delta at the confluence of the upper North Han River and the Soyang River, is located just east of downtown Ch'unch'ŏn. Many Chŭlmun potsherds and various stone specimens have been collected across the surface of this site. Chungdo is now divided into two parts-- Upper Chungdo (Sangchungdo) and Lower Chungdo (Hachungdo)--due to the creation of a boat passage from Hobandong in Ch'unch'ŏn City to Sinmae-ri in

Ch'unsŏng County, which, in 1994, was officially incorporated into the city of Ch'unch'ŏn.

Prehistoric archaeological remains in the Chungdo Island were first reported in 1977 during the site survey executed by a team from the Korean National Museum. In the 1980s, several excavations were carried out by different archaeological institutes, including the Korean National Museum, Kangwŏn National University Museum, and Hallym University Museum, which generated a number of excavation reports and related articles (B. G. Ch'oi 1982, 1984; S. G. Im 1978; Korean National Museum 1980, 1981, 1982, 1983, 1984). Through such excavations, archaeological remains for the Chŭlmun, Mumun, and State Formation Periods were ascertained according to their stratigraphical order in the sand alluvium of Chungdo Island.

Among those components which were deposited in sequential order, those belonging to the Mumun and State Formation Periods were excavated, but those belonging to the Chŭlmun Period have not yet been excavated. However, on Chungdo Island many Chŭlmun potsherds were collected, as seen in the distribution map (Figure 50).

As shown on the map, although only potsherds have been found in scatters, there is no doubt that Chŭlmun people had lived there. Considering the typical riverine environmental conditions which must have influenced the

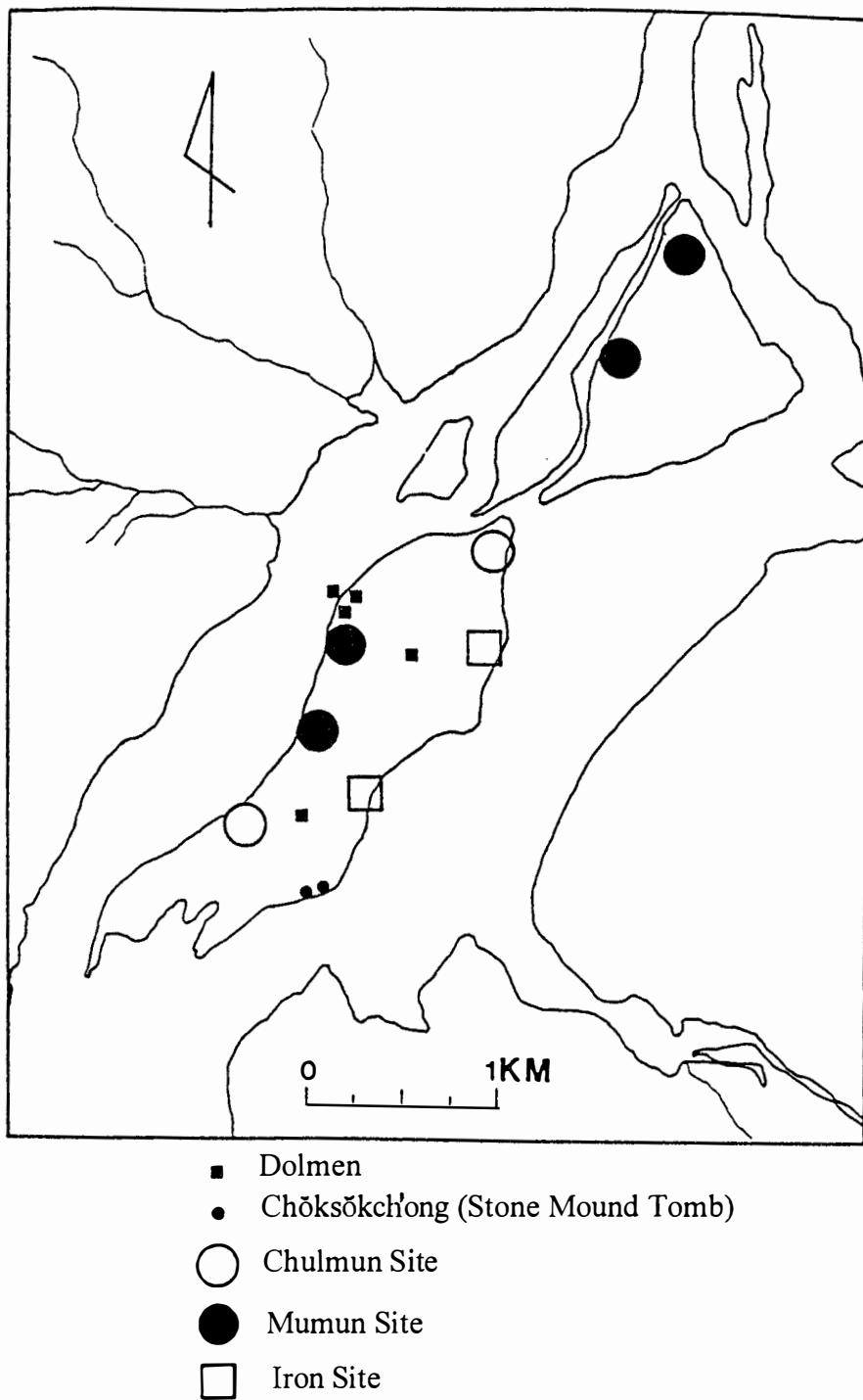


Figure 50. Survey map of Chungdo Island.

subsistence economy of Chŭlmun people, Chungdo Island must have been one of central activity areas in the North Han River Valley for Chŭlmun fishermen. All the Chŭlmun potsherds collected from Chungdo Island belong to the typical western type, with pointed bottoms and geometrical designs. A few stone tools were also collected there, such as net-sinkers bearing flaked-out grooves at both ends and half-polished axes.

The general characteristics observed in the Chungdo Island potsherds are no different from those of the Naep'yŏng-ni site. All potsherds have pointed-bottom pottery and are decorated with various incised and impressed linear designs (Figure 51). But, in more specific detail, some little difference can be discerned. Unlike those of the Naep'yŏng-ni site, Chungdo potsherds may not be necessarily taken as belonging to the final stage of the western-type Chŭlmun Period or as having coexisted with the early phase of the subsequent Mumun culture. This is because, unlike the stratigraphical situation in the Naep'yŏng-ni site, where both Chŭlmun and Mumun samples of pottery were found together in one layer, on Chungdo Island a sterile natural stratum separated the Mumun and Chŭlmun strata, implying the existence of a certain length of time between those sites.

The special geographical situation and ecological conditions of Chungdo Island obviously indicate that the main subsistence economy of the Chŭlmun

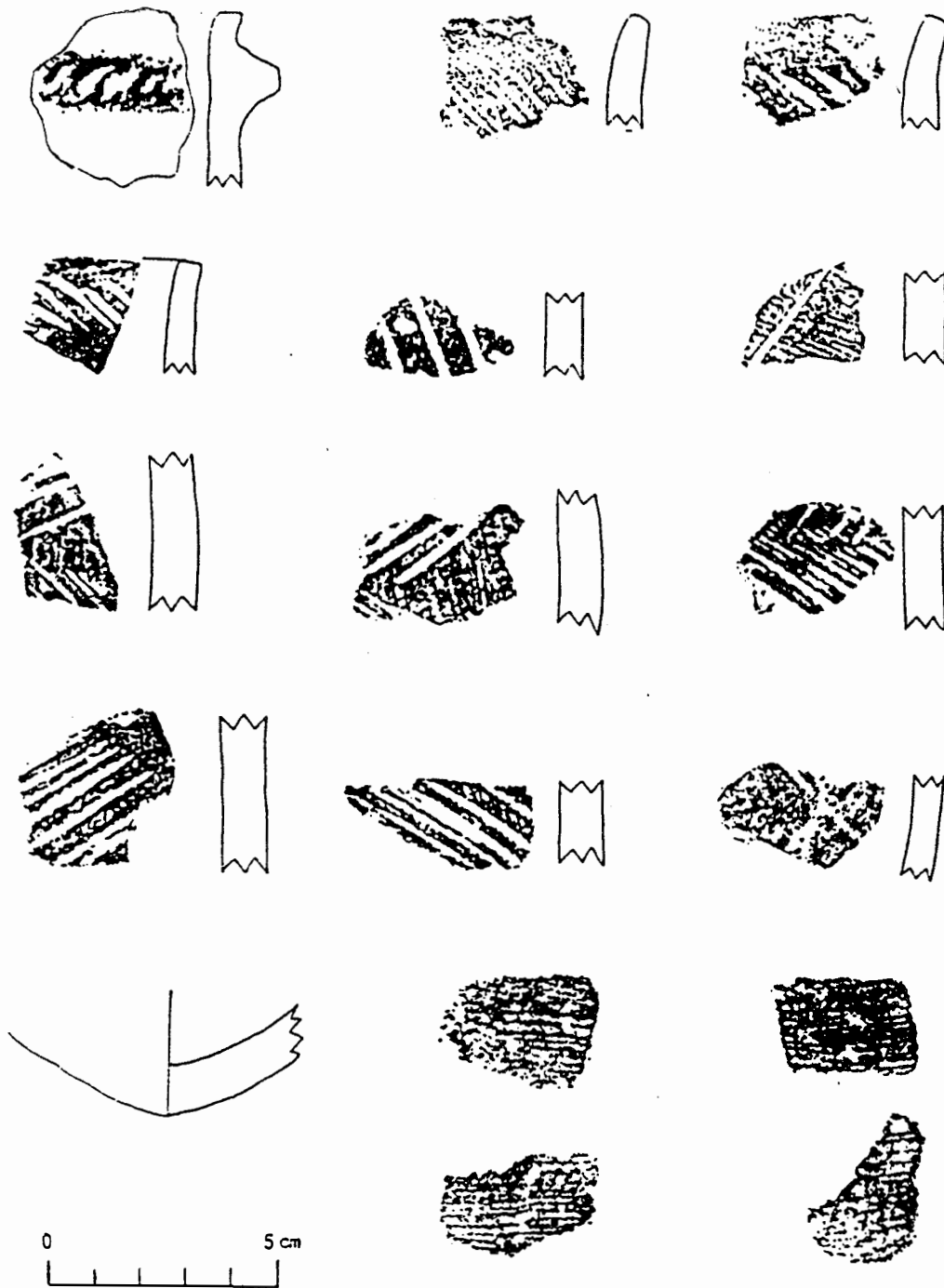


Figure 51. Chūlmun potsherds collected from Chungdo Island.

people on Chungdo Island was riverine fishing.

The archaeological importance of Chungdo Island is clear. It is the only site where all cultural stages, from Chŭlmun to the iron-bearing State Formation Periods, were preserved in their original stratigraphical order.

The Period of Mumun Agrarian Culture (ca.1500 B.C. to 300 B.C.)

Among the prehistoric sites so far discovered in the North Han River Valley, the number of sites belonging to the Mumun Period exceeds the number belonging to the Chŭlmun, Korean Agrarian Bronze, State Formation, and Three Kingdoms Periods. Mumun sites in the North Han River Valley are grouped into two categories: residential structures and burial structures. These are discussed in detail below.

Except for the Naep'yŏng-ni and Sinmae-ri sites, the known residential sites were all discovered in the course of site survey or by chance in the course of various construction projects. The structural remains excavated in the Naep'yŏng-ni and Sinmae-ri sites were determined to be parts of houses in Mumun village settlements. Large numbers of artifacts showing various aspects of the village life of Mumun people in the North Han River Valley were collected in those structural remains. In addition to these two excavated sites,

many locations in the North Han River Valley yielded clusters of potsherds and stone tools.

With one exception, all burials discovered in the North Han River Valley are dolmens, the indigenous burial tradition of Mumun society. The exception is one stone cist, excavated in 1978 in Sinmae-ri, Ch'unsöng County, by a research team from the Korean National Museum. Of the dolmen burials, 11 were excavated by Hallym University and Kangwön University Museums.

Residential Structures

Naep'yöng-ni Residence Site, Buksan-myön, Ch'unsöng County, Kangwön Province

Location and geomorphological description. As mentioned previously in the description of Chŭlmun culture in the North Han River Valley, the Mumun residential structure at the Naep'yöng-ni site was discovered and excavated in 1971 in the course of a salvage project prior to the construction of the Soyang Dam(Bureau of Cultural Properties Administration 1974). In terms of geomorphological formation, the Naep'yöng-ni site, now submerged, was a small basin lying between rugged mountains, making it a much more severe location than that of Ch'unch'ön, which lay about 15 kilometers downriver. A

small agrarian village was located at Naep'yōng-ni before it was submerged under the water of Soyang Dam.

Stratigraphy and other features of the site. One structural feature excavated at Naep'yōng-ni is believed to be a house floor. The floor's dimensions are 3.10 meters by 2.65 meters, and 40 to 45 centimeters in depth. In light of this depth, the house floor is classified as a semisubterranean pit-house, the most popular type of house structure during the Mumun agrarian culture period (Y. J. Im 1985; J. K. Kim 1974).

Functional features in and around the structure, such as a fireplace and postholes, are always expected to be discovered in the course of excavating a Mumun house floor. Instead, here, a portion of the surface of the central part of the floor was observed to have been charred and reddish, which indicated the practice of burning a fire inside the house. As for the abandonment of the village, excavators of the Naep'yōng-ni site concluded that the house must have been abandoned after a fire because large quantities of ashes were found inside the house structure.

Pottery was discovered on the house floor and along the areas surrounding the contour of the house structure. In addition to pottery, the amount of which was much greater than that of other artifacts, only two polished stone arrowheads and one grinding stone were collected on the house

floor. Several polished stone implements, such as a semi-lunar-shaped reaping knife, a polished stone axe, a stone dagger, and stone arrowheads, were collected in the disturbed fill surrounding the house structure. In addition to this residential structure, three dolmens were discovered in the Naep'yŏng-ni village. These must certainly have been the burials of the Mumun people who had left those residential houses, as they had been contemporaneous to the excavated house.

One grave limitation of this salvage excavation of a single house structure is that efforts to ascertain the entire boundary of the settlement to which that house belonged were totally ignored. However, the existence of such village settlement in the Naep'yŏng-ni is indicated by the existence of several dolmens there.

Sinmae-ri Residence Site, Sŏmyŏn, Ch'unsŏng County, Kangwŏn Province

Geographical location and conditions of discovery. The Sinmae-ri residence site is located at Sinmae-ri, Sŏmyŏn, Ch'unsŏng County, Kangwŏn Province, now incorporated into the official territory of Ch'unch'ŏn City. The site is located on riverside sand alluvium, which today is being eroded away by the river current. The present-day Sinmae-ri village is located on a flat plain

partially surrounded by small but steep mountain ridges, and partially encircled by the North Han River. Therefore, the Sinmae-ri plains containing the excavated site can be said to be half encircled by river and half encircled by mountains, resulting in an ideal environment for the settlement of Mumun agrarian sedentarists. Because of the irregular river current, which increased after the construction of Ŭiam Dam, located nine kilometers downriver from the site, the sand alluvium banks along the upriver zone, starting from Ŭiam Dam and including the Sinmae-ri, have been continuously eroding.

The Sinmae-ri site was discovered in mid-summer of 1984 after the great flood had swept along the North Han River Valley (Hallym University Museum 1986). As the floodwaters retreated, along the borderline of the sand alluvium in Sinmae-ri village, many archaeological remains, such as potsherds, stone tool specimens, pieces of charcoal, and charred logs, were found removed from their contexts and scattered along the riverside. Also, on the vertical section of the cut-away sand alluvium, the cross-section of a destroyed Mumun house floor was discovered.

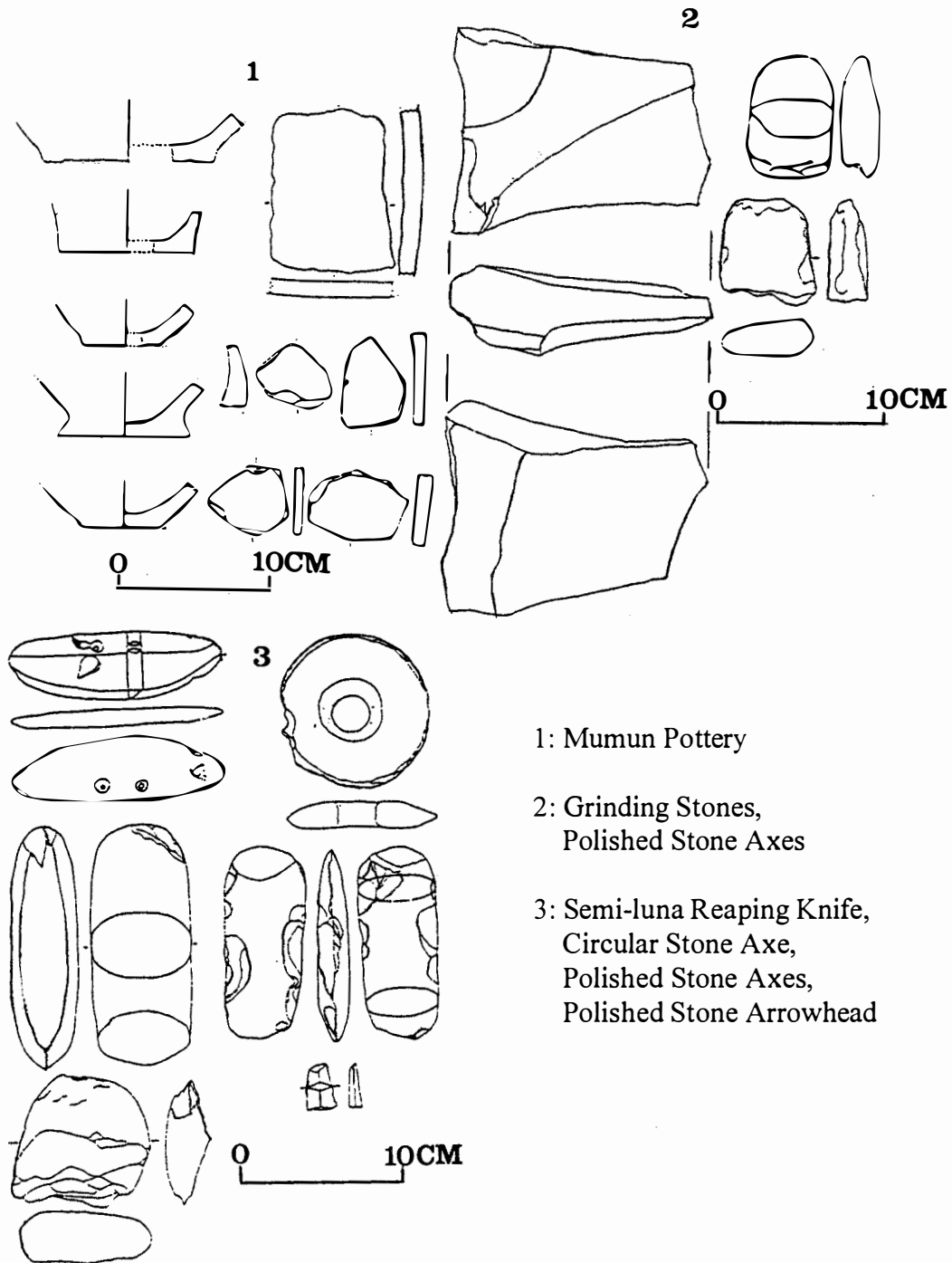
Hallym University Museum, with which the author was affiliated, surveyed the site, and conducted a short-term salvage excavation at the point nearest to the riverbank where the remaining part of the house floor was revealed. Because of the shortage of time available and denial of access to the

digging area by the landowner, only a test-pit excavation at the point where the remaining part of the house floor was located was undertaken.

Description of Sinmae-ri site features and artifactual remains. Leveling down the pits led to the identification of two components, both of which belonged to the Mumun Period; they were separated by an intervening natural stratum. Inside the excavated area of the overlying component, remains of charred logs believed to have been part of a house structure were recovered along with Mumun potsherds and stone objects underneath it (Figure 52).

In the underlying component, the bottom of a house floor was discovered. However, the house's entire structure, which must have been outlined by the surrounding shoulder line of the pit-house, could not be mapped because of the landowner's stubborn refusal to allow the investigators to extend their digging area. The landowner was afraid that once the naturally deposited soils adjacent to the riverbank were disturbed, that area would be easily wiped away in the next flood. For this reason, excavation was carried out only on the scale of small pits.

The height of the natural stratum lying between the two components belonging to Mumun culture was 20 to 30 centimeters. One more notable feature observed in the stratigraphy of the excavated pit was that, between the layer containing the upper component and the natural layer above it, was a



- 1: Mumun Pottery
- 2: Grinding Stones, Polished Stone Axes
- 3: Semi-luna Reaping Knife, Circular Stone Axe, Polished Stone Axes, Polished Stone Arrowhead

Figure 52. Objects excavated from the Sinmae-ri site.

small lens--a pocket of blackish soils containing some wheel-made hard potsherds (Figure 53).

Those potsherds consisted of two rim shards and one spindle whorl, which was made by trimming the potsherd into a circular shape. All these specimens belonged to the black-colored, wheel-made hard pottery. This kind of pottery, the surfaces of which is decorated with impressed lattice designs, is generally considered to have appeared after the third century B.C.--that is, during the State Formation Period--and to have lasted up to the Three Kingdoms Period.

Because excavation at the Sinmae-ri site was limited to a very confined area over a very short period of time, further investigation of archaeological evidence contemporaneous with the pocket feature was not possible. Therefore, no contextual inferences could be made, and it has been impossible to determine the exact function of that pocket. Although much important archaeological information, necessary to explicate structural, functional, and contextual patterns in settlement life, was not obtainable, the chronological sequence of three different components was established. This sequence provides the basic framework for reconstruction of the development of prehistoric cultures in the North Han River Valley. This chronological sequence basically conforms to the pattern observed throughout the Korean

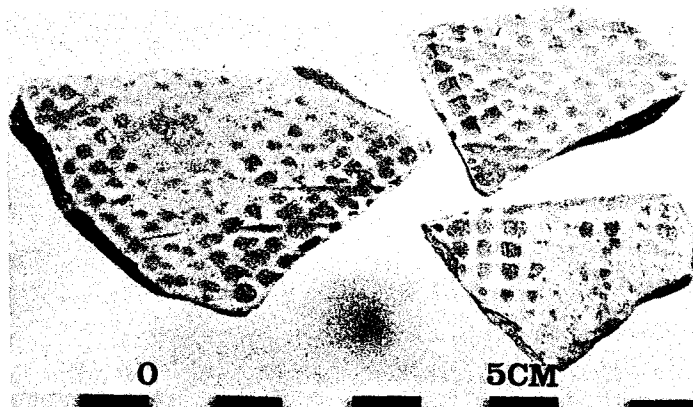
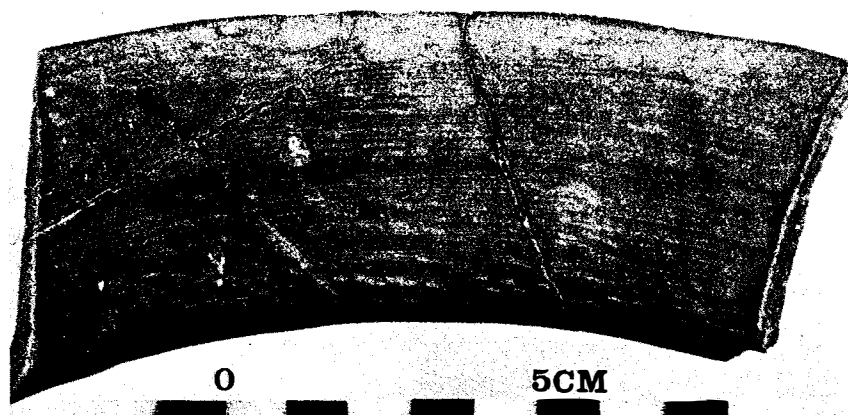


Figure 53. Potsherds and earthen spindle-whorl found in the pocket feature of the Sinmae-ri site.

Peninsula, which is that the stage of iron-bearing and wheel-made hard pottery emerged after the close of the Mumun cultural period. Furthermore, one pattern which seems to be unique to the North Han River Valley is that there were at least two substages in the Mumun cultural period.

Stratigraphically, both the Chungdo Island and Sinmae-ri sites bear identical alluvial depositions, providing a master sequence for chronological development of the prehistoric and protohistoric cultures in the Ch'unch'ŏn region. These may be legitimately extended to the overall region of the North Han River Valley. That sequential order consists of the Chŭlmun stage, substages of the Mumun culture, and the State Formation Period. The determination of two substages of Mumun culture raises a question about the developmental pattern of the Mumun culture in the North Han River Valley.

As discussed earlier, among substages as well as regional types in Mumun culture, the kongyŏltogi (pierced-rim pottery) stage is generally classified as the earlier stage; its appearance in Korea dates as far back as the fifteenth century B.C.

On the floor of the lower Mumun component in the excavated pit at Sinmae-ri, pieces of pierced-rim pottery were found. However, in the upper Mumun component not a single piece of pierced-rim pottery was identified among all the Mumun potsherds. Thus, the archaeological phase characterized

by pierced-rim pottery was confirmed as the older phase by the Sinmae-ri site stratigraphy. However, the stone tools discovered in both Mumun components at the Sinmae-ri site show no distinction. They include arrowheads, axes, grinding stones, and flakes.

Supplementary comments on the Sinmae-ri site. Notwithstanding the very limited excavation in a restricted area, it is clear that settlement of Mumun culture in the Sinmae-ri alluvial plains had taken place at least twice. Furthermore, the original sequential order of the components of Chŭlmun, two sub-Mumun components, and post-Mumun periods in the North Han River Valley has been established. The existence of two different Mumun components in the same location, separated by natural strata, testifies to the passage of time and seems to indicate that the Mumun people's village life extended over a considerable period at the Sinmae-ri site and neighboring areas.

On the other hand, the blackish soil pocket containing wheel-made hard potsherds, which had intruded into the later Mumun component, can be taken as evidence that little time had passed between the emergence of new cultural forces, such as iron tools and wheel-made hard pottery, and the final phase of Mumun culture in the North Han River Valley. The fact that the Mumun agricultural sedentarists had chosen the riverside sand alluvium as their place of residence can be taken as indication of their preference for riverine fishing to

supplement their primary subsistence of crop cultivation.

Onüidong Residence Site, Ch'unch'ön

Location and geography. In 1976, many Mumun potsherds and stone tools were collected in Onüidong, Ch'unch'ön City, and all of these surface collections were reported by S. G. Im (1977). Due to the location, conditions, and various kinds of artifacts collected from Onüidong, it is believed that a Mumun residential settlement existed there.

The Onüidong site is located in an area consisting of a small plain and a very low hillside at the end of a mountain ridge in the southern part of downtown Ch'unch'ön. This region is very adequate for the settlement of Mumun people. A large number of the artifacts collected from Onüidong are Mumun potsherds. In addition, some stone objects were found. The stone objects included polished stone axes, semi-lunar-shaped reaping knives, polished stone arrowheads, spear points, and other broken specimens. The potsherds are typical of plain, coarse Mumun pottery, including the pierced-rim pottery, and a small rim shard of the so-called ring-attached pottery, which is the trademark as well as the index artifact of Korean-style agrarian bronze culture (Figure 54).

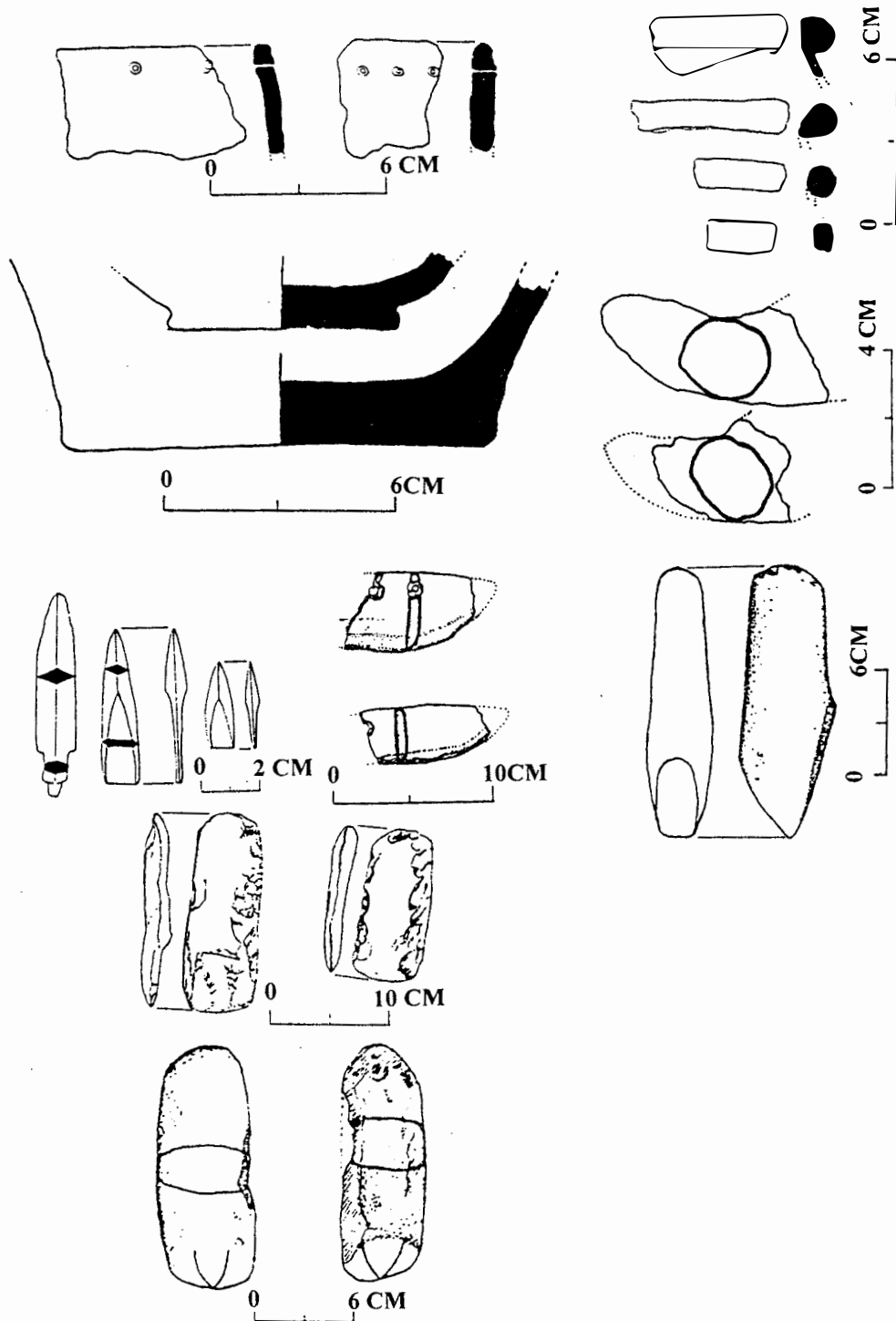


Figure 54. Pottery and stone objects gathered in Onüidong, Chunchön.

Comments regarding the Onüidong site. Unlike the Sinmae-ri and Naep'yöng-ni sites, no structural remains were found at the Onüidong site despite its ideal location and environmental conditions. However, analysis of the surface gatherings, all of which had been used for ordinary domestic purposes, clearly indicates that all of them came from a Mumun settlement house.

One thing that must be pointed out regarding the surface collections from the Onüidong site is that potsherds belonging the two different stages of Mumun culture were mixed together. This is indicated by the presence of potsherds typical of the pierced-rim pottery style and those of the ring-attached pottery style. The existence of ring-attached pottery at the Onüidong site was ascertained in 1994 in Ch'ilchöndong, a district neighboring Onüidong. There, a large number of ring-attached potsherds were discovered, and the settlement was excavated by Hallym University Museum (1995). This excavation will be discussed in detail in the next section.

Dolmens in the North Han River Valley

Taegok-ni Dolmen Site, Buksanmyŏn, Ch'unsŏng County, Kangwŏn Province

Two dolmens were excavated at the Taegok-ni site (Bureau of Cultural Properties Administration 1974), both examples of the table-type Dolmen. They are located 800 meters apart, and the sizes of their capstones are 225 x 180 x 30 centimeters and 30 x 150 x 50 centimeters, respectively (Figure 55). On the outlying areas of the dolmens, Mumun potsherds, including the pierced-rim pottery type, were collected (Figure 56).

Ch'uchŏn-ni Dolmen Site, Buksanmyŏn, Ch'unsŏng County, Kangwŏn Province

One table-type dolmen was excavated at the Ch'uchŏn-ni site (Bureau of Cultural Properties Administration 1974), the capstone size of which is 240 x 240 x 45 centimeters (Figure 57).

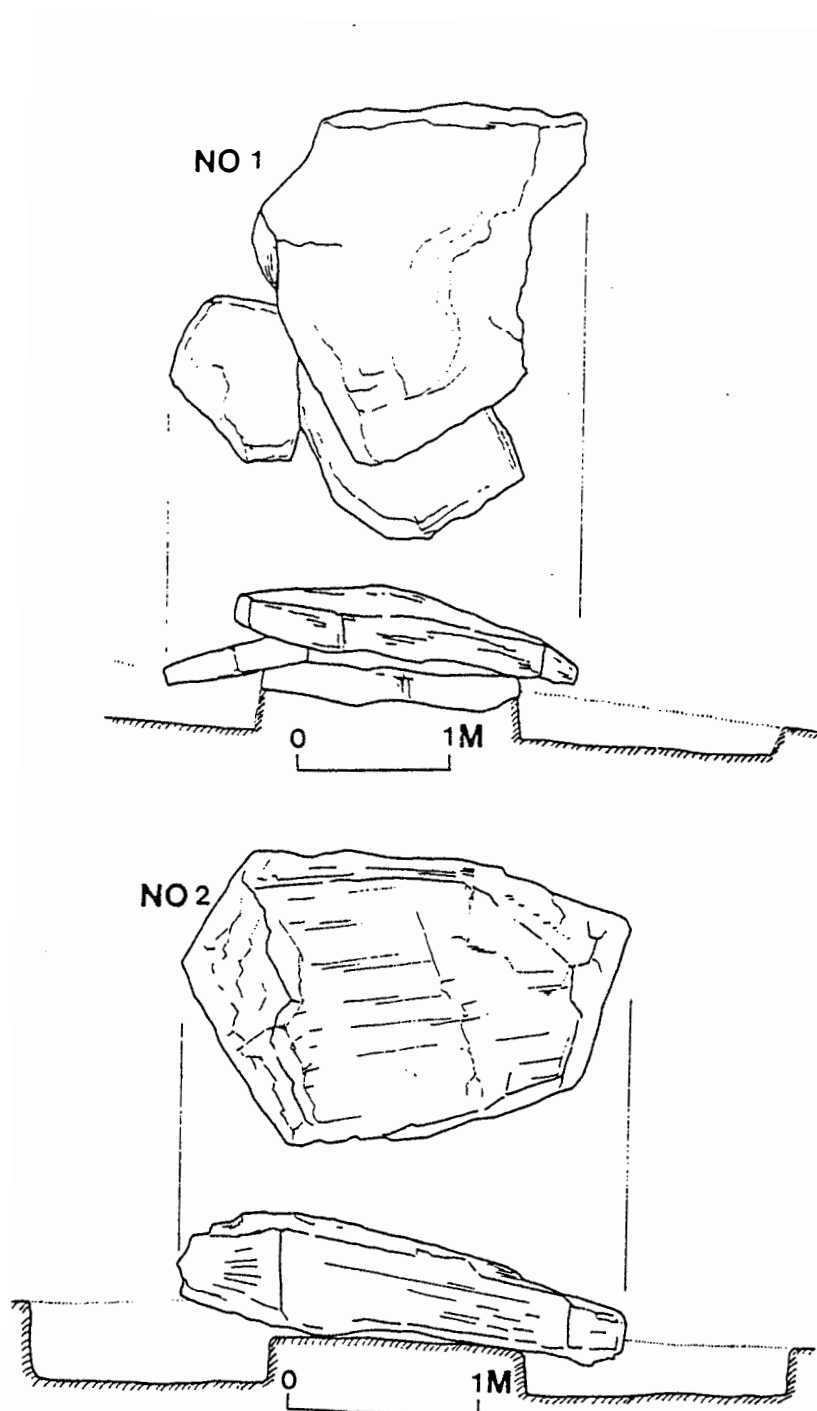


Figure 55. Taegok-ni dolmens.

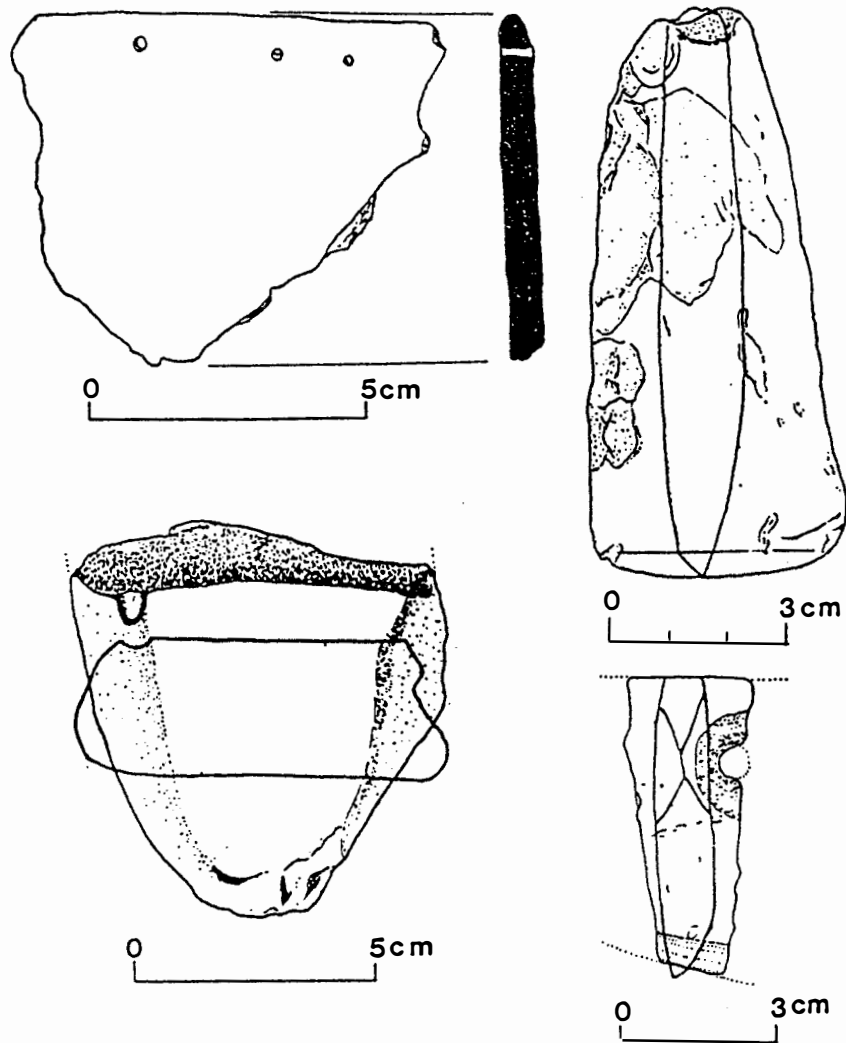


Figure 56. A potsherd and stone objects gathered from Taegok-ni.

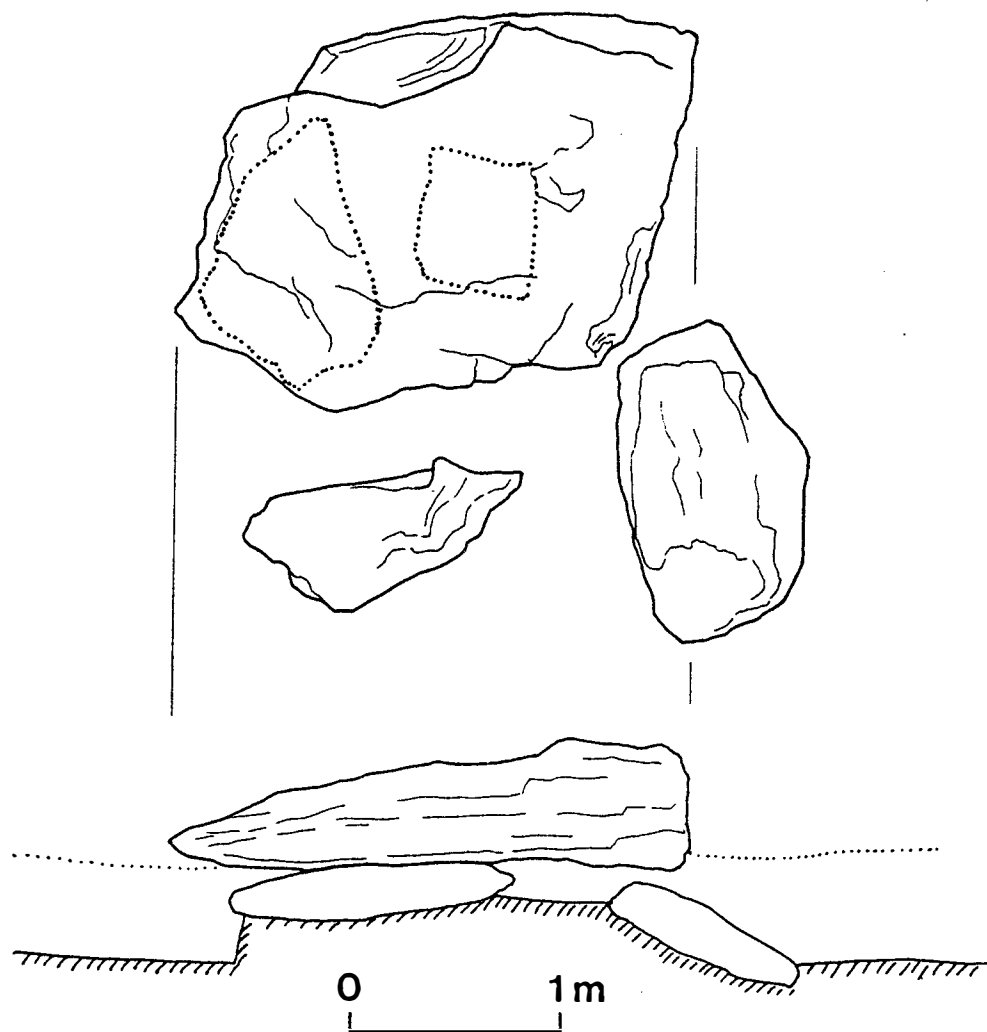


Figure 57. A Ch'uchön-ni dolmen.

Ch'önchön-ni Dolmen Site, Sinbukmyön, Ch'unsöng County

Dozens of dolmens can be found at Ch'önchön-ni, Sinbukmyön, Ch'unsöng County (J. W. Kim and Yun 1967). The site is located eight kilometers from downtown Ch'unch'ön on the banks of the Soyang River, one of two tributaries of the North Han River. It was excavated in 1966 and 1967 by a team from the Korean National Museum. During excavation, parts of the dolmens' stone structures were ascertained in at least 10 places in what was then Ch'önchön-ni village. Researchers reported that the dolmens were arranged linearly in an east-west direction. However, because of severe disturbance of the original geomorphological feature containing the dolmens due to a reshaping of the riverbank, several dolmens were destroyed. Therefore, the exact number of dolmens that had been originally constructed by the Mumun people is unknown.

Furthermore, some of remaining dolmens had lost their capstones or their entombing structures had been destroyed. Such destruction seems to have occurred when Japanese archaeologists visited Ch'önchön-ni and removed artifacts from inside the dolmens. Indeed, it has been reported (Arimitsu 1938) that Ch'önchön-ni and neighboring regions were surveyed around 1915.

Dolmen 1, Ch'ŏnchŏn-ni. The capstone of Dolmen 1 was found lying on an elliptical mound, which was constructed by the accumulation of river stones. The size of the mound structure was about 8.00 x 6.50 x 1.00 meters, and the size of the capstone was 2.60 x 2.20 x 0.45 meters. The entombing structure, for containing a single cremated body, consisted of four flat stones, forming walls 1.70 meters long and 0.62 meters wide. By the time of the last excavation of Dolmen 1 in 1966-1967, the excavation team from the Korean National Museum had found no grave goods inside the entombing structure.

Dolmen2. Ch'ŏnchŏn-ni. This dolmen was located 10 meters to the west of Dolmen 1 and is the same type. However, its capstone had been removed from its original position long ago and cannot be located in the surrounding area. The dimensions of the mound structure were 7.80 x 5.30 x 5-60 meters, and the cist structure was estimated to be 70 x 75 centimeters. Inside the cist, a thin layer of small pebbles was observed on the floor. This is believed to have been for the purpose of floor covering. Mumun potsherds and two specimens of polished stone arrowheads were collected on the floor of the cist.

Dolmen 3, Ch'ŏnchŏn-ni. Dolmen 3 consists of only half a mound structure and an entire capstone. The size of the capstone is 1.70 x 1.30 x 20-40 centimeters. Because the central part of the dolmen was completely destroyed, the original structure of the cist is unknown (Figure 58).

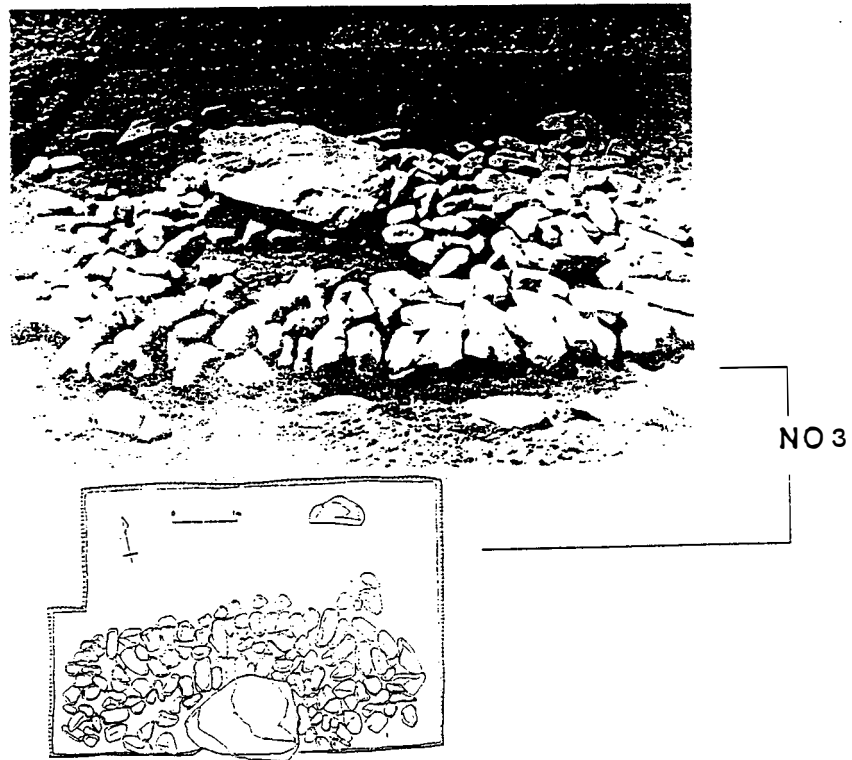


Figure 58. Ch'önc'hön-ni dolmen no. 3.

Dolmen 4, Ch'ŏnchŏn-ni. Like Dolmen 3, Dolmen 4 also had suffered severe damage. Only part of the mound structure, which consisted of accumulated river stones, and two small stone cists contained inside were intact. The size of the intact portion of the mound structure was 4.20 x 5.00 meters, and the two cists were 41 x 25 centimeters and 45 x 22 centimeters, respectively. Each of the stone cists consisted of four flat stones, and each was topped by one thick flat stone. The floor of one cist had been "tiled" by a layer of small pebbles, as in Dolmen 2, and the floor of the other cist was covered by a single flat stone slab. No artifacts were found in either cist. However, one cylindrical bead of natural stone and one polished stone arrowhead were collected from crevices between the accumulated stones of the mound structure. Structurally, Dolmen 4, with its two very small cists in one burial mound, does not appear to be exceptional. However, because the capstone is missing and the overall structure is largely disturbed, it is difficult to assess its structural characteristics with certainty (Figure 59). Among the many questionable points which can be raised about the structure of Dolmen 4 is the uncertainty regarding whether both of its cists had been used for entombing the dead. It is possible that one cist had been used for entombment and the other for containing burial goods. Regardless of whether one or both of the cists were used for entombing the dead, neither was large enough to

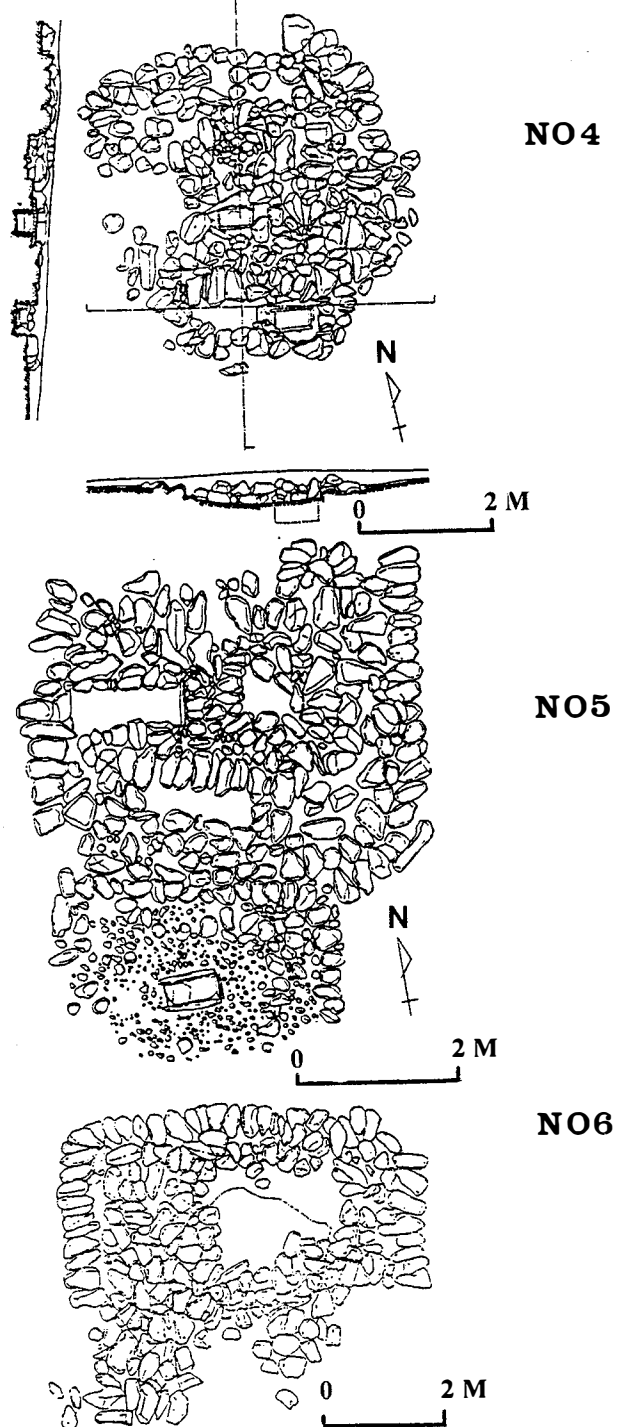


Figure 59. Chöncjön-ni dolmens.

contain more than just bones. The cists of some dolmens were so small that, as has been suggested, there could have been no alternative explanation except secondary burial practice. However, the social implications of secondary cremation in Mumun society are uncertain because no regular cultural pattern can be observed in the occurrence of such small cists. Thus, it is difficult to conclude that the small cists in Dolmen 4 were made for the purpose of secondary cremation.

It is difficult for a person who had not participated in the dolmens' excavation to raise questions about its description in the excavation report. However, when one examines the drawing of the intact part of the structure of Dolmen 4 in the excavation report, one of the two cists appears to have been constructed later, or, if it had been made at the same time as the first cist, the capstone appears to have been placed on the first one. This suggests that the basic structure of Dolmen 4 is no different from the typical dolmen, which has one cist and one overlying capstone inside the mound structure. The other cist seems to have been attached after construction of the main structure, perhaps for a subsidiary function, such as for containing burial goods.

Dolmen 5, Ch'önc'hön-ni. Dolmen 5 also suffered severe damage. The size of the stone mound structure still intact was about 5 x 4 meters; its capstone was missing. Dolmen capstones are so heavy that it is hardly possible

for them to be removed by natural forces; intentional human action is likely the cause. Yet, until the excavation of these dolmens by the Korean National Museum team in the 1970s, large-scale intentional human action on the dolmens in Ch'ŏnchŏn-ni was unknown, except that of the Japanese archaeologists during the Colonial Period. Because of this error, it is very difficult to make conclusions based on the remaining features of the dolmens in Ch'ŏnchŏn-ni. A smaller mound structure containing a small stone cist, measuring 60 x 28 x 25 centimeters, was found attached to the mound structure of Dolmen 5 (Figure 59).

Dolmen 6, Ch'ŏnchŏn-ni. This dolmen was also severely damaged. The capstone was intact, however, and measured 2.50 x 1.95 x 20 centimeters. The size of the remaining stone mound structure is 6.00 x 5.00 meters. While the features of the entombing structure are uncertain, excavators believe that it had been made of accumulated river stones--the same kind of stones that had been used for the construction of the mound structure. Some Mumun potsherds and a very small amount of decayed human bone, which cannot be identified, were found in the crevices between stones of the mound structure (Figure 59).

Other dolmens in Ch'ŏchŏn-ni. Four dolmens were identified based only on the presence of capstones, which had been removed from their original

locations, thereby losing their structural context. .

Researchers estimate that dozens of dolmens should have existed in Ch'ŏnchŏn-ni, but many of them had been destroyed, and, as stated above, the remaining ones show severe damage. Despite this, the existence of the clustering of dozens of dolmens in Ch'ŏnchŏn-ni confirmed the existence of an independent Mumun village there. In and around present-day Ch'ŏnchŏn-ni village, Mumun potsherds are being found even today. Indeed, in terms of favorable environmental conditions for Mumun sedentary agriculturalists, the Ch'ŏnchŏn-ni area can be considered an ideal location. The natural environment there is similar to that of the Sinmae-ri site. It lies on a sand alluvium plain, partially surrounded by a mountain ridge and partially surrounded by the Soyang River.

Sinmae-ri Dolmen Site, Sŏmyŏn, Ch'unsŏng County, Kangwŏn Province

In Sinmae-ri many dolmens are estimated to have existed (Hallym University Museum 1986). Among them, several had been destroyed in the course of cultivation by village farmers. Three remain, although their entombing structures were completely destroyed. Five were excavated in 1984 by the excavation team of Hallym University Museum, to which the author

belonged. Two dolmens of the five excavated are located at Sinmae 1ri, and three others at Sinmae 3ri--that is, the first and third districts in the Sinmae-ri village, respectively.

Elder men who have lived in contemporary Sinmae-ri village from childhood say that many dolmens that had hindered field cultivation were intentionally broken up into small pieces or buried in the sandy ground. The villagers could not recall the exact numbers and locations of those dolmens, however.

Because of the particular ground composition of the Sinmae-ri region--sand alluvium--the dolmens were easily invaded. Therefore all of the remaining dolmens, including those excavated by the Hallym University Museum team, had been plundered.

Excavation of the two dolmens at Sinmae 1ri was carried out during the summer of 1985. Before excavation, capstones of all five dolmens were found lying at present-day ground level, half hidden by grass. Again, the ground where all the dolmens were located is a pure sand alluvium. All five were found by the upper North Han River just upriver of its confluence with the Soyang River. Each dolmen is described below.

Dolmen 1, Sinmae 3ri. Before excavation, only the upper surface of the capstone of a small dolmen was exposed at ground level. The size of the stone

was 2.00 x 1.50 meters. As excavation progressed, some large flaked stones and river cobbles were revealed beneath the capstone. However, no artifactual objects or features were ascertained beneath or around it.

Considering the quadrangular shape of the large flat stone, which looked like the capstone of a dolmen, and its location nearby another dolmen, the structure of which was clearly established, the author, who led that excavation, determined, at least provisionally, that it was a dolmen. But, precisely speaking, there is no direct archaeological evidence to prove that it is a dolmen. Therefore, the author has excluded Dolmen 1 in the description of dolmens found in Sinmae-ri (Figure 60).

Dolmen 2, Sinmae 3ri. Dolmen 2 has retained its basic structure almost intact, despite disturbance of the entombing structure's interior and the disappearance of all artifacts that it must have been contained. The basic structure of this dolmen consisted of a heavy and well-trimmed flat capstone, the quadrangular cist, constructed of four flat stone slabs, and the circular mound, which was made of an accumulation of large flaked stones and river cobbles.

The size of the stone mound structure is 3.80 x 4.90 meters, and the size of the capstone is 2.22 x 2.70 x 0.6-0.7 meters. The capstone, with the entombing cist beneath it, was located at the summit point of the mound

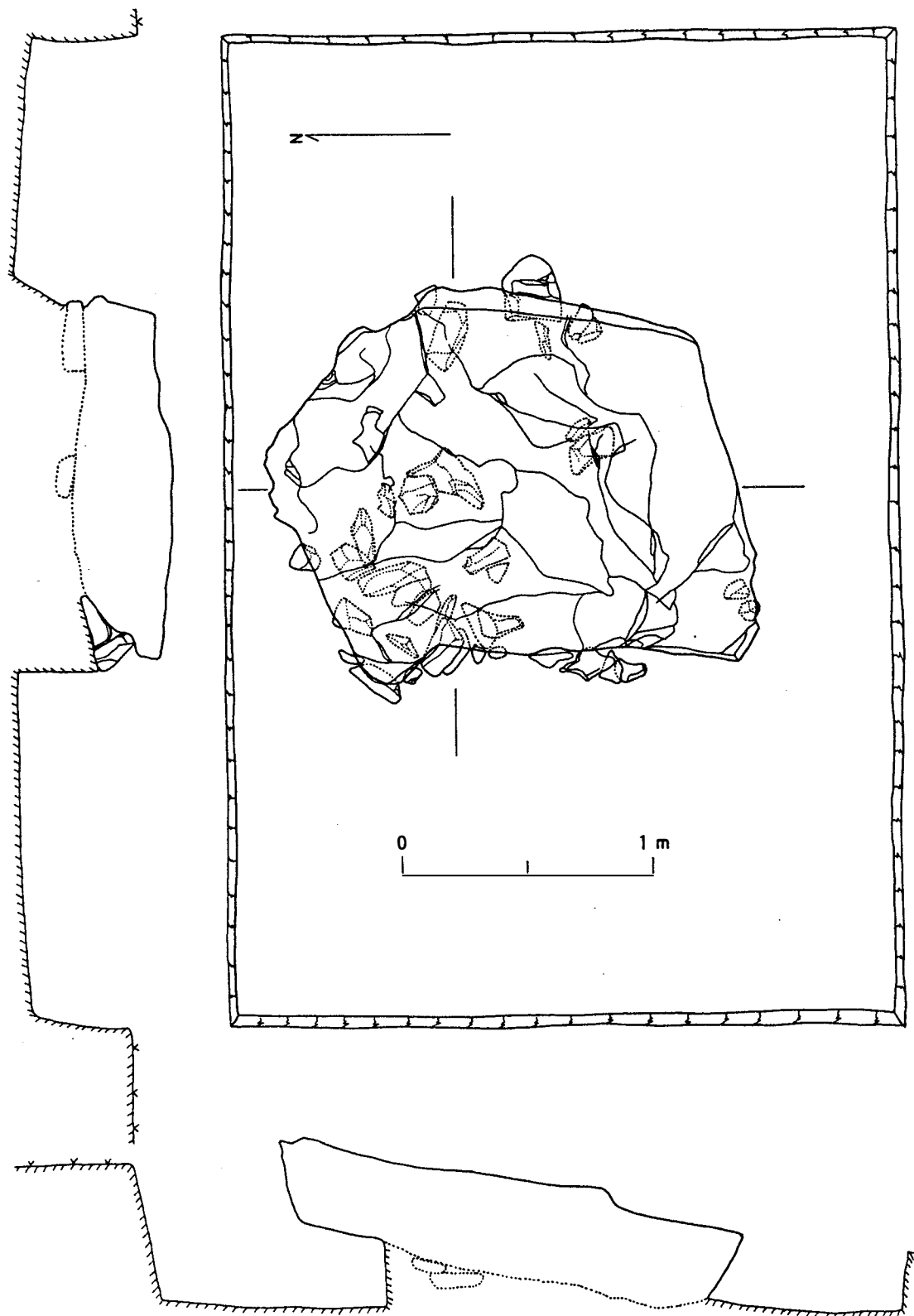


Figure 60. Sinmae-ri dolmen no.1.

structure. The condition of the stone mound and the capstone was not so bad as to hinder identification of the dolmen's original shape. However, the interior of the cist was considerably disturbed, as indicated by the discovery of only a small piece of Mumun pottery on the bottom level.

The cist had been constructed by erecting two stone slabs lengthwise and parallel to each other. A smaller stone slab was then installed on the north side. Finally, after placement of the dead body and burial goods inside, the other side was closed up by a fill of flaked and cobble stones.

More than half of the floor of that cist was paved by small pebbles. In the course of excavation, one tiny piece of thoroughly decayed bone was discovered at the same level as those pebbles, and several small Mumun potsherds were found on or between stones of the mound structure surrounding the four walls of the entombing structure (Figure 61-1, 2, 3).

Typologically, the dolmens discovered in the North Han River Valley belong to the table type. The stone mound structure constructed by the accumulation of cobble stones and flaked stones is believed to have been added to help support the massive capstone and its understructure, since the ground was composed entirely of sand deposits.

Dolmen 3, Sinmae 1ri. The interior of Dolmen 3 also was disturbed, and on the capstone itself a house wall had been erected. Therefore, excavation was



Figure 61-1. Sinmae-ri dolmen no.2 (The entombing structure with capstone).



Figure 61-2. Sinmae-ri dolmen no.2 (after removing the capstone).

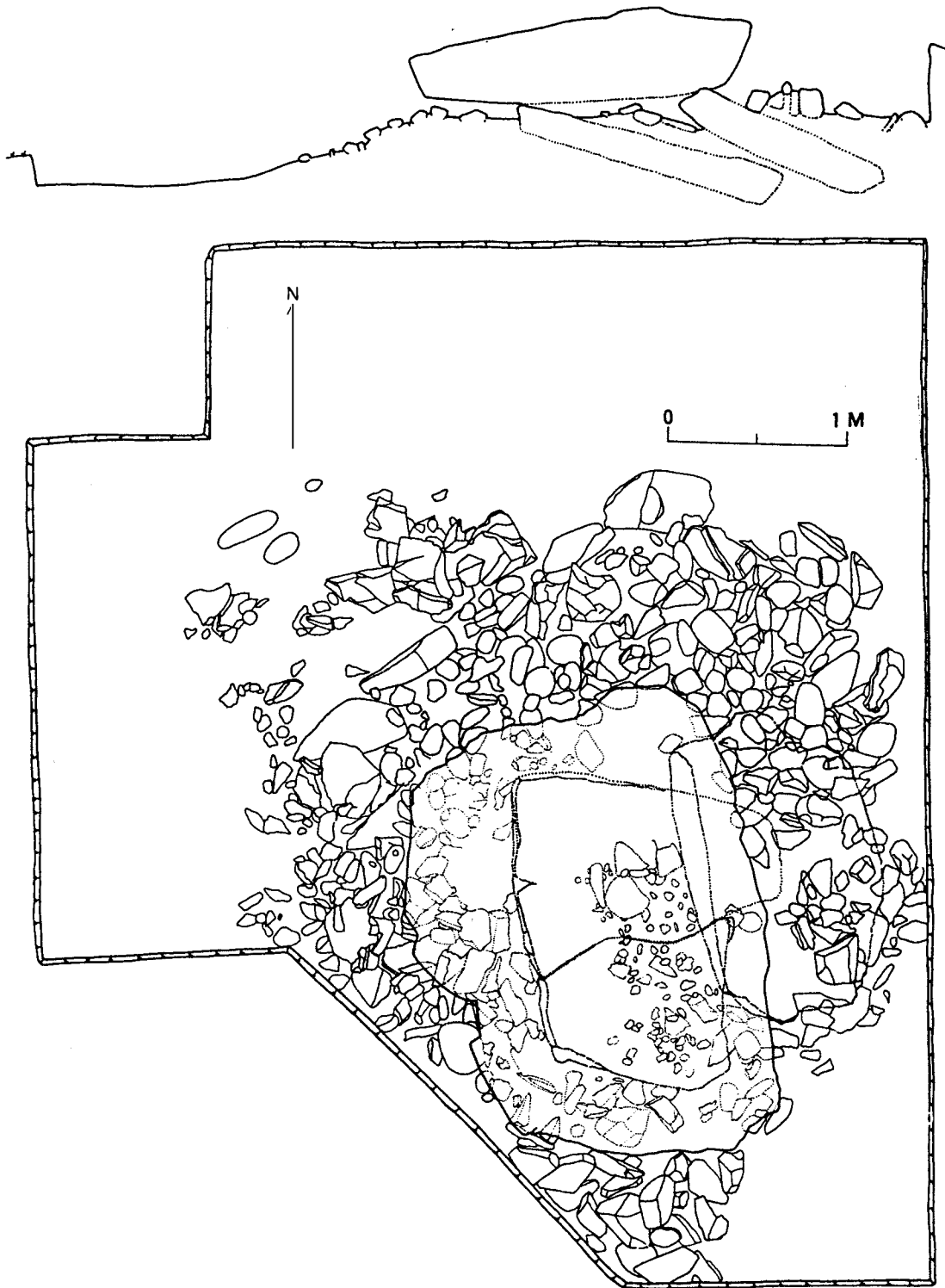


Figure 61-3. Sinmae-ri dolmen no. 2 (plan and section drawings).

carried out so as not to disturb the wall. This dolmen belongs to the table type, and some stones which were supposed to have been used for the stone mound structure identified in Dolmen 2 were discovered beneath the sunken capstone.

Although the area in which the stone mound structure and the cist were located was not excavated in order to avoid destruction of present-day house walls, the dolmen's basic structure was determined to be the same as Dolmen 2. Here, again, no artifacts were collected inside or around the dolmen (Figure 62).

Dolmen 4, Sinmae 3ri. This dolmen is severely deformed structurally. It also seems to belong to the table type, consisting of a small stone mound and an interior cist, which also was severely disturbed. Only one Mumun potsherd was found under the capstone (Figure 63).

Dolmen 5, Sinmae 3ri. The degree of disturbance of Dolmen 5 was no better than that of Dolmens 3 or 4. Indeed, it was slightly worse: Unlike Dolmen 4, which had one stone slab left to demarcate its cist structure, Dolmen 5 was missing all of the slabs which comprised its cist structure.

The size of its capstone is 1.20 x 3.40 x 0.60-0.70 meters. A small quadrangular stone, which may have been a capstone for another dolmen, was laid on top of it, presumably placed there by a farmer using a bulldozer (Figure 64).



Figure 62. Sinmae-ri dolmen no.3.



Figure 63. Sinmae-ri dolmen no. 4.

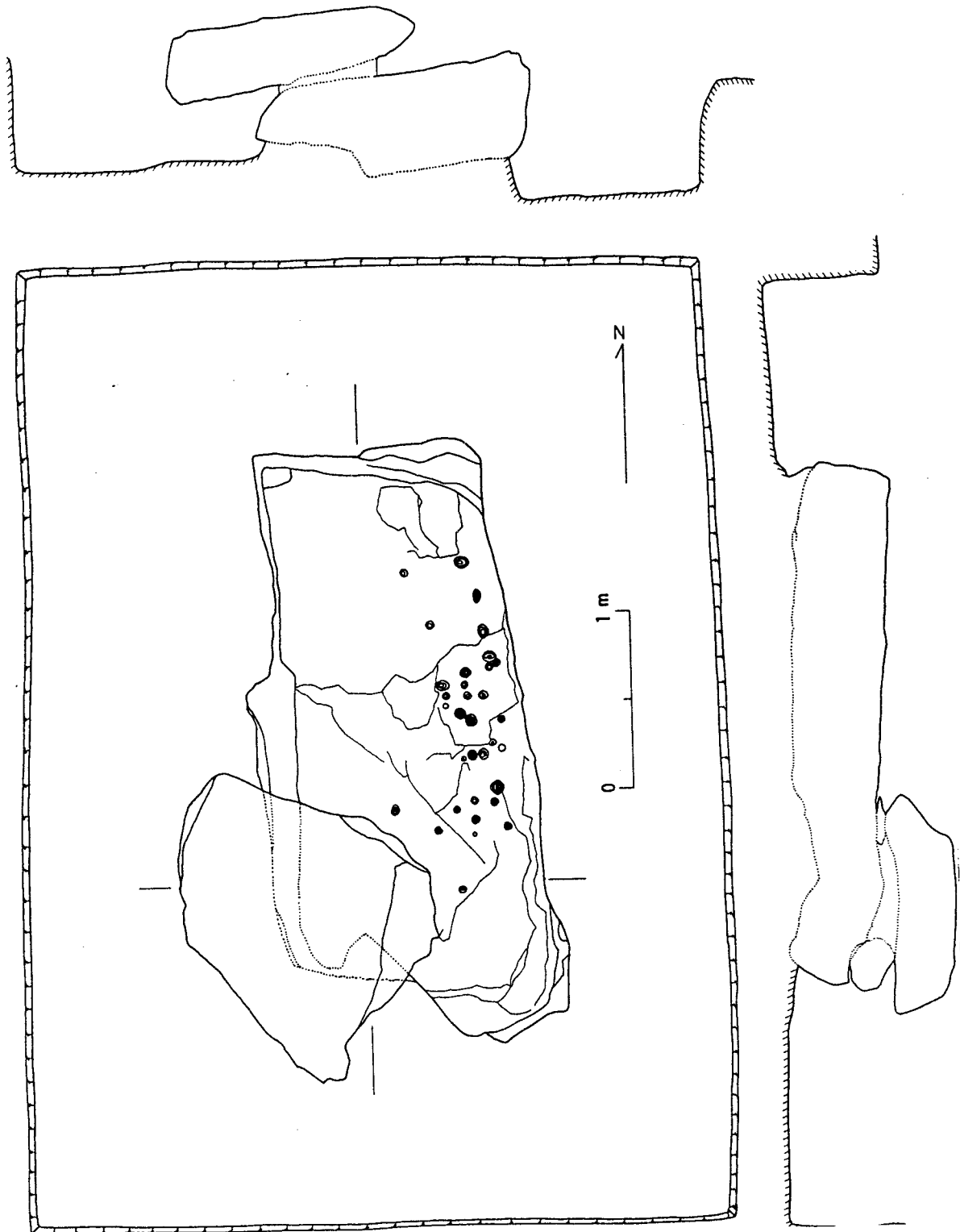


Figure 64. Sinmae-ri dolmen no. 5.

Other dolmens in Sinmae-ri. In June 1984 an excavation team from the Korean National Museum worked on three destroyed dolmens. All of them lacked capstones; only underground structures were discovered below present-day ground level. These dolmens were discovered accidentally by a farmer in the course of tilling the ground for cultivation. The discoveries were made at the same time that archaeological excavations of residential structures were taking place near the riverbank. The farmer informed the excavation team that when he had been tilling the ground with his small tractor, some heavy stones were hitting the blades of the tiller. Hearing this, the excavation team decided to examine those spots to examine the remaining features of those destroyed dolmens.

At Dolmen 1, only the quadrangular-shaped stone cist, constructed by an accumulation of stones on the four walls, was located underground; there was no capstone. Its length, north to south, was about 210 centimeters; its width at the southern end was about 70 centimeters and, at the northern end, 53 centimeters.

The floor of the cist was paved by flaked stone slabs, and small pebbles were discovered under those stones. It appeared that the rectangular hole was dug first underground, then small pebbles were laid on the floor, and, finally, flaked stone slabs were placed on top of that. Only four pieces of Mumun

pottery were picked up from the fill level inside Dolmen 1, and no remains were found on the floor. On the other hand, around the cist structure, one polished stone axe, one flaked stone axe, and some Mumun potsherds were collected (Figure 65).

In Dolmen 2, the upper part of its structure was destroyed. Only the cist structure remained, consisting of three sides constructed of accumulated flaked stone slabs and a fourth, the southern side, constructed of one large stone slab. The interior length of the cist was about 208 centimeters; the width at the southern end was 60 centimeters, and at the northern end it was 50 centimeters. The depth was about 40 centimeters. No artifactual remains were discovered on the floor, but in the black soil fill, three Mumun potsherds were collected. Also, in the surrounding area of the dolmen, one broken polished stone knife, one polished stone adz, more than 20 Mumun potsherds, and two polished stone arrowheads were collected (Figure 66).

At Dolmen 3, only the floor remained. All other features, including walls and capstone, had been lost in the course of tilling the field, according to the farmer. Only one polished stone arrowhead and two Mumun potsherds were picked up around the remaining structure (Figure 67).

The excavators of these three dolmens' structures concluded that their capstones had been removed or pushed into holes by farmers in the course of

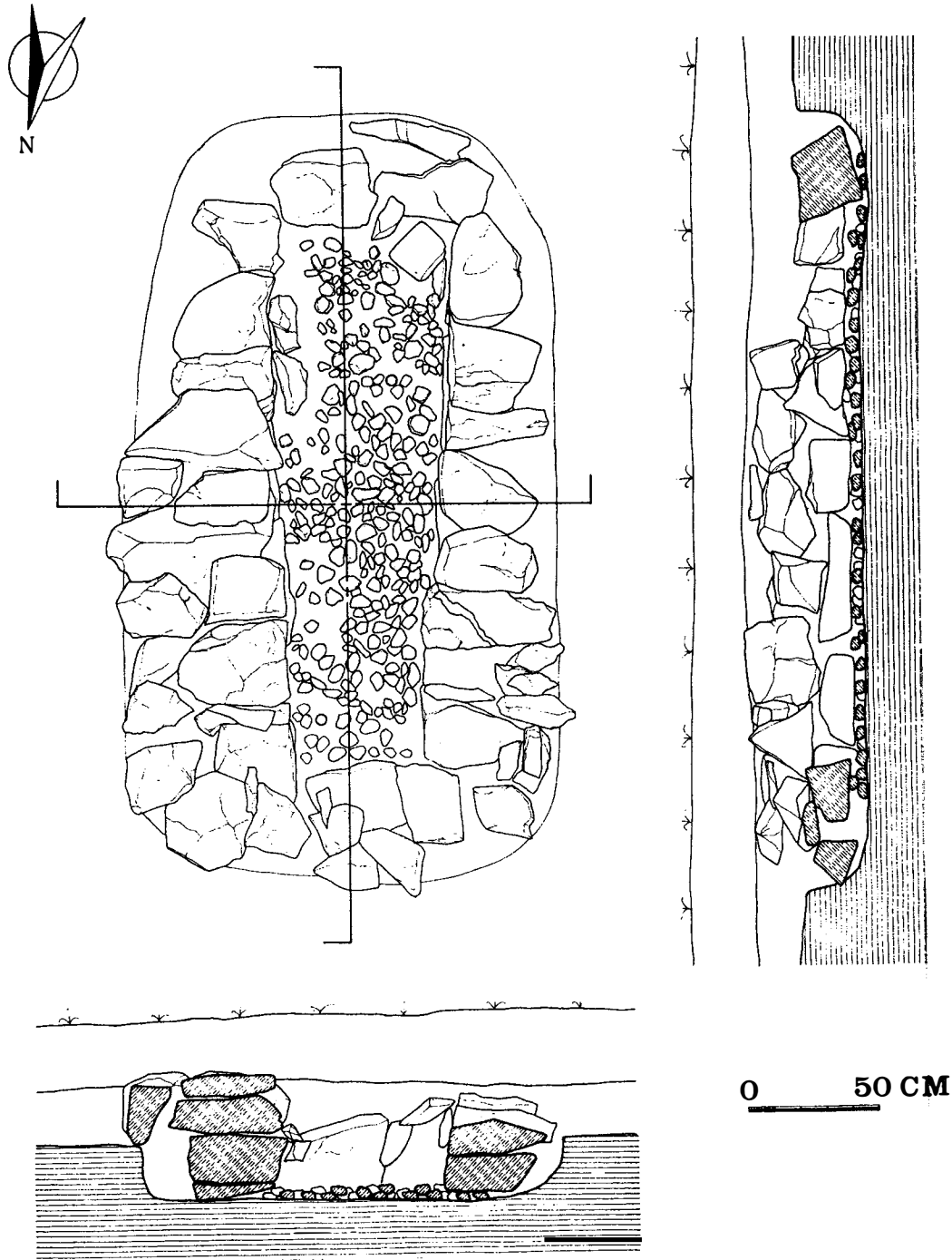


Figure 65. Sinmae-ri dolmen no.1.

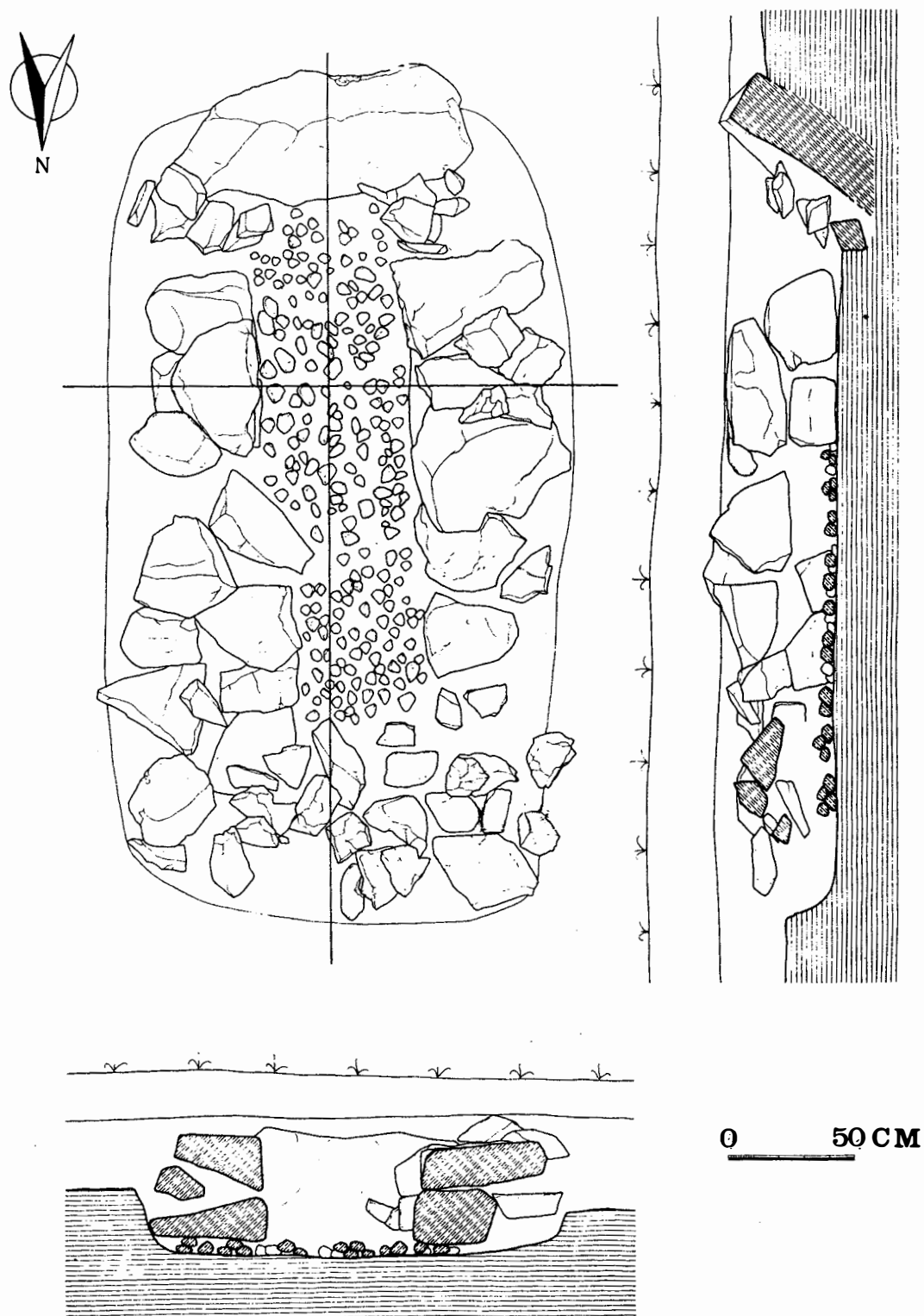


Figure 66. Sinmae-ri dolmen no. 2.

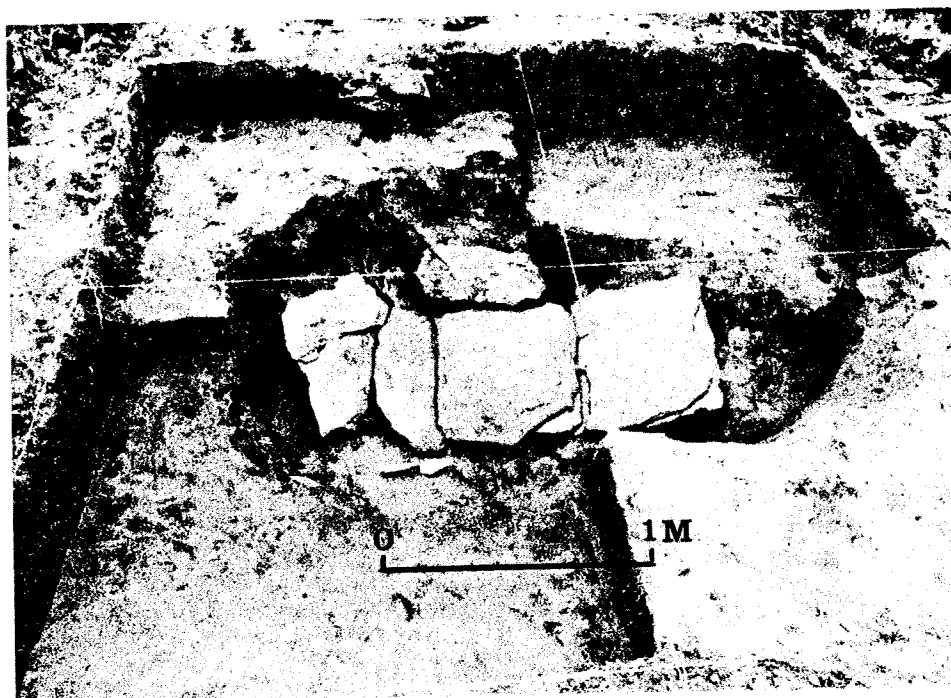


Figure 67. Sinmae-ri dolmen no.3.

preparing the land for cultivation. In sum, although all dolmens in the Sinmaeri region were severely disturbed, their basic structures could be identified as the table type, consisting of a stone mound structure which supported a heavy entombing structure.

Chungdo Island Dolmen Site

Four dolmens were excavated at Chungdo Island, and, in the course of their excavation, a number of buried dolmens were identified (Kangwŏn University Museum 1984; Korean National Museum 1982, 1983; Ro and Ŭ. J. Ch'oi 1982).

Dolmen 1, This dolmen was excavated in 1983 by a team from Kangwŏn University Museum. It was entirely hidden underground, and its location was only determined by the landowner's report that he had encountered a large stone when spading the area. Excavation revealed the dolmen to be of the table type, composed of three main parts: the mound structure, which was constructed of accumulated stones, the quadrangular cist, constructed of four stone slabs, and a large triangular capstone. The elliptical mound structure measured 665 x 435 centimeters, and the capstone measured 270 x 196 x 40 centimeters. The cist structure, which had been assembled of two parallel stone

slabs erected lengthwise and two flat stones for enclosing the two ends, was centered on the mound structure. The size of the enclosed space measured 72.0 x 100.7 x 50 centimeters. Some small pebbles were discovered on the bottom level of the cist.

Nothing was found inside the entombing structure. Only three Mumun potsherds were collected from between the stones of the mound structure, and one polished stone adz was also picked out from between the stones of the mound structure. Also, several tiny pieces of unidentifiable decayed bones were collected in and around the stone cist. This dolmen also is typical of the table type, similar to the dolmens discovered in Sinmae-ri (Figure 68).

Dolmen 2. This dolmen is located on the very outskirts of the Chungdo Island and therefore is being rapidly eroded by the river. For this reason, it was selected to be excavated in 1982 by the Chungdo Island excavation team, of which the author was a member. Before the excavation of this dolmen, another dolmen had been demolished by the river, most of its structure having been completely submerged.

Typologically, Dolmen 2 at Chungdo belongs to the typical table type, with the mound structure. The capstone measured 2.20 x 2.80 x 60-70 centimeters. Prior to excavation it was known that this dolmen had suffered severe damage. The central part of its capstone had been broken off by a heavy

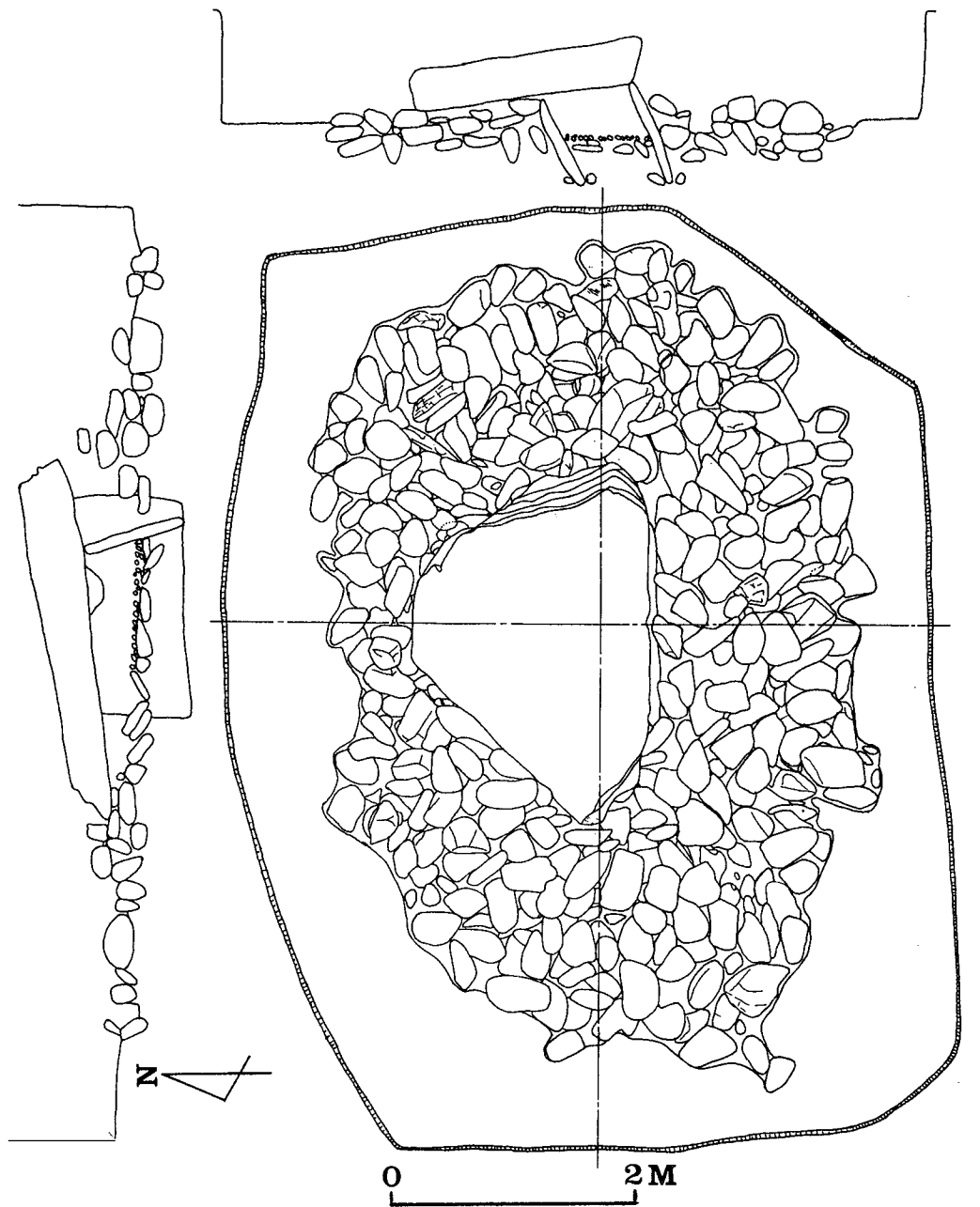


Figure 68. Chungdo dolmen no. 1.

metallic chisel. Apparently this was done to gain access to the interior of the cist, because it must have been impossible for the intruder to penetrate the chamber through the sidewalls, all of which were blocked by the accumulated stones of the mound structure.

The cist was constructed of two parallel stone slabs placed lengthwise and a small flat stone at one short side; the other short side was blocked with large flaked stones. The interior of the cist was totally disturbed, and small pebbles were found scattered on the floor, as well as 13 pieces of cylindrical perforated beads, which must have been left behind when the cist was pillaged. On and around the stone mound structure, Mumun potsherds and polished stone arrowheads were found (Figure 69).

Dolmen 3, Dolmen 3 is also located on the outskirts of the Chungdo Island, only 5 meters from the riverbank and near Dolmen No. 2. In fact, the two dolmens were so close to each other that the perimeters of their stone mound structures touched. Therefore, in the past they must have looked like a set of two burials.

Dolmen 3 was excavated in 1983 by a team from the Korean National Museum. Before excavation, only the surface of its large capstone had been exposed. After excavation, the dolmen emerged as a stone mound tomb having a large capstone in the center of the burial structure, which was surrounded by a



W → E



S → N

Figure 69. Chungdo dolmen no. 2.

circular mound constructed of large accumulated flaked stones and river stones. The capstone resembled a turtle shell, measuring 312 centimeters in length and 220 centimeters in width.

As the excavation progressed, it became clear that Dolmen 3 had not been destroyed or pillaged. As the earth covering the capstone and stone mound structure was removed, the dolmen emerged in its original form. Soon after the removal of surface soils, excavators became sure that the entombing structure beneath the capstone and burial goods contained in it still must be in place; there was no trace of disturbance or removal of the capstone or deformation of the surrounding mound structure. The stone mound structure measured 900 x 620 x 25-50 centimeters, and that of the capstone, which had been placed on the center of the mound structure, was 312 x 220 x 80 centimeters. The dolmen is unusual in that it lacked any distinct cist structure. Apparently, it originally had been constructed only as an accumulated stone mound structure surrounding a large capstone.

Three pieces of cylindrical, pierced jade stones were found between the small, sparsely scattered stones lying underneath the capstone. Many Mumun potsherds were recovered on the surface of the stone accumulation as well as in the outlying areas of the circular stone mound. In addition, one small stone knife, one small polished stone adz, two polished stone axes, and two other

stone tools with sharp cutting edges were collected among the stones in the accumulated mound (Figure 70).

Dolmen 4. This dolmen was excavated together with Dolmen 3 by the same excavation team from the Korean National Museum. Like Dolmen 3, Dolmen 4 was located at the northern edge of Chungdo Island. Its location, 30 centimeters below ground, was ascertained by the landowner in the course of tilling the soil.

After the excavation was completed, it turned out that the capstone was square, measuring 90 x 90 centimeters, and its thickness ranged from 9 to 20 centimeters. Underneath this small capstone lay the cist structure with yet another, smaller capstone. A small, circular mound made of large river stones surrounded the cist. The smaller capstone measured 56 centimeters in length, 40 centimeters in width, and 17 centimeters thick, and the small stone cist was assembled by four stone slabs, one for each side. It was indeed small, measuring 30 centimeters in length and 25 centimeters in width. The mound structure was composed of about 20 stones, the sizes of which ranged from 25 centimeters to 50 centimeters; it measured 205 centimeters east to west and 190 centimeters north to south.

Flakes of charcoal and small spalls of human bone were found inside the cist, and after complete inspection of the cist interior, it was determined that

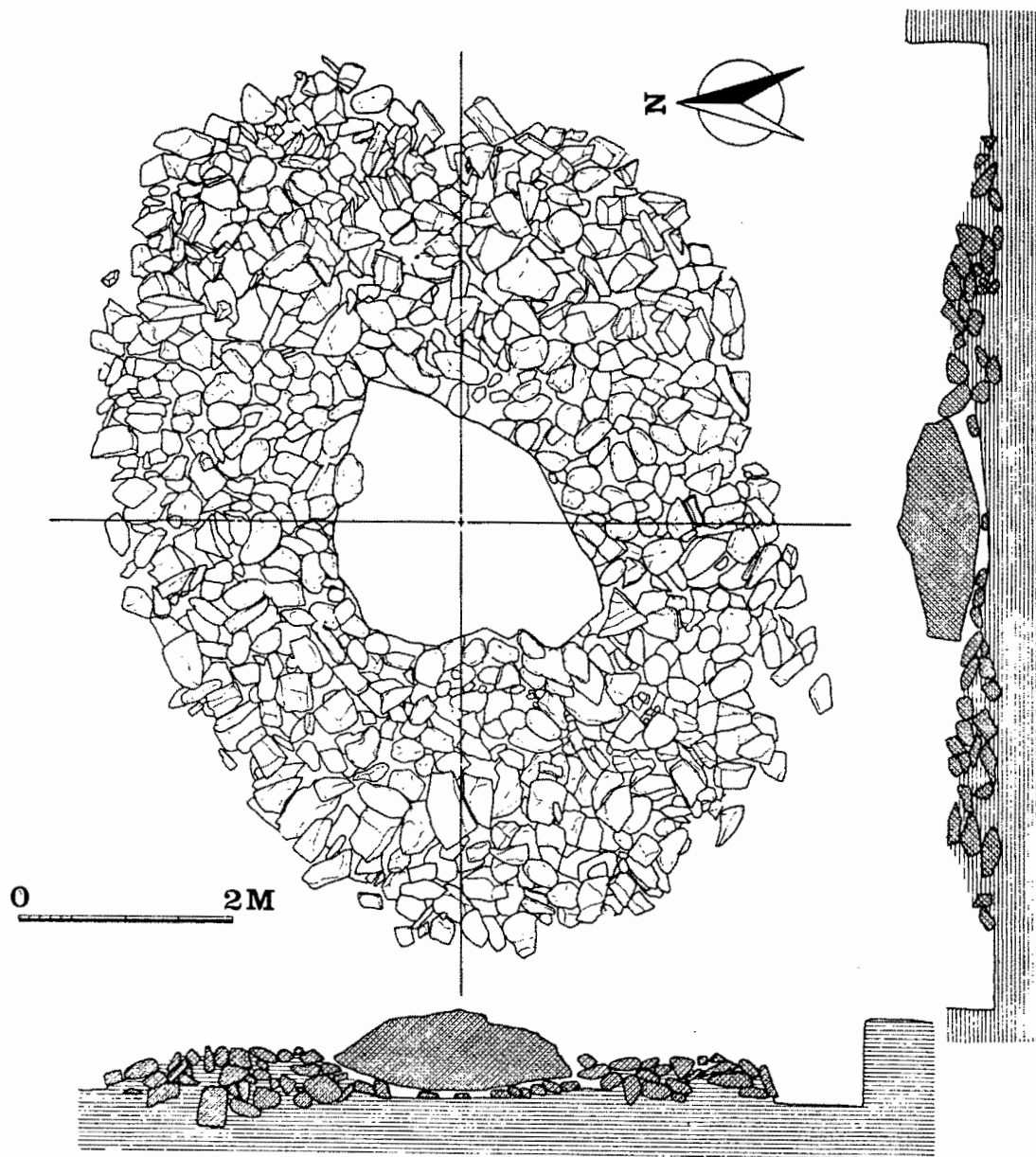


Figure 70. Chungdo dolmen No.3.

bone flakes assumed to be from the cranium were concentrated in the eastern corner, with the upper part of the body lying in the eastern part of the cist. The leg bones were primarily concentrated in the western part. Therefore, despite the overall disturbance of the bone remains, the investigator was able to conclude that the body must have been entombed in the crouched position, with legs and back bent and the head and knees very close. The investigator estimated the entombed person had been about 10 years of age. No other remains were discovered in the cist. However, among the stones of the circular mound structure, three elongated, lozenge-shaped polished stone arrowheads were picked up; also, one very small Mumun potsherd was found among those stones (Figure 71).

Other Dolmen Sites

Sanch'ŏn-ni Dolmens, Sinbukmyŏn, Ch'unsŏng County

It has been said that several dolmens may be found in Sanch'ŏn-ni (Hallym University Museum 1994a). While the exact number is uncertain, two table-type dolmens are known to exist there (Figure 72-1).

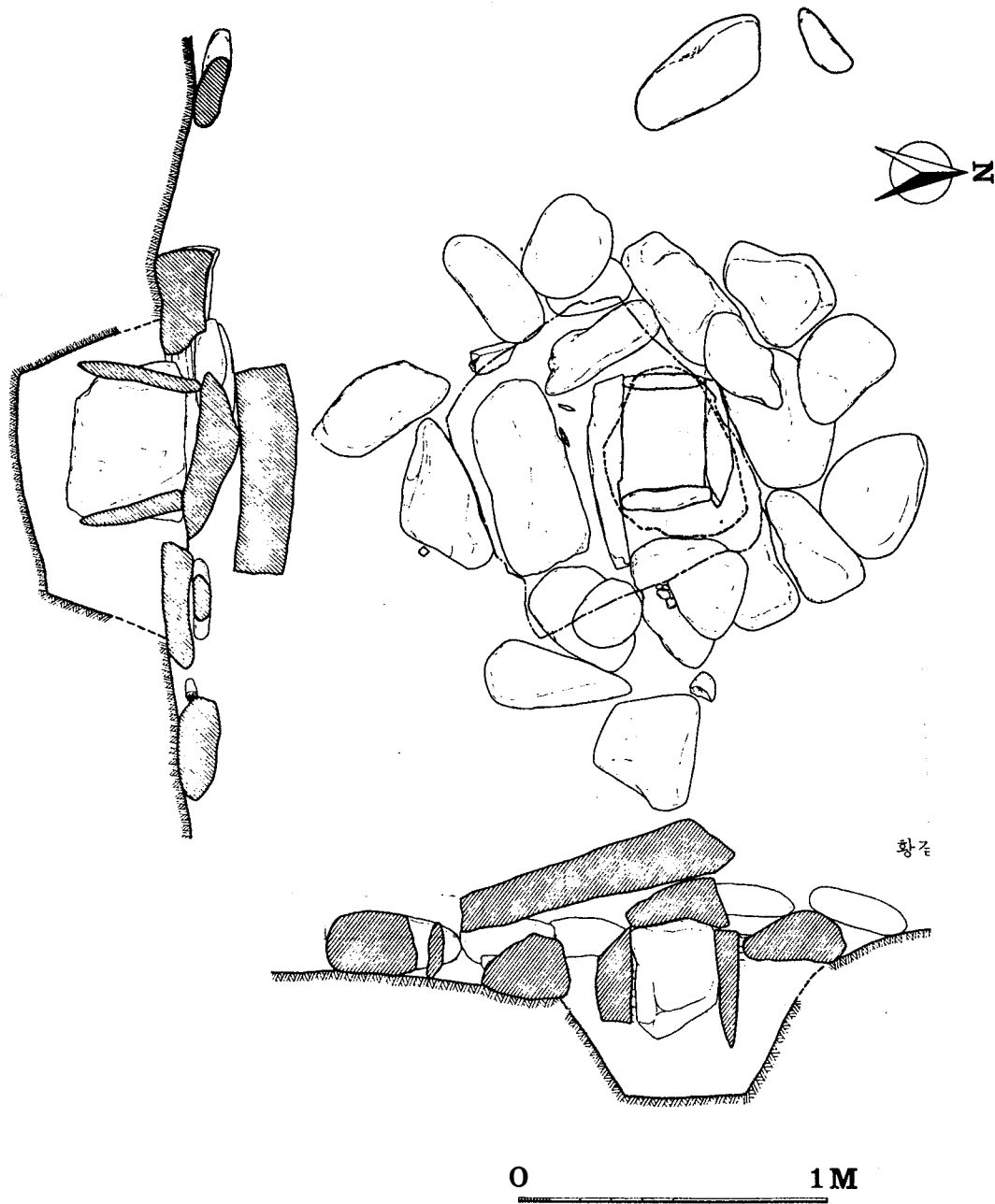


Figure 71. Chungdo dolmen no.4.

Kümsan-ni Dolmens, Sömyön, Ch'unsöng County

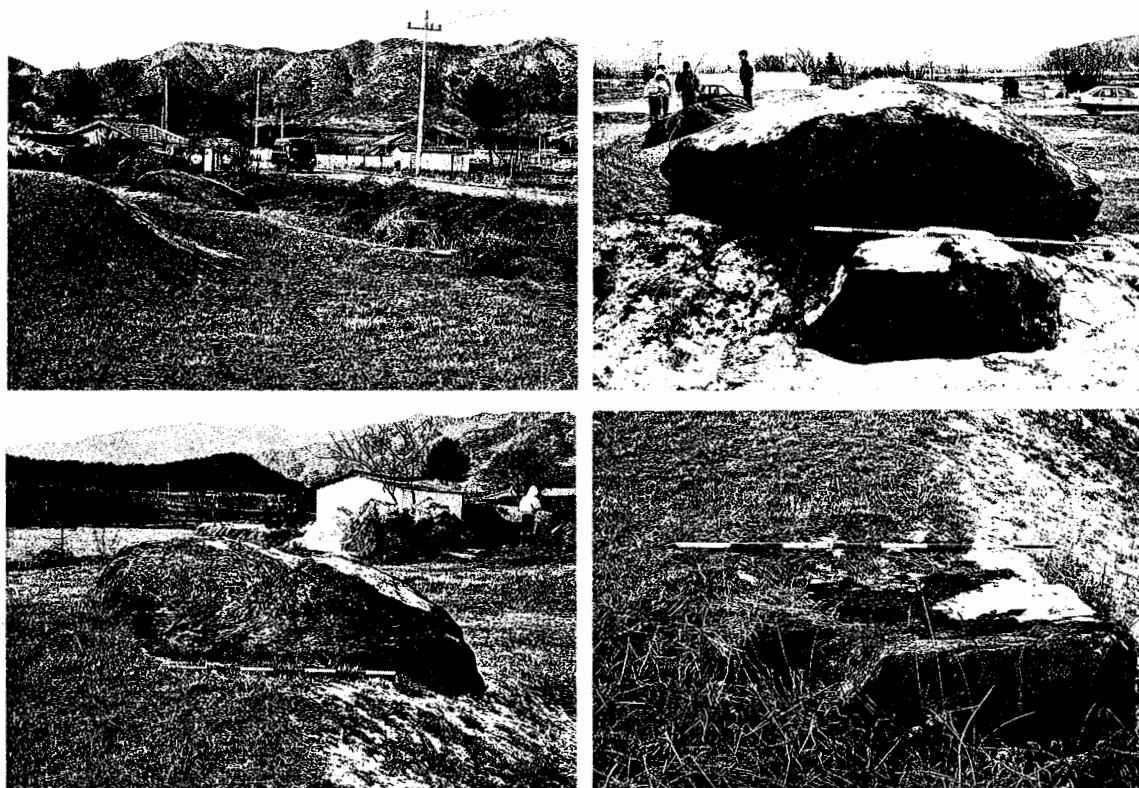
Kümsan-ni village neighbors Sinmae-ri village to the north. There, two table type dolmens were discovered in a rice paddy. However, in 1993 they were removed during cultivation by the landowner. The capstone of the larger dolmen measured 3.40 x 3.50 x 0.56 meters, and that of the smaller one measured 2.00 x 1.04 x 0.50 meters (Figure 72-2).

Palsan-ni Dolmen, Sinbukmyön, Ch'unsöng County

Many dolmens seem to have existed in Sinbukmyön, but only a few table-type dolmens remain (Figure 72-3).

Discussion of Dolmens in the North Han River Valley

Among the dolmens so far discovered in the North Han River Valley, certain patterns are observed in their structure, location, and the composition of their burial goods. Those patterns, which seem archaeologically meaningful, are summarized as follows. First, in terms of typology, dolmens in the North Han River Valley belong to the table-type tradition, in which the



1

2



3



Figure 72. Other dolmen sites (1: Sanch'ŏn-ni dolmens; 2: Kūmsan-ni dolmen; 3: Palsan-ni dolmen).

entombing structure had been prepared on what was then the ground surface.

In terms of construction, the North Han River Valley dolmens may be roughly divided into two subtypes: One is composed of a capstone and a cist structure made of four flat stones. The other is composed of a capstone, a cist structure made of four flat stones, and a mound structure made of accumulated stones (Ro 1986). The difference between these two subtypes is believed to have stemmed from their different geographical locations. Without exception, the type consisting of a capstone and quadrangular cist was found in relatively inland zones, such as plains or low hillsides--the Sanchŏn-ni site, for example. On the other hand, all examples of the other type, which consists of a capstone, an entombing structure, and a mound structure, have been found in riverside sand alluvium.

The reason for this correlation between the two dolmen subtypes and their geographical placement may be explained by the function of the additional accumulated stone mound structure of the second type. It seems reasonable to suppose that the mound structures of the dolmens built on alluvial sand had been attached for the purpose of reinforcing them. The mound structures could help the cists support the heavy capstones as well as protect the cists by encircling them.

Another characteristic of the dolmens in the North Han River Valley is

that, while they are found in clusters--as are the dolmens found elsewhere in Korea--the size of such clustering is much smaller than in other areas of the Western Region. Although the exact size of the cluster might be larger than that indicated by the present count of remaining dolmens, it seems likely that the size of dolmen clusters in the North Han River Valley ranged from a few to no more than 20 maximum. This contrasts with clusters found in more open areas in the Western Region, where tens, several tens, or sometimes even hundreds of dolmens comprised a cluster.

As for the age of dolmens in the North Han River Valley, no direct archaeological evidence has been obtained that can help determine dates. However, it is certain that dolmens had been constructed in the first settlements of Mumun people in the North Han River Valley, because such Mumun artifacts as pierced-rim pottery and red pottery were found in both dolmens as well as nearby residential house floors. Thus, considering the earliest dates of the archaeological assemblage of the pierced-rim pottery tradition, as discussed above in the general description of Mumun culture, the earliest dolmens in the North Han River Valley could date back as far as the thirteenth century B.C. or earlier.

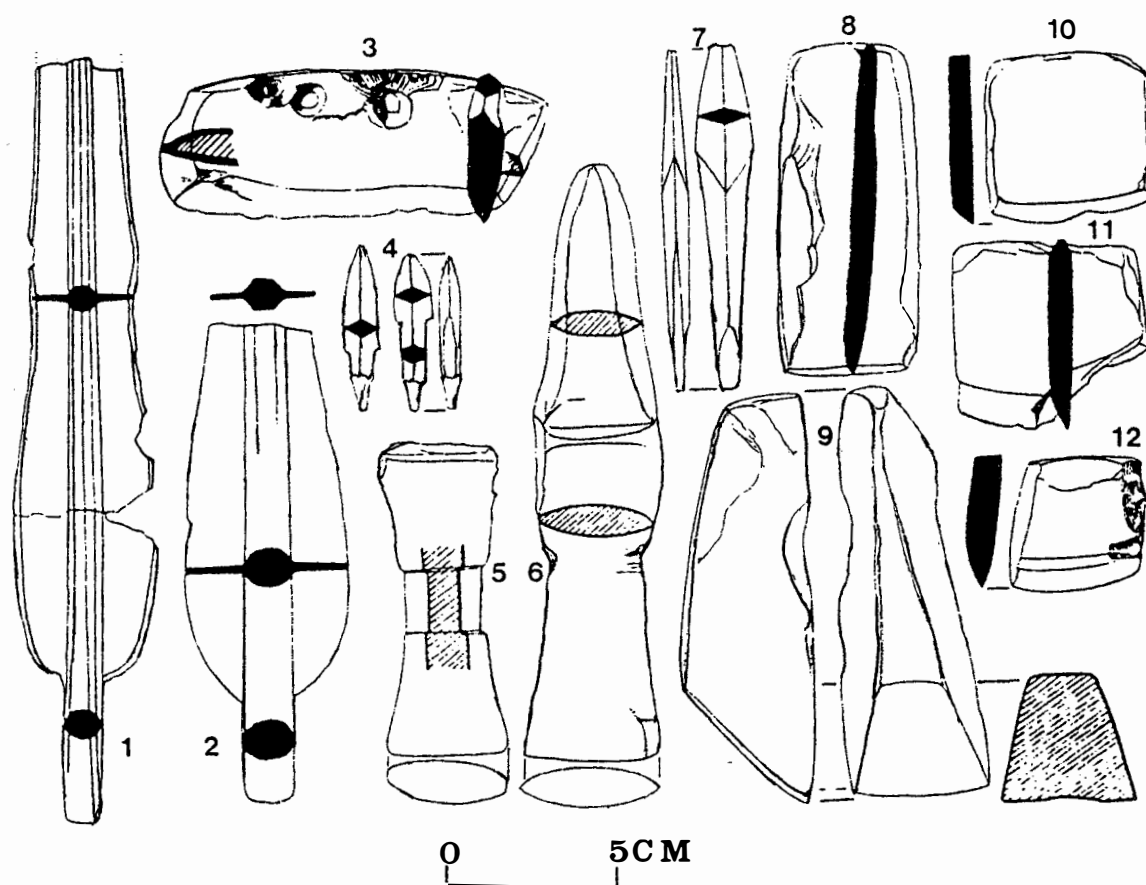
Given the uniquely circumscribed environment of the North Han River Valley, the dolmen burial tradition could have persisted there longer than in any

other region of Korea. Although there is little possibility that it was sustained after the emergence of new cultures bearing iron technology and wheel-made hard pottery in the North Han River Valley, the author believes that it had been maintained even into the time of Korean-style agrarian bronze culture, which lasted until the beginning of the Christian era in the case of the North Han River Valley.

The Traits of Liaoning Bronze Culture in the North Han River Valley

Two specimens of the mandolin-shaped bronze dagger have been discovered in the North Han River Valley. In 1938, Arimitzu Kyoichi surveyed Ch'unch'ŏn and vicinity and found many polished stone tools such as axes, grooved and plane adzes, and arrowheads. His survey report included several photos and drawings of those specimens (Arimitzu 1938:236-241). In one of those drawings, two mandolin-shaped bronze daggers were shown (Figure 73).

However, in his report, unlike the other specimens, there was no description of the location and context of discovery of the two bronze specimens. In other words, the only evidence that these two mandolin-shaped bronze daggers were found with the other artifacts at Ch'unch'ŏn was that they were included in the same drawing as the stone specimens. Because of the poor



1,2: Mandolin Shaped Bronze Daggers

3: A Semi-luna Shaped Reaping Knife

4,7: Polished Stone Arrowheads

5,6: Polished Stone Daggers

8,10, 11,12: Polished Stone Adzes

9: A Grooved Stone Adze

Figure 73. Collections in Chunchön by Arimitzu Kyoichi.

quality of reporting of these data; it is hardly possible to propose any convincing explanation as to the nature and role of Liaoning bronze culture in the development of prehistoric cultures of the North Han River Valley. Therefore, for now, we shall have to settle for some vague extrapolations, as follows.

As discussed earlier, in the course of interaction, Liaoning society's bronze elements were introduced into the region of Mumun culture. Thus far, such elements have been found mainly in the midwestern and southwestern parts of the Western Region. As compared to these relatively open regions, in such an isolated region as the North Han River Valley, it is probable that Liaoning bronze culture had less influence there. Along with the fact that little archaeological investigation has been conducted there, this natural background seems to explain why the archaeological trait of Liaoning bronze culture has been so weakly revealed in the North Han River Valley.

Korean-Style Agrarian Bronze Culture in the North Han River Valley

Traits of Korean-Style Agrarian Bronze Culture in the North Han River Valley

In contrast to the evidence for Liaoning bronze culture in the North Han

River Valley, archaeological evidence for Korean agrarian bronze culture is plentiful. As described earlier, the archaeological assemblage of Korean-style agrarian bronze culture consists of the subterranean cist burial composed of stone slabs, typical bronze objects, including the Korean Style Bronze dagger, and typical pottery, which includes the earthen ring-attached pottery, rusticated long-necked black pottery, and ring or ox-horn-shaped handled long-necked pottery. Thus far, no bronze objects or burial structures have been discovered in the archaeological assemblage of Korean-style agrarian bronze culture in the North Han River Valley. Potsherds of the earthen ring-attached plain pottery type were collected at Onŭidong in Ch'unch'ŏn City. In autumn of 1994 a partially destroyed residential settlement was discovered on the outskirts of downtown Ch'unch'ŏn and has been salvage-excavated by a Hallym University Museum team, of which the author was a member. These sites are described below.

Site Descriptions

Onŭidong Site

In the present district of Onŭidong in Ch'unch'ŏn, many Mumun

potsherds and stone tools were collected in 1980 by S. G. Im (1977). Among them were included three pieces of the rim portion of an earthen ring-attached pot. Because there was no stratigraphical context, those collections could not be arranged chronologically. However, it is certain that all those artifacts had come from two separate components, because sherd of the pierced-rim type, which is the index artifact of the earlier stage of Mumun culture, and those of the earthen ring-attached type, which is the index artifact for the Korean-style agrarian bronze culture, were mixed together.

Ch'ilchöndong Site

This site was discovered during the autumn of 1994 in the course of surface survey conducted by the Hallym University Museum as a salvage project. The Korean Land Corporation planned to level 330,000 square meters for housing purposes in Onüidong District, on the southeastern outskirts of Ch'unch'ön City. In accordance with legal sanctions stipulating that such land be examined for evidence of cultural resources, the developer asked Hallym University Museum to survey the area. Hallym University Museum, to which the author belongs, carefully inspected the area by foot. Investigators dug more than 50 test trenches to determine the extent of archaeological features as well

as the condition of stratification. As a result of that survey, an area of some 7,000 square meters where Mumun pottery sherds were scattered was selected for excavation. In May 1995, the excavation began; it continued through the months of May and June (Figure 74).

As shown in Figure 74, the excavation area is located on the western slope of a low hillside. The natural contour of the eastern slope had been considerably deformed in the course of construction of the Ch'unch'ŏn Country Golf Club several years ago. As excavation progressed, it became clear that the pattern of artifactual remains could broadly be divided into two groups, according to location. One group is concentrated at the top of the slope, and the other towards the bottom of the slope. All the artifacts found in the lower area were deposited there after having rolled down along the contour of what had been the surface. Those found at the top of the slope had been left in situ, but not in the context of the feature to which they had originally pertained. Amorphously shaped features where potsherds and stone objects were concentrated were found in four places. However, their function in the settlement as well as structure could not be identified.

A variety of artifacts were discovered at the top of the excavation area, including such stone tools as triangular polished arrowheads, grooved adzes, earthen net-sinkers, and many potsherds, including examples of the earthen

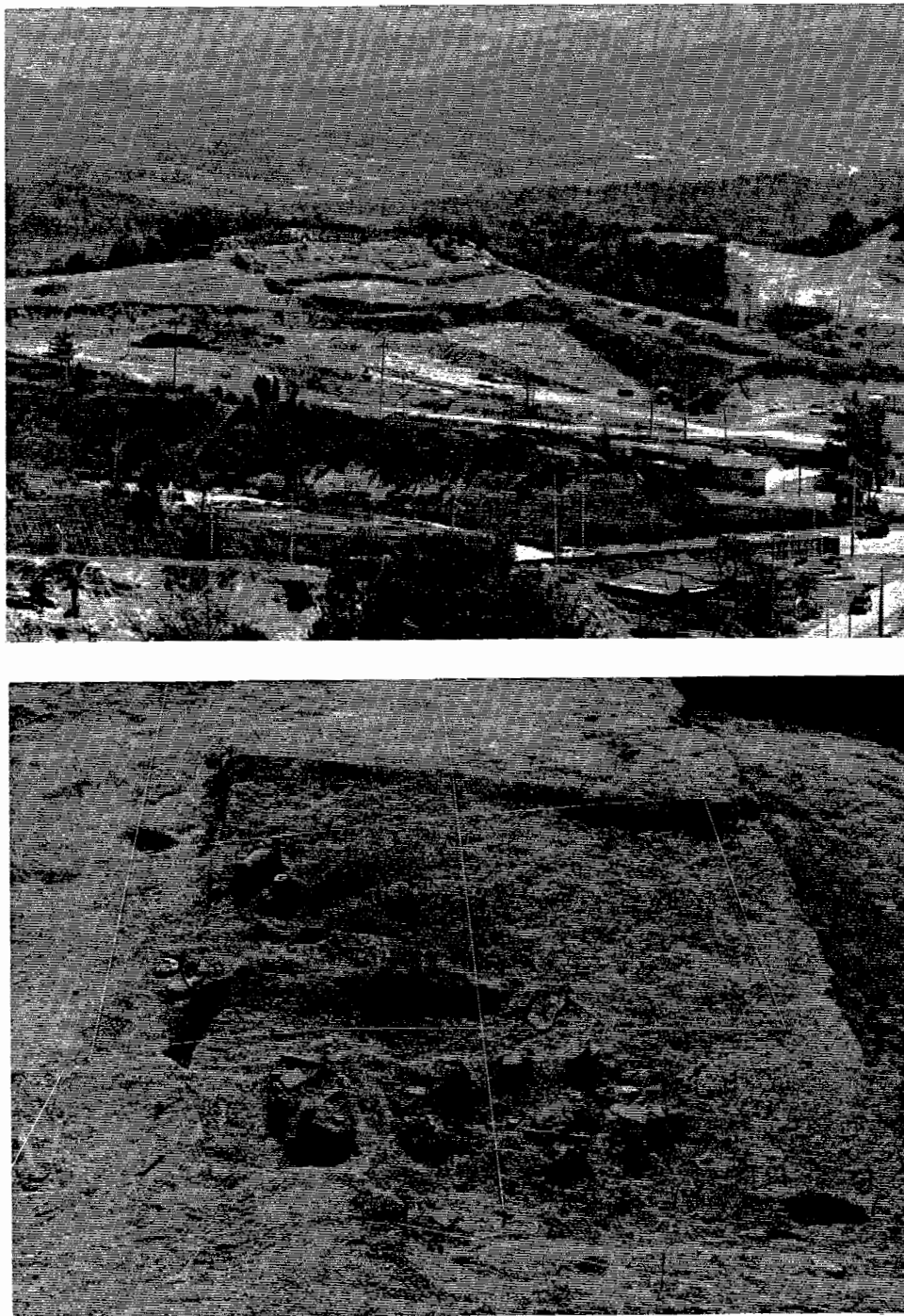


Figure 74. A distant view of the Ch'ilchödong site and the feature where pottery concentrated.

ring-attached pot and long-necked black pot. Thirteen clay net-sinkers were found in one spot, and broken pieces from one pot were found in a cluster beside them. This indicates that the net-sinkers and potsherds had remained in their original places despite their entire structural context having been destroyed.

In contrast, all of the artifacts found on the slope were completely outside of their original contexts. A large number of various kinds of stone specimens and pottery were collected from that lower area. The stone tools include a spindle whorl, a sickle, a polished stone axe, the broken piece of a polished stone adze, two broken pieces of a grooved stone adze, and several stone flakes. Pottery sherd found there include pieces of earthen ring-attached pottery, long-necked pottery, and ox-horn-shaped handled or ring-shaped handled pots of various sizes.

Thus, a great variety of artifacts have been discovered at the Ch'ilchöndong site, comprising the entire archaeological assemblage of Korean-style agrarian bronze culture except bronze specimens, despite the disturbance of their structural context (Figure 75).

The discovery of this assemblage in Ch'ilchöndong substantially contributes to an understanding of the pattern of Korean-style agrarian bronze culture in the North Han River Valley. Prior to this discovery, only a few

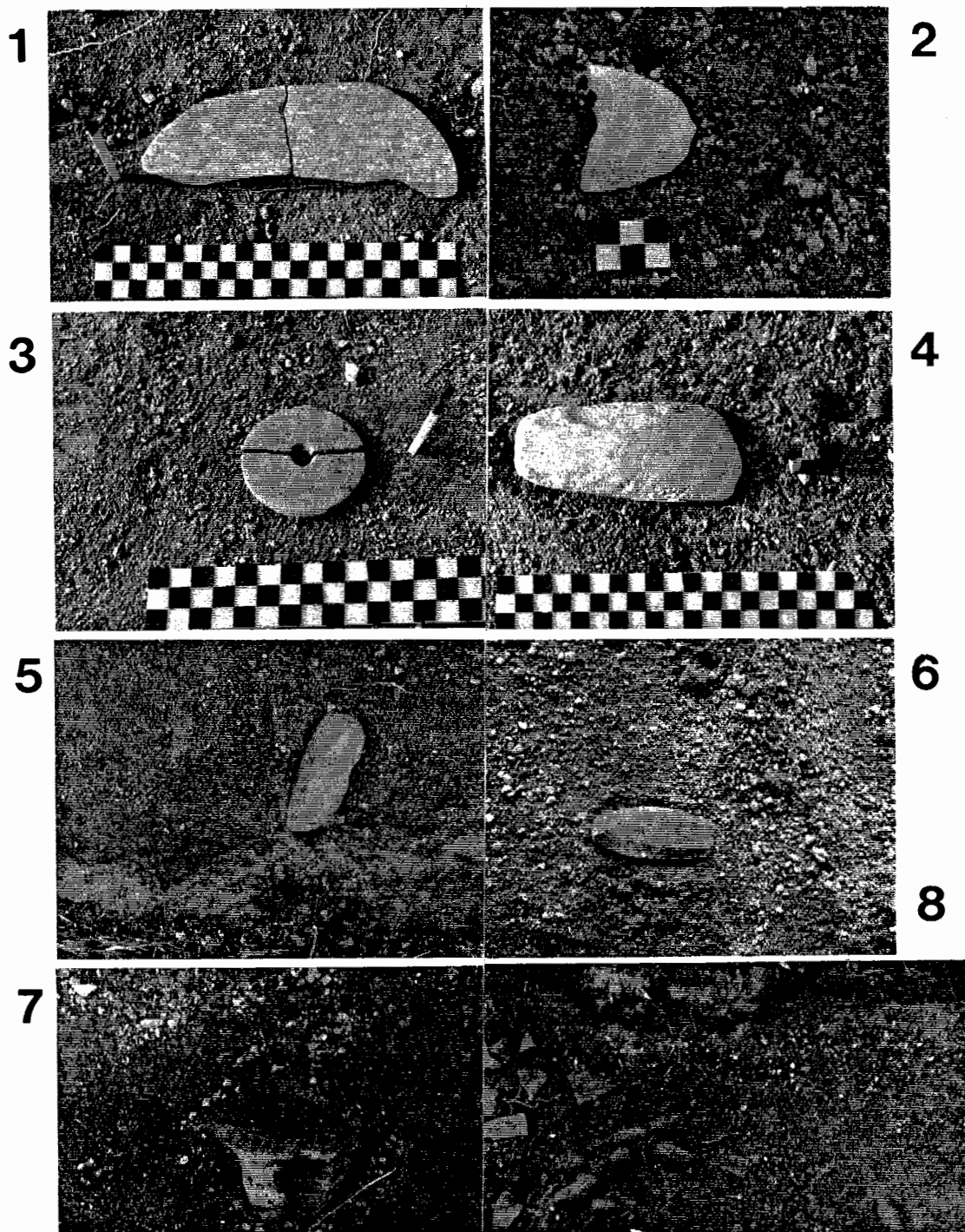


Figure 75. Objects excavated in the Chilhondong site (1: A stone sickle; 2: A broken semi-luna reaping knife; 3: A polished stone spindle whorl; 4: A polished stone axe; 5: A grooved stone adze; 6: A polished stone spearhead; 7: A combined ox-horn-shaped pottery handle; 8: Earthen netsinkers).

pottery sherd had been found in the territory of the North Han River Valley. The Ch'ilchöndong site is the first residential settlement of the Korean-style agrarian bronze society discovered in the North Han River Valley. Before its discovery, it was very difficult to claim that the Korean agrarian bronze culture existed in the North Han River Valley. With the excavation of the Ch'ilchöndong site, it appears likely that a certain scale of society had been established in the region of Ch'unch'ön.

Currently, we cannot clearly determine whether the Mumun people had adopted the cultural traditions and social patterns of Korean-style agrarian bronze culture, which must have been introduced from the direction of the Lower Han River, or whether people of the Korean-style agrarian bronze tradition had moved into the North Han River Valley and established their own societies where Mumun people had previously lived. In the broader historical view of the development of Korean agrarian bronze culture, the discovery of the archaeological assemblage at the Ch'ilchöndong site strongly indicates that the territory of Korean agrarian bronze culture--which had emerged somewhere in northwestern Korea, advanced through midwestern Korea, and reached southeastern Korea--also extended much farther into the upper regions of Han River Valley.

The State Formation Period

Introductory Description

As stated in Chapter II, general consensus among Korean archaeologists is that during this period conspicuous change had taken place in every aspect of social life, including the introduction and rapid propagation of iron technology, the intensification of rice cultivation, and the progressive reshuffling of the traditional social structure of Mumun and Korean bronze societies toward the establishment of state-level social structure.

Two characteristics of the archaeology of this period are frequently identified as being the most representative of it: (a) the gradual replacement of stone and bronze with iron for such implements as weapons, house-working tools, and agricultural tools; and (b) the propagation of wheel-made hard pottery, which gradually replaced handmade earthen pottery for most practical purposes. The presence of iron tools and wheel-made hard pottery has become a routine reference point in interpreting whether or not an archaeological site belongs to this period.

During the State Formation Period, throughout the Korean Peninsula, both the indigenous Mumun people and the expanding Korean-style agrarian

bronze people were greatly affected socially by the rapidly spreading new iron technology, and their social structures changed. This technology, as well as that of wheel-made pottery, first must have reached the Han River valley in the mideastern Western Region from the northwestern Western Region, and thereafter one group spread along the North Han River Valley to eventually reach Ch'unch'ŏn, leaving their traces on the way through the North Han River Valley, as indicated by the discovery of the Machang-ni site in Kap'yŏng.

In Kyŏnggi Province, where the North Han River unites with South Han River at Yangsu-ri, Yangju County, a number of sites belonging to this period have been found, especially in the vicinity of present-day Seoul, next to Kyŏnggi Province. Until now, four sites belonging to this period had been discovered in the North Han River Valley, all of which had been excavated partially or entirely. They are three residential sites at Machang-ni in Kap'yŏng County, Kyŏnggi Province, Chungdo and Sinmae-ri in Ch'unch'ŏn, and one burial structure at Chungdo in Kangwŏn Province.

Two characteristics of archaeological remains in the North Han River Valley during the State Formation Period can be identified: (a) the appearance of a new burial tradition, known as chŏksŏkch'ong (stone mound tomb), which is believed to be the tomb of a political leader; and (b) the persistence of the Mumun pottery tradition with some modifications. Pottery found for this

period indicates a combination of two traditions: (a) wheel-made hard pottery, which had been the tradition introduced to the indigenous people in the North Han River Valley; and (b) native Mumun pottery. The appearance of these distinctive cultural features in the region is documented in sites described below.

Site Descriptions

Machang-ni Residence Site

The Machang-ni site is part of a large residential settlement. As shown in the site distribution map in Figure 76, the Machang-ni site is located at present-day Sangmachang-ni (meaning, the upper part of Machang-ni), which lies alongside the Kap'yŏngch'ŏn (Kap'yŏng Stream), which flows into North Han River about eight kilometers downstream of the site. The site is located on a plain in the valley of Kap'yŏngch'ŏn, which lies at the lowest end of the hillside of a small mountain.

The Machang-ni site was discovered by Major Howard A. MacCord (1958) of the United States Army in 1951 during the Korean War (1950-1953). MacCord was camped at Machang-ni and was digging military trenches when

he found remains of residential houses in several of them. As pottery and other artifacts were revealed on the walls of the trenches, MacCord decided to completely excavate one of the destroyed houses. He collected all the pottery, iron objects, stone tools, and some charcoal from the excavated house. Upon returning to the United States, he sent the charcoal to the Michigan State University laboratory to radiocarbon date, and he gave all the artifacts to the Smithsonian Institution.

MacCord (1958) reported on the results of his excavation in the journal *Asian Perspective* under the title "The Able Site Kap'yŏng, Korea" (pp. 128-138). Having read that report, W. Y. Kim (1971), then at Seoul National University, surveyed the site in 1969 with his students from the Department of Archaeology and Anthropology and published a survey report. In 1978, M. J. Ch'oi (1979) carried out a very small-scale pit excavation on the area of Machang-ni and reported his findings. In 1981, Y. H. Han, curator of the office of the archaeological department at the Korean National Museum, had the opportunity to take pictures and draw the specimens. These were displayed in the Asian section of the Smithsonian Museum after they had been taken by MacCord to the United States. Y. H. Han introduced his drawings and photos with summary remarks (Korean National Museum 1983).

According to MacCord's (1958) excavation report, the stratigraphy of the

pit, from the bottom up, consisted of a gravel layer, a yellowish layer, and a dark layer. The house remains were located in the yellowish layer, with the house floor lying very near the surface of the underlying gravel layer.

MacCord's report included no illustrations of the stratigraphy. The house floor measured 5 x 6.5 meters and was a rectangle with rounded corners. However, with the exception of one hearth in a corner of the house, there was no mention in his description of any postholes, walls, floor, or other structural traits, all of which must have existed.

Pottery, iron specimens, and various stone and earthen objects were discovered on the house floor. The pottery was classified into two kinds: wheel-made hard pottery and handmade plain pottery. The wheel-made hard pottery included various short-necked pots and a handled steamer; the handmade plain pottery consisted entirely of short-necked pots. It was observed that the former type showed more variety than the latter. The presence of both types of pottery indicates the popularity of the alien hard pottery and, at the same time, the continued preference for traditional Mumun pottery (Figure 76), (Figure 77).

Stone tools collect by MacCord (1958) included a polished axe, two polished arrowheads, a semilunar-shaped reaping knife, and an earthen spindle whorl. All of these had been used during the Mumun Period, indicating a variety of

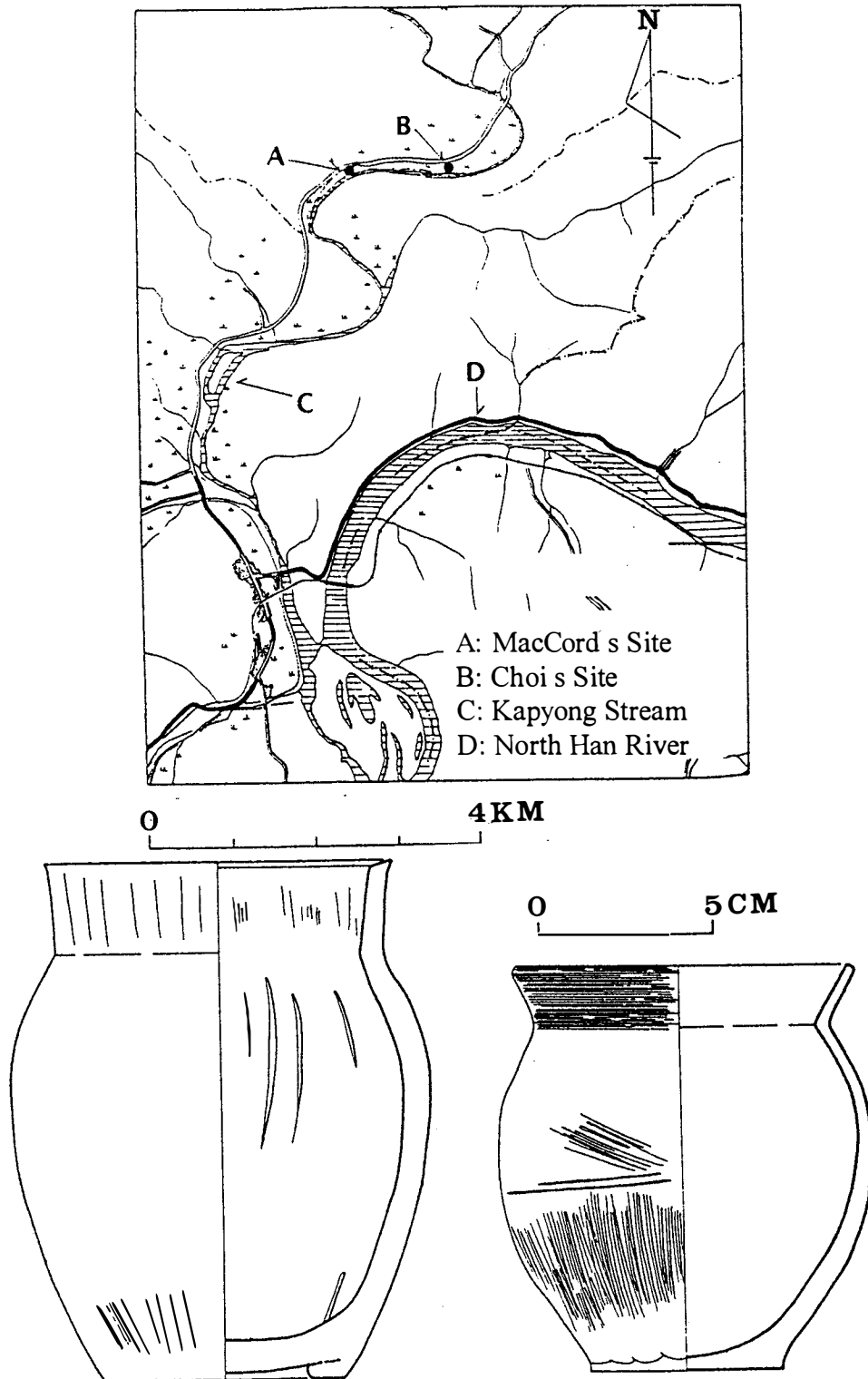


Figure 76. Map of Machang-ni site and pottery collected by MacCord.

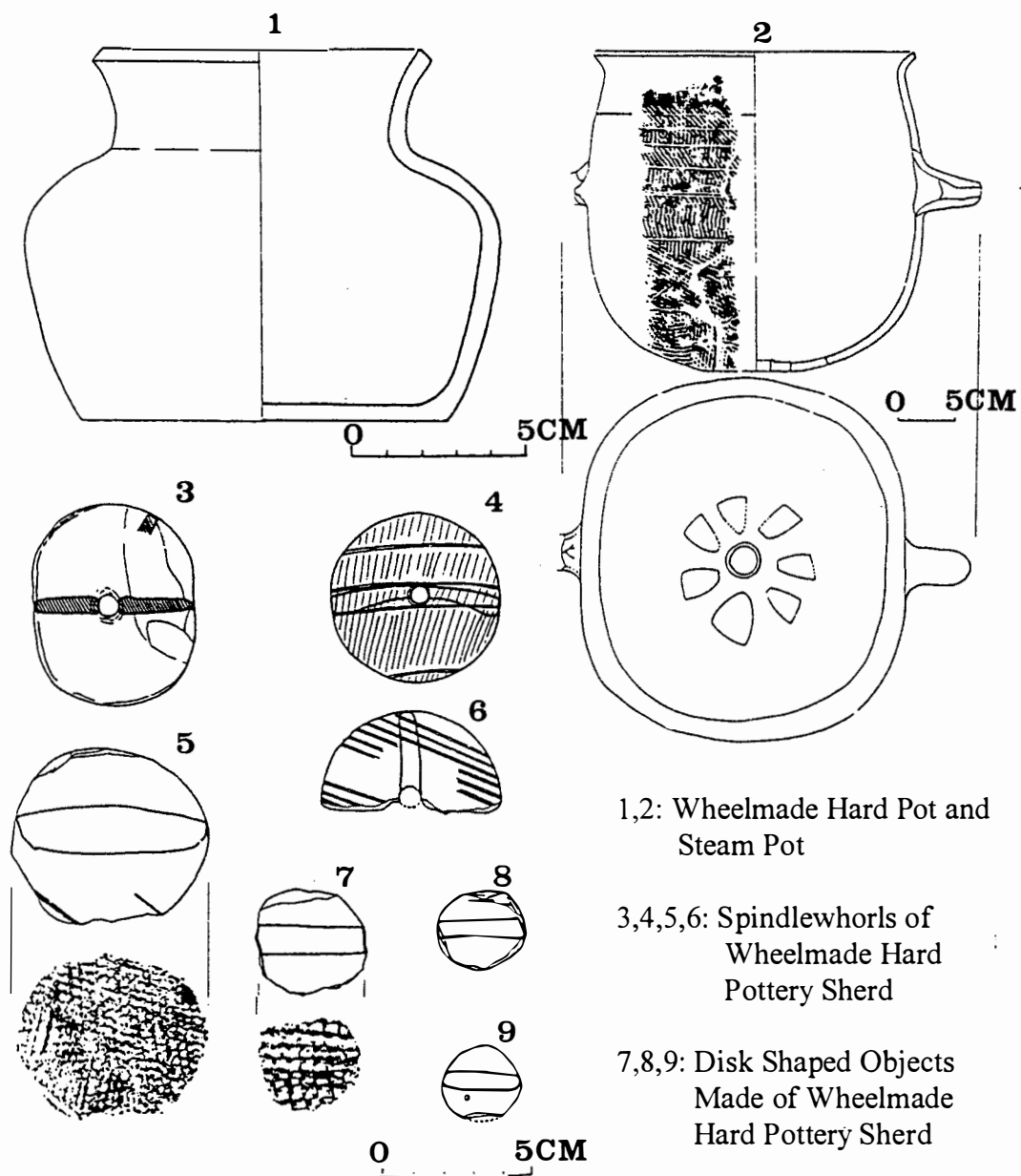


Figure 77. Potteries collected from the Machang-ni site by MacCord.

ordinary activities in a sedentary village life, such as woodworking, harvesting of cereal grains, and cloth weaving. The iron specimens consisted of an agglomeration of slag and small pieces of unidentified iron objects, all of which provided clear evidence for the practice of iron processing at the site.

M. J. Ch'oi's excavation report (1979) seems to have missed the stratigraphical segregation of the site's different components, because descriptions of stratigraphical divisions between the distinct cultural stages of Chŭlmun, Mumun, and State Formation were lacking in his report. Despite the absence of a stratigraphical sequence, the presence of artifacts pertaining to those three cultural stages testifies to the fact that the Chŭlmun, Mumun and State Formation stages existed in the region of Machang-ni (Figure 78).

The artifacts pertaining to Chŭlmun culture included potsherds of the rim and bottom parts of pointed-bottom Chŭlmun pottery, bearing the typical incised herringbone design on their surfaces. Also, a stone net-sinker was found, both ends of which were flaked out for binding net strings. Artifacts pertaining to the Mumun culture included various types of polished stone arrowheads, a semilunar-shaped reaping knife, and sherd of the typical pierced-rim pottery and other plain coarse pottery. Finally, artifacts pertaining to the State Formation Period included what appears to be an iron arrowhead and a large amount of wheel-made hard pottery.

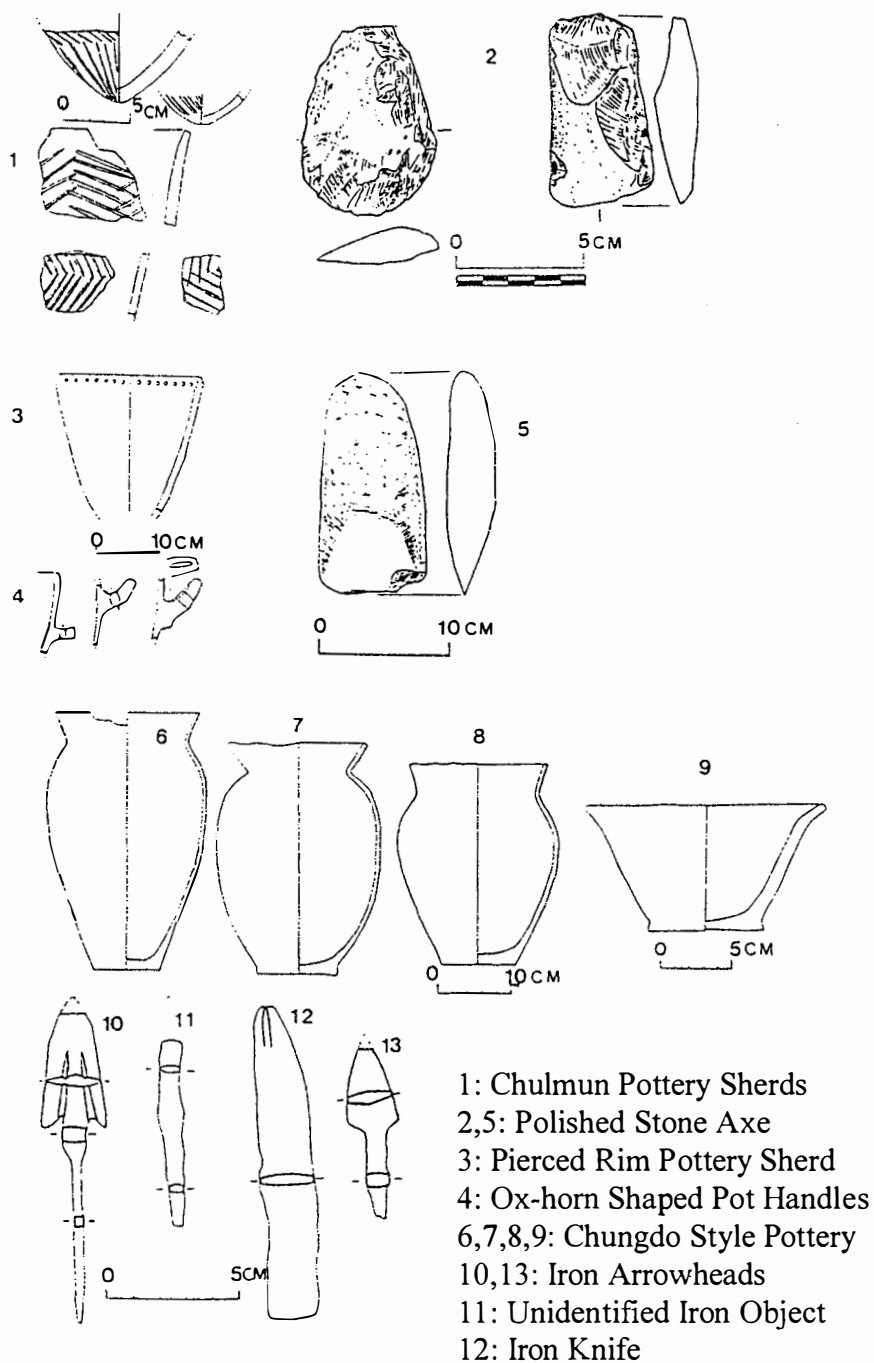


Figure 78. Objects excavated from the Machang-ni site by Choi.

Again, the lack of explanation of the stratigraphical order in M. J. Ch'oi's excavation report prohibits a clear-cut division of these three cultural stages at Machang-ni. As for the differentiation of artifacts belonging to the Chŭlmun Period from others belonging to later periods, there is no problem because of their distinctive style in both the pottery and stone tools. However, distinguishing between the archaeological assemblages of the Mumun and State Formation Periods is more difficult because some of the tools used in the Mumun Period were also used during the State Formation Period without any conspicuous typological change. Such continuity is evident in both the stone implements and in the pottery.

Among those artifacts, pierced-rim pottery and various polished stone arrowheads must be classified as Mumun. But other artifacts, such as spindle whorls and earthen net-sinkers, do not seem to fall clearly into either the Mumun or State Formation Periods. On the other hand, in M. J. Ch'oi's excavation, compared to the few Chŭlmun and Mumun remains, relatively more artifacts were discovered that can be classified into the State Formation Period. Those artifacts mostly consisted of pottery, some iron and stone implements, and such animal remains as the molar tooth of a wild pig and small pieces of deer teeth.

All the potsherds collected from the Machang-ni site by M. J. Ch'oi were

classified into two broad categories: handmade earthen pottery and wheel-made hard pottery. The handmade earthen pottery included three flat-bottom short-necked pots, two small flat-bottom pots and two pot caps, dozens of flat-bottom potsherds, dozens of rim shards, and three pieces of the earthen handle from a handled pot. Including the complete specimens as well as the individual bottom potsherds, at least 23 examples of various handmade earthen pots were excavated by M. J. Ch'oi in the Machang-ni site pit.

The wheel-made hard pottery included one complete pot and 14 pieces of rim shards, two pieces of holed steamer potsherds, and three pieces of cowhorn-shaped pot handles. Of the 14 rim shards, 10 were gray in color and had no design, and four were gray in color and had lattice designs or rope-bitten designs. Two bottom shards of a steam pot also had lattice designs. The iron objects included three arrowheads and one knife. The stone tools included two large polished axes, four flaked axes, one piece of a semilunar-shaped reaping knife, three flat adzes, and three grinding stones.

These stone woodworking tools indicate an established village life at Machang-ni. In addition, a piece of earthen pipe, used for blowing air onto an iron-melting furnace, and iron slag were recovered. These specimens indicate that iron metallurgy was practiced by the Machang-ni people.

Supplementary comments on the Machang-ni site. One notable fact regarding the Machang-ni site in the history of Korean archaeology is that it is the first archaeological site from which a radiocarbon date (1700 ± 250 B.P.) was obtained. The archaeological assemblage recovered there contributes to the study of the culture of State Formation Period in several ways. The Machang-ni site must have belonged to a large settlement. However, because of its accidental discovery and a limited and unsystematic excavation, the boundaries and size of the entire settlement, intravillage structure, and social structure, remain untraced.

For now, only a few extrapolations can be drawn from the existing fragmented data. First, the basic tradition of Machang-ni culture can be defined as one combining an indigenous Mumun tradition with a newly introduced iron technology and wheel-made hard pottery tradition. Of these two traditions, the archaeological assemblage belonging to the indigenous Mumun tradition includes typical Mumun pottery and various polished stone tools such as semilunar-shaped reaping knives, arrowheads, and polished axes.

The pottery, which consisted of an inherited Mumun pottery tradition, was formerly known as the P'ungnap-ni-style Mumun pottery (W. Y. Kim 1977:133) and more recently has become known as the Chungdo-style Mumun pottery (Korean National Museum 1980). Both names were taken from the

names of the sites where that pottery was discovered. Mumun pottery used in the Mumun Period and the Chungdo-style pottery pertaining to the State Formation Period show only stylistic variations. Mumun Period pottery consisted of a variety of shapes, but the most common form of Mumun-tradition pottery used during the State Formation Period was the outwardly bent short-necked flat-bottom pot (Figure 79). The various types of long-necked pots that had prevailed during the Mumun Period had disappeared during the State Formation Period.

Iron objects discovered in the Machang-ni site included iron slag, arrowheads and a knife. The discovery of iron slag indicates the practice of iron processing, which was also supported by the discovery of the cylindrical earthen pipe which is supposed to have been used as a part of the fan structure to blow air into the furnace. The iron knife had lost its original shape, and therefore it was impossible to identify its type. However, one of the two arrowheads has retained its original shape. It has grooves at both wings, giving its cross-section the shape of a dented lozenge. Similar iron arrowheads were discovered on Chungdo Island in the residential site and on the surface of the stone-accumulated mound of a dolmen.

The wheel-made hard pottery consists of various types, including the flat-bottom short-necked pot with no surface decoration, the round-bottom



Figure 79. Typical Chungdo style pottery.

short-lipped pot with impressed lattice design, and the round-bottom short-lipped steam pot with two handles and seven large holes on the bottom and having impressed rope-stricken designs.

It is generally known that such wheel made hard pottery was fired at temperatures of 900° to 1000° Centigrade, and it is also known that the necessary temperature for melting iron ore is at least 900° Centigrade (D. S. Yun 1984:34). Therefore, the practice of processing iron at Machang-ni must have spurred on hard-pottery manufacture. The rapid propagation of a more efficient and practical pottery reduced the need for and use of indigenous Mumun pottery. However, because of Mumun pottery's longstanding tradition in the region, it did not disappear suddenly but was maintained for limited functional purposes.

In summary, the archaeological assemblage of the Machang-ni site, showing evidence of both an indigenous Mumun cultural tradition and a new tradition based upon iron technology and advanced pottery manufacture, reveals an intermediate phase in the transformational process of Mumun society into a more complex society.

Chungdo Island Residence Site

Archaeological remains pertaining to the Chŭlmun, Mumun, and State Formation Periods have been discovered on Chungdo island. In 1982, the united team for the excavation of Chungdo, including the Korean National Museum, Sungjŏn University Museum, and Kangwŏn University Museum, excavated one chŏksŏkch'ong (the stone mound tomb), one dolmen, and a residence site.

First excavation, Chungdo Island. The first excavation by the Korean National Museum team in 1980 had been initiated by the discovery of potsherds on the surface of the collapsed rim of Chungdo. In this project, only one residential structure had been excavated (Korean National Museum 1980). The house measured 5 meters x 5.4 meters. Four corners of the residence were rounded, and it looked as if it had been a subterranean pit-house with postholes on the floor (Figure 80). The excavators estimated that, at 25 square meters, the house could accommodate about five people--i.e., one nuclear family. The subterranean depth of the house was approximately 40 to 45 centimeters. It was believed to have been abandoned after suffering a sudden fire, because many objects were found inside, including iron tools and pottery. No radiocarbon dates were obtained from this site, but the excavator estimated that it dates back

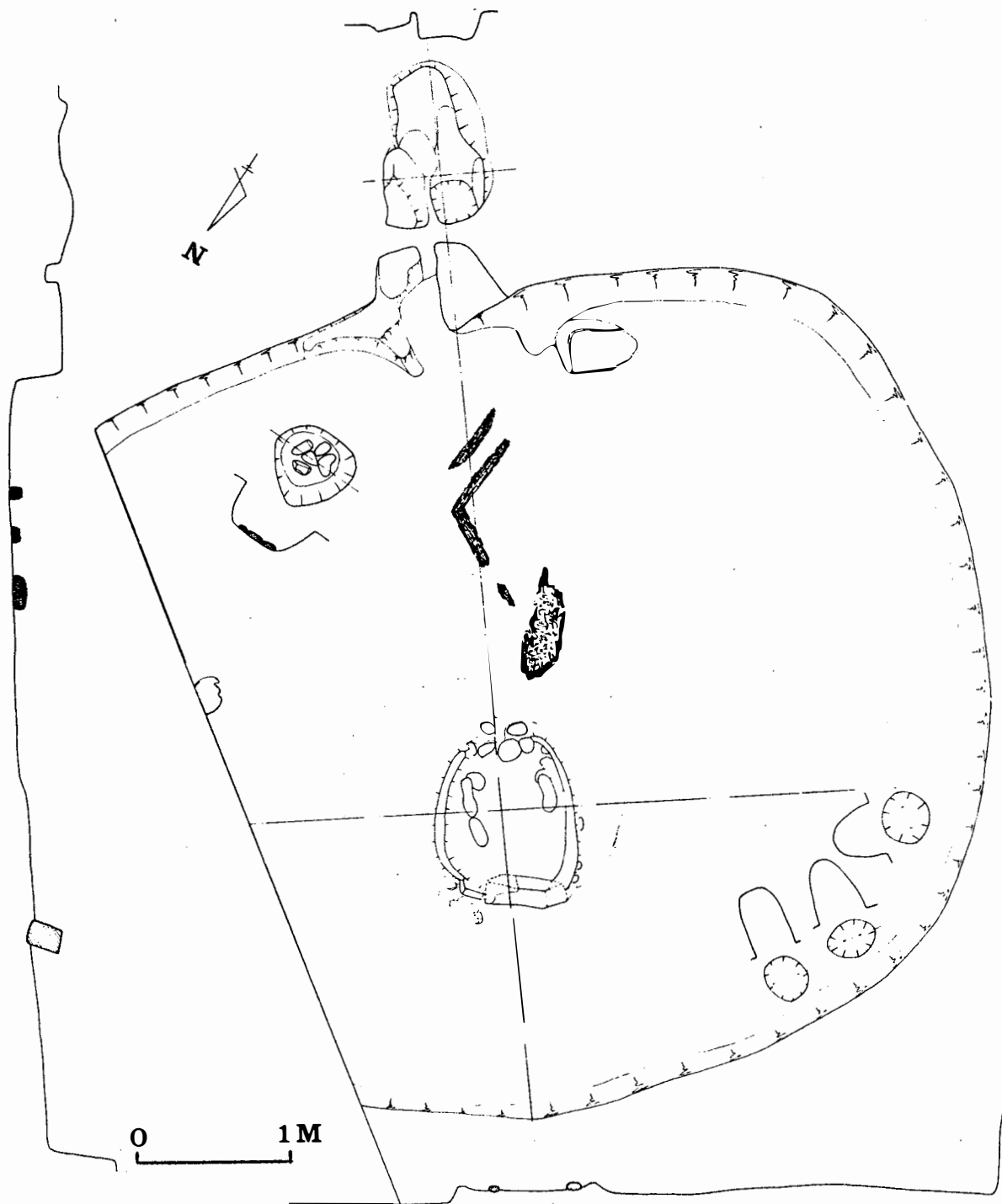


Figure 80. A subterranean house excavated in Chungdo in 1980.

to the first or second century A.D.

Several important conclusions were drawn from this house site. One is that Mumun pottery and wheel-made hard pottery coexisted (Figure 81), (Figure 82). Also, stone tools showed an overall functional degeneration, and iron tools showed a growing popularity. For example, two axe-shaped iron arrowheads were recovered at this site (Figure 83). The same type of axe-shaped iron arrowhead was found in 1978 at a Koguryo stone mound tomb in Jiān, Jilin Province, in northern China. The two specimens were discovered with one bronze dagger, three bronze spearheads, four fan-shaped bronze axes, one finely designed bronze mirror, and other bronze goods (Korean National Museum 1980:36). Until Chungdo, this axe-shaped iron arrowhead had been discovered only from sites pertaining to the Three Kingdoms Period. However, the excavator interpreted that the date of this Koguryo stone mound tomb, containing both iron arrowheads and various bronze objects, can date to the Period of Warring States in Ancient China, which permits the supposition that the Chungdo house site could date back to as early as 200 B.C. (Korean National Museum 1981:27).

Mumun potsherds from the Chungdo house site are largely divided into two groups: (a) pots with outwardly bent, short rims; and (b) small bowls. However, a few potsherds with inwardly bent, short rims were also identified.

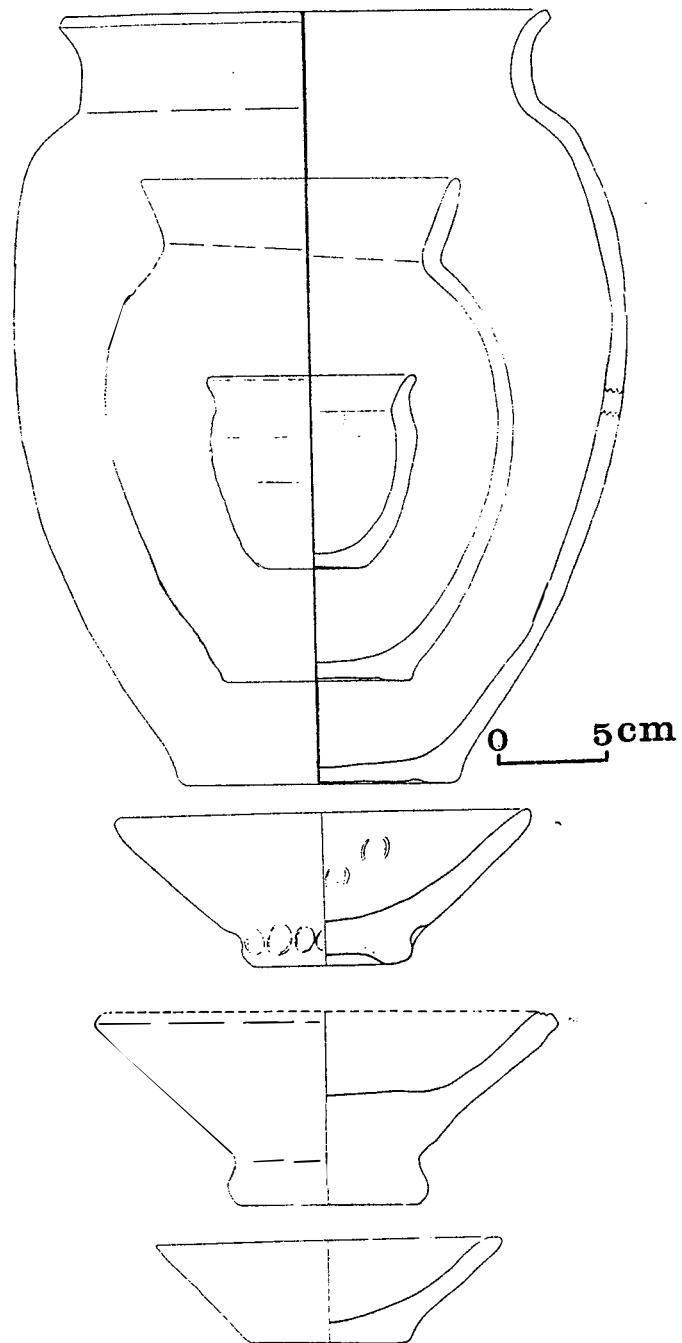


Figure 81. Chungdo style pottery found in a Chungdo house excavated in 1980.

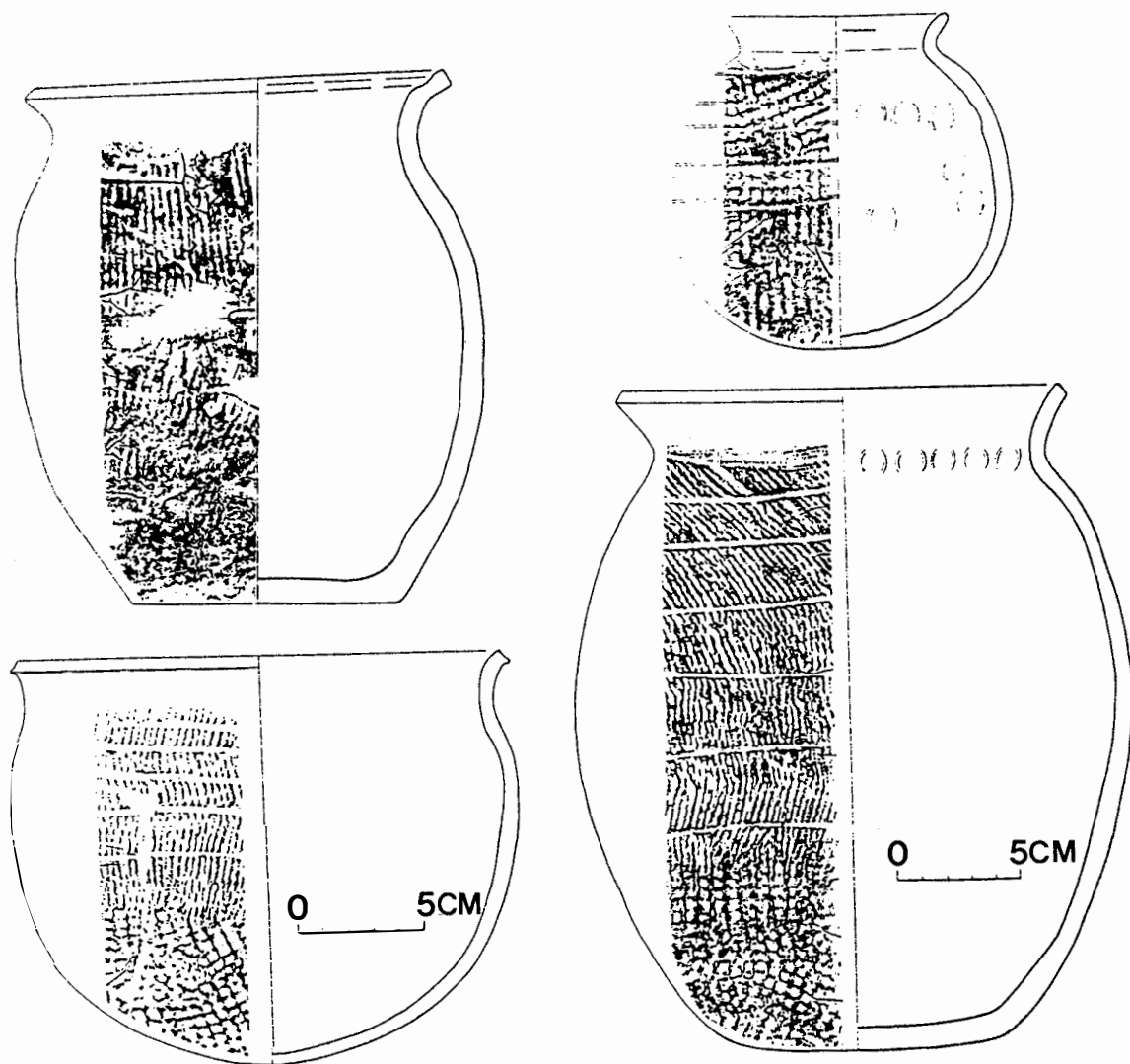
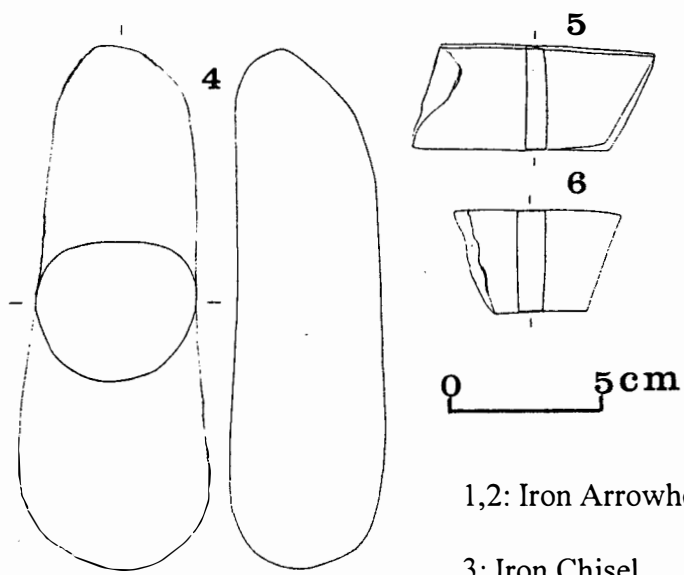
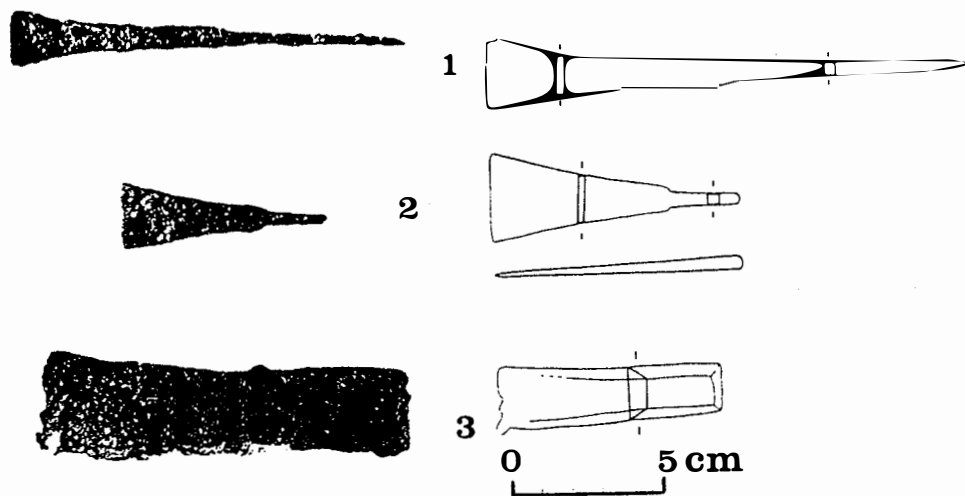


Figure 82. Wheel-Made pottery found in a Chungdo house excavated in 1980.



- 1,2: Iron Arrowheads
- 3: Iron Chisel
- 4: Hammerstone
- 5: Grindstones

Figure 83. Iron tools found in a Chungdo house excavated in 1980.

The total amount of wheel-made hard pottery is less than that of Mumun pottery. However, the former retained its original shape more completely than the latter. The larger amount of Mumun pottery cannot be reassembled.

Second excavation, Chungdo Island. The second excavation at the Chungdo Island (Korean National Museum 1982) was carried out in June 1982. In this excavation one house floor was excavated. The shape of the house and objects discovered there were similar to those of the house excavated the previous year, with two exceptions: This time more iron tools were found, and the pottery showed more typological variety. In the absence of concrete data for the calculation of an absolute date for this site, the excavator estimated it as roughly contemporaneous with the house excavated the previous year, dating to the first or second century A.D.

The quadrangular pit-house had one hearth, the floor of which had been covered by a layer of gravel with a layer of clay on top of it. The excavator remarked that, in terms of structural properties, this house is similar to the one excavated the previous year and also to the house at the Machang-ni site (Figure 84).

Mumun pottery discovered at this house site consisted mostly of short-necked pots and some bowls. Short-necked pots showed variation in their rims. Both inwardly bent and outwardly bent pots were found. Wheel-made hard

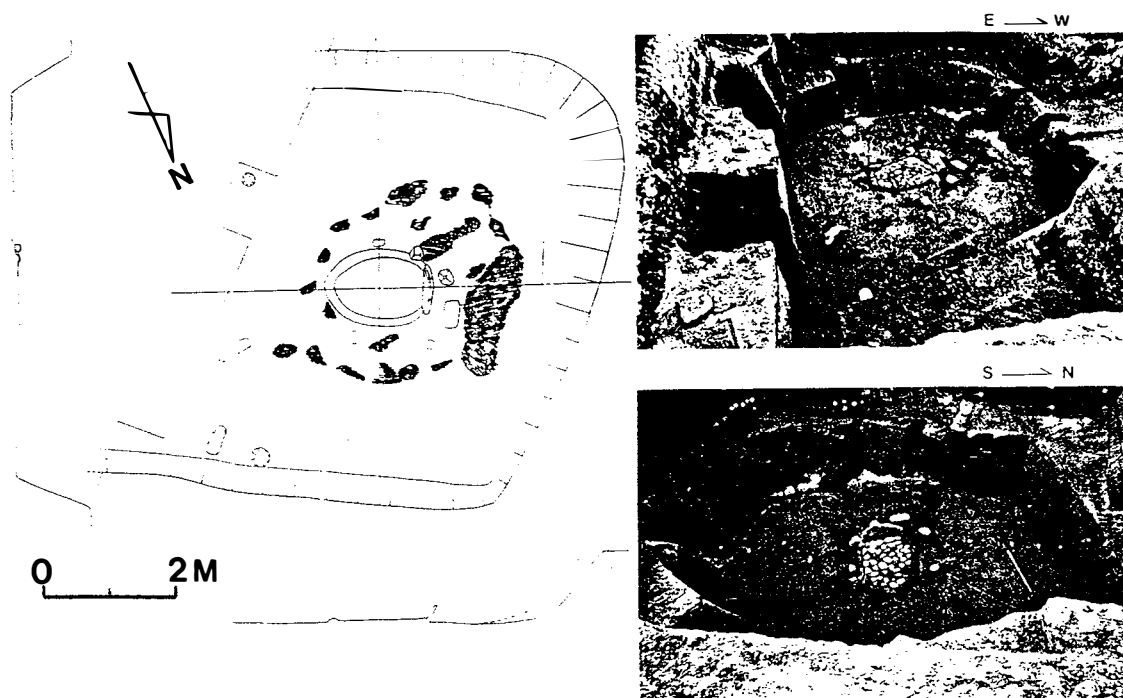


Figure 84. A subterranean house excavated in Chungdo in 1982.

pottery included both long-necked and short-necked pots. These could be subdivided into two kinds of temper: soft and hard. Dozens of iron tools were also discovered, including knives, sickles, arrowheads, awls, and some unidentifiable pieces. As many as six knives were recovered, although some were not positively identified as such. One axe-shaped arrowhead was discovered in the northern corner of the house floor. Both knives and axe-shaped arrowheads are known to have been used into the middle of the Three Kingdoms Period. Only one piece of stone tool was found at this site, which indicates that by this period most stone tools had disappeared, replaced by iron tools (Figure 85).

The Pocket Feature in Sinmae-ri

As described in the previous description of Mumun sites, three components were identified at the Sinmae-ri site based upon their undisturbed stratigraphical order. From the lowest level up, they are as follows: (a) an early phase of Mumun culture, (b) a later phase of Mumun culture, and a phase of the State Formation Period. .

A pocket feature (Hallym University Museum 1986) was deposited on the layer of late-phase Mumun culture without any intervening layer, and

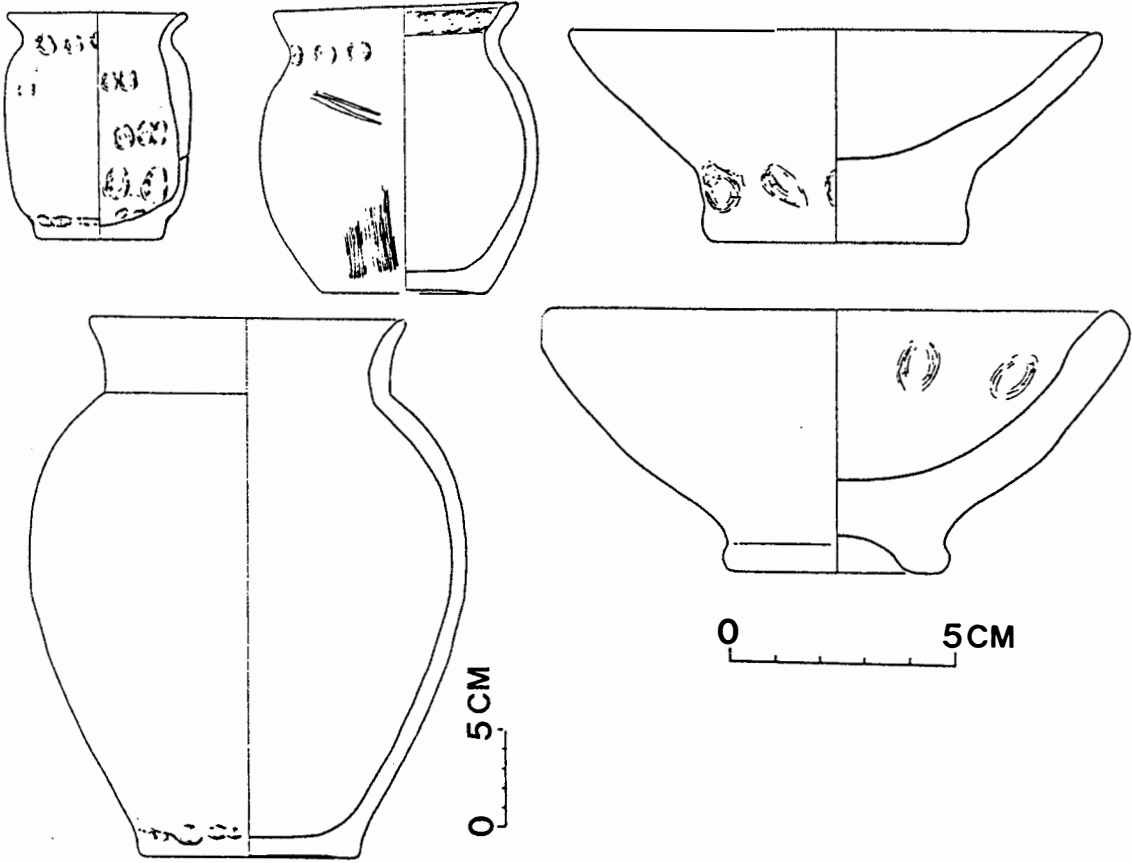


Figure 85. Pottery and iron tools from a Chungdo house excavated in 1982.

pieces of wheel-made hard pottery were found there. This stratigraphical context indicates that little time had passed between late-phase Mumun culture and the following phase containing wheel-made hard pottery. All the potsherds discovered in the pocket were rim shards, gray or blackish in surface color. One had a paddle-stricken surface design. In addition to these potsherds, one spindle whorl was discovered, which had been shaped by grinding a potsherd of the same pottery type.

It is very difficult to guess the function of this pocket judging from the few artifacts left inside as well as the pocket's amorphous features. It could have been used as a trash hole because it contained only broken potsherds and the used spindle whorl. It may have been a naturally shaped depression into which the artifacts happened to fall. Regardless of its past function, the pocket serves as evidence that a settlement belonging to the State Formation Period existed at this site (Figure 86).

The Chöksökch'ong (The Stone Mound Tomb) in Chungdo

The Chungdo stone mound tomb site (Korean National Museum 1982) site lies at the southeastern part of the Chungdo Island. It consists of two stone mound tombs placed just at the circumference of the island. Before the

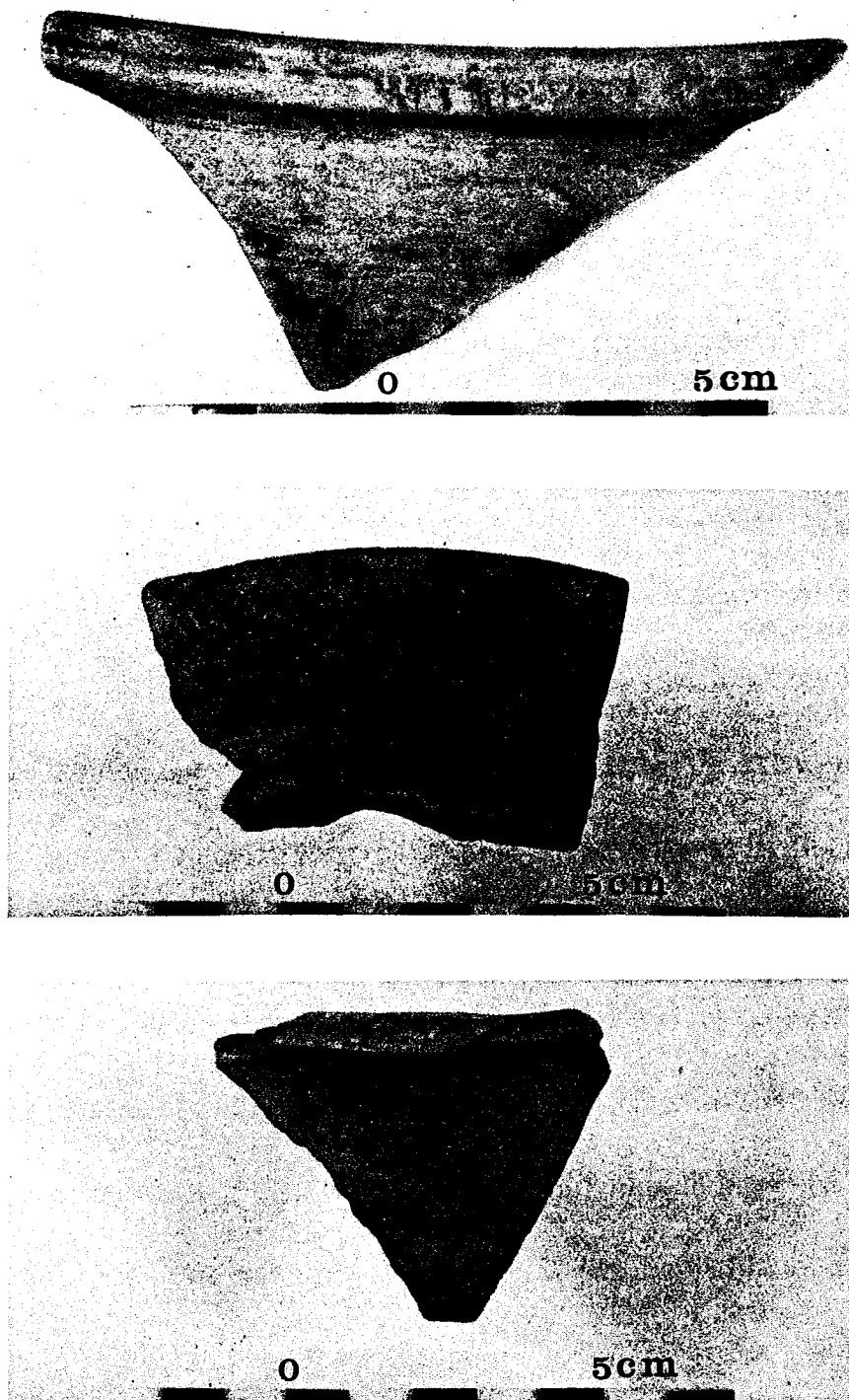


Figure 86. Pottery found in a pocket feature in Sinmae-ri.

construction of the Ŭiam Dam on the North Han River downriver from the site, the water level of North Han River above the site of the Ŭiam Dam had been much lower than it was after construction of the dam. Therefore, both tombs had retained their original shape relatively well. However, after dam construction and rapid rise of the water level, the southeastern portions of both tombs were inundated. The original sizes of the tombs were estimated to be about 14 meters in diameter, 44 meters in circumference, and 5 meters in height. As the water level rose, the bases of the tombs quickly disintegrated. Almost a third of both tombs appears to have been swept away. In 1981, when an archaeological project was set up to investigate cultural resources on the Chungdo Island, researchers selected the eastern tomb for excavation, while the western tomb was selected for preservation because it was in much better condition (Figure 87).

In 1981, the eastern stone mound tomb was excavated by Ch'oi (1984). It was constructed of accumulated large river stones which had been scattered around the perimeter of the Chungdo Island and on both banks of the North Han River. The excavator estimated that the tomb was about 14 meters in diameter, 5 meters in height, and about 44 meters in circumference. According to the investigator, it had been built in the following way.

First, the platform basement had been laid out by accumulating stones on

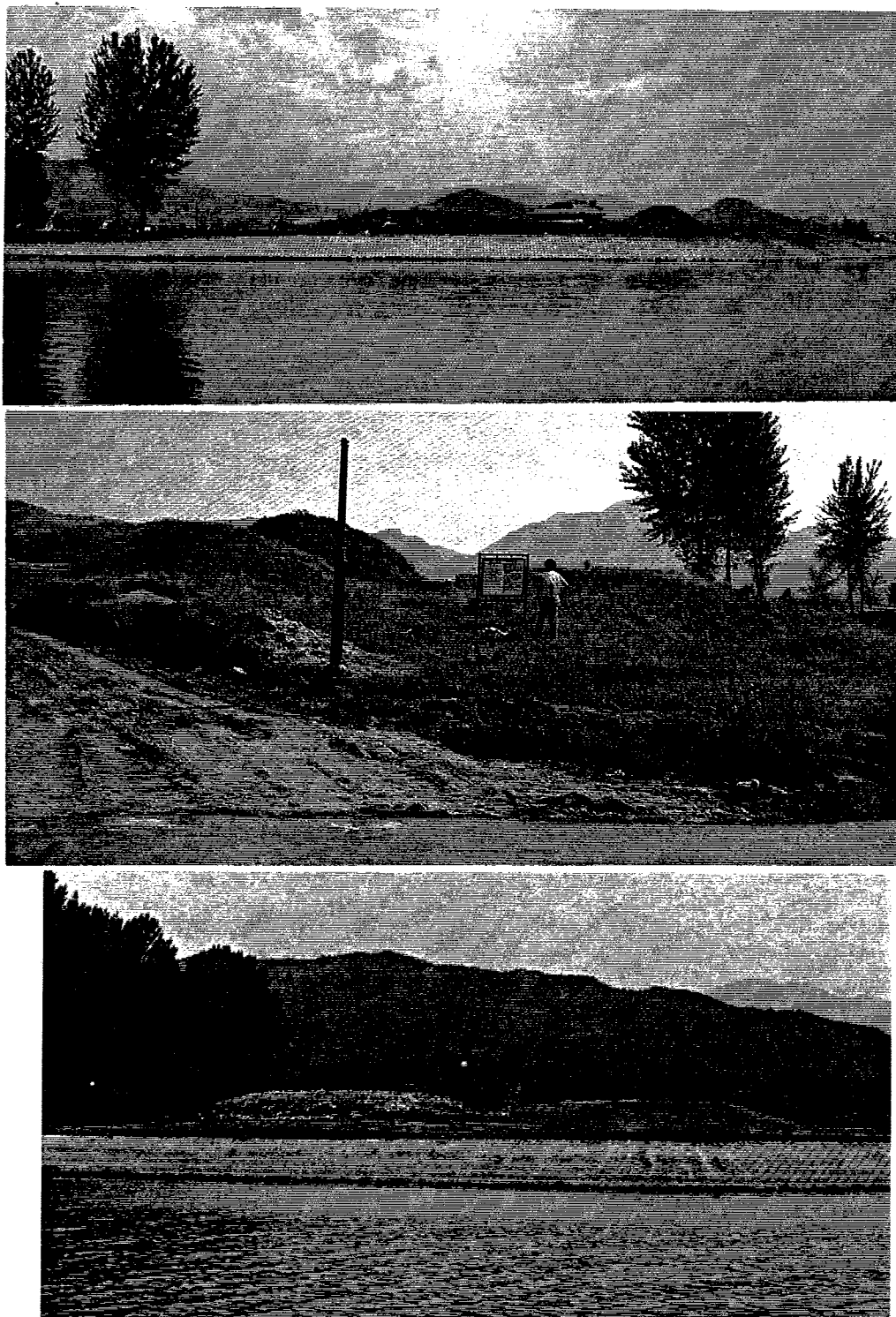


Figure 87. Chungdo stone mound tombs (A distant view of the tombs; Two Chungdo stone mound tombs before excavation; Two Chungdo stone mound tombs remounded after excavation).

the ground surface. Then, at the center of the platform an entombing structure was constructed by the accumulation of more river stones. A wooden coffin was placed inside, and, finally, the tomb was covered up by another accumulation of river stones. However, contrary to this investigator's supposition, it is very difficult to discern the entombing structure with certainty because all the stones that were assumed to have made up the entombing structure are the same kind of river stones as those which make up the rest of the structure. Therefore, the author now thinks that the structure of the stone-mound tomb on the Chungdo Island cannot be defined with much assurance until another tomb is excavated (Figure 88).

Despite the uncertain dimensions of the internal structure of the stone mound tomb, there is no doubt that some internal vault had been prepared because, in the central interior of the mound, a number of artifacts were discovered. These consisted of a large number of potsherds, including three almost complete pots, two iron knives, one iron nail, and four unidentified iron pieces. Two types of pottery were found: wheel-made hard pottery and handmade plain pottery. The former type was found in overwhelming numbers (Figure 89).

At Sinmae-ri, another stone-mound tomb similar to those on Chungdo Island was identified. It is located beside the North Han River. The outward

shape of this tomb had been very deformed by houses, but it shows similarity with the two Chungdo tombs in composition material--large river stones--and in its approximate scale (Figure 90).

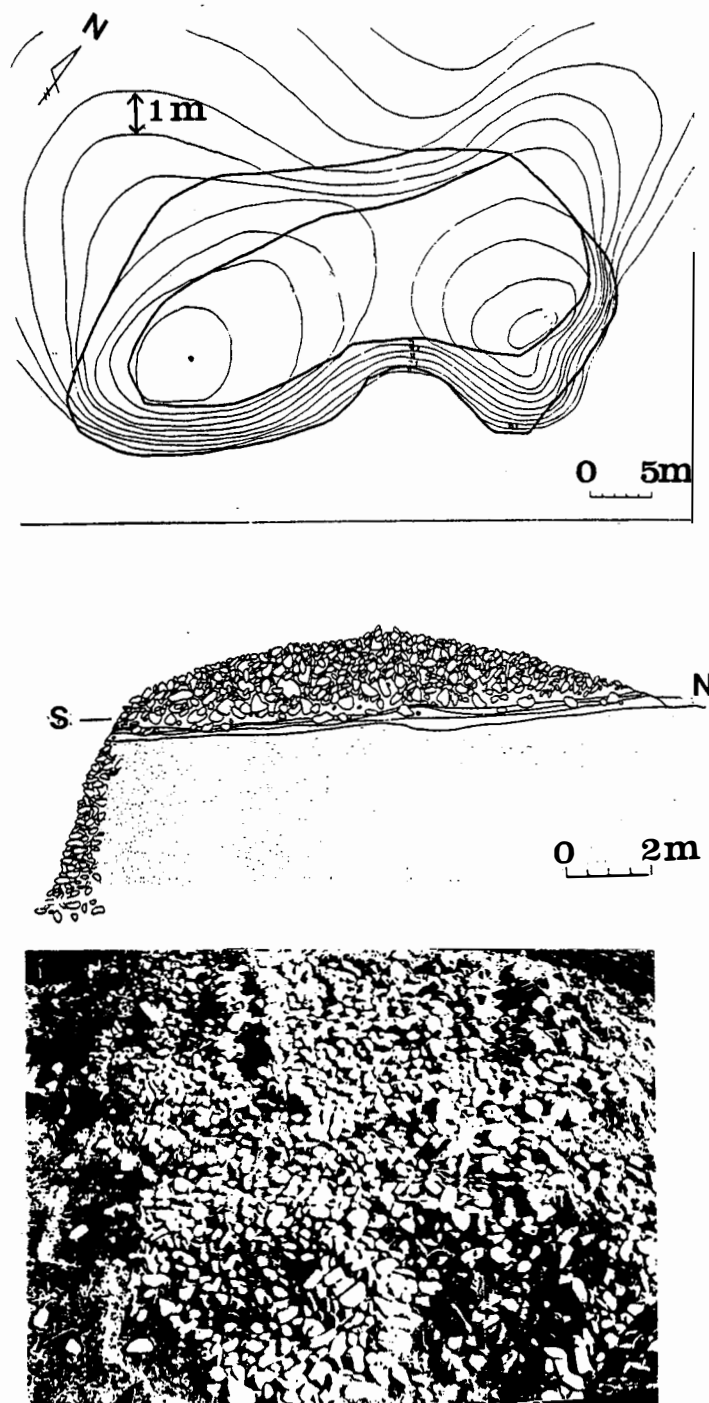


Figure 88. Various features of the Chungdo stone mound tomb excavated in 1981 (Contour map of two stone mound tombs; Vertical section of the excavated one; The stone accumulation revealed after removing earthen mound).

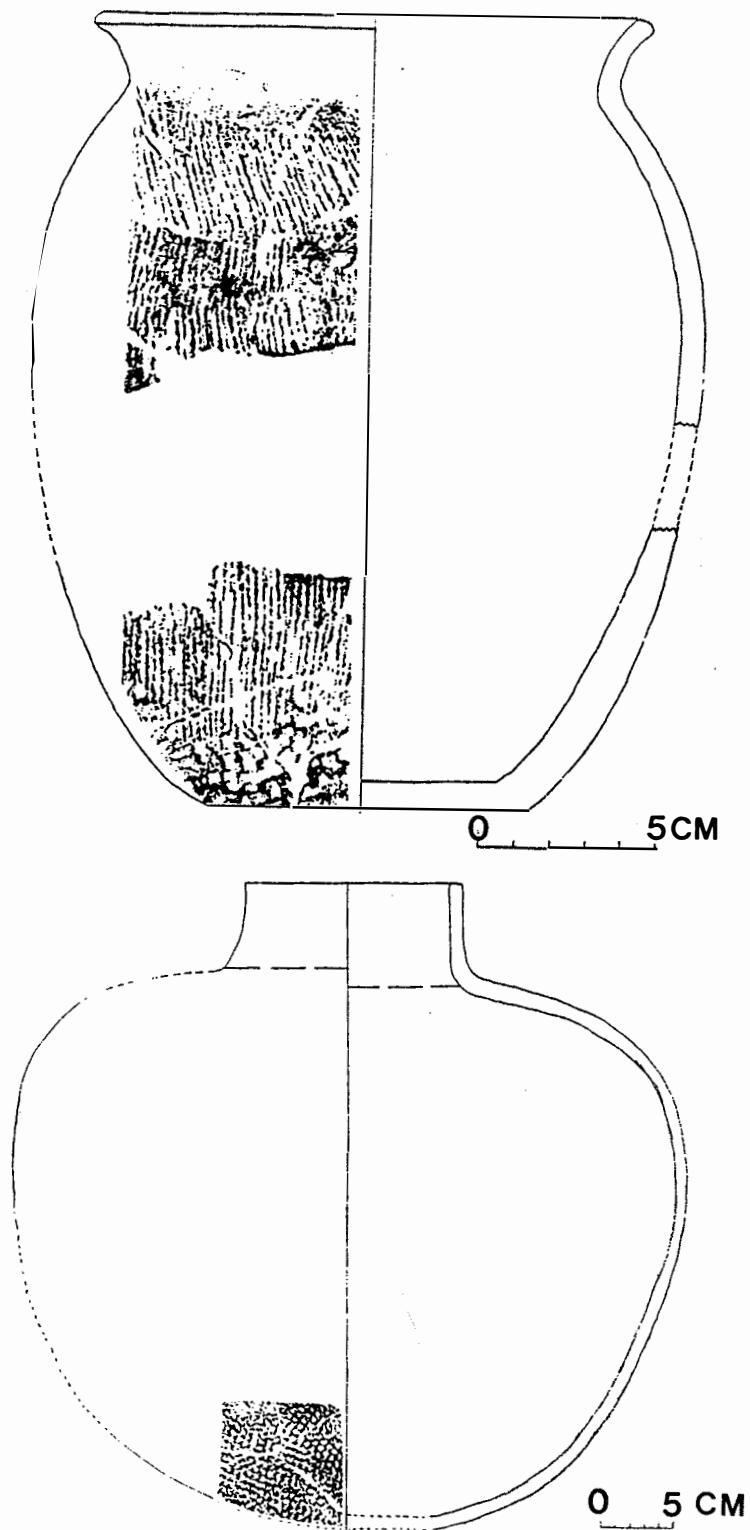


Figure 89. Stamp-designed wheel-made hard pottery from the excavated stone mound tomb in Chungdo.



Figure 90. The stone mound tomb in Sinmae-ri (A close look and its part modified as a wall).

CHAPTER IV

SYNTHETIC RECONSTRUCTION OF THE DEVELOPMENTAL PROCESS OF PREHISTORIC AND PROTOHISTORIC CULTURES IN THE NORTH HAN RIVER VALLEY

The North Han River Valley is noted for its steep mountains, deep, narrow valleys, and scarcity of plains. The ruggedness of the mountain ranges bordering the North Han River Valley strongly suggests that human movement--and, with it, cultural development--followed the flow of the North Han River. Therefore, the only possible choices of the direction for people's movement in the valley are either up or down the Han River system.

By organizing the development of different cultures in the North Han River Valley and establishing their relationships to each other--from Chūlmun culture to the establishment of state society-- the author will have constructed a comprehensive model for the prehistory of the North Han River Valley.

Chŭlmun Culture in the North Han River Valley

Site Distribution Pattern

Of the Chŭlmun sites discovered in the North Han River Valley, structural remains were found only at Naep'yŏng and Kyodong. Chŭlmun potsherds and stone tools were collected at all of the other sites. Thus, all but two sites merely confirm that Chŭlmun sites exist in the North Han River Valley. However, their distribution does reflect a strong relationship to the outstanding geomorphological features of the valley. One common feature of their locational pattern is that all sites were found on sand alluvium on the banks of the North Han River, except in the case of Kyodong Cave, which is located on a slope of Pongŭi Mountain.

This distribution pattern of Chŭlmun sites in the North Han River Valley generally matches the locational pattern of western-type Chŭlmun fisher-hunter-gatherer sites, as elucidated in Chapter II. However, the degree of dependency on riverine subsistence among western-type Chŭlmun people in the North Han River Valley was much greater than that of hunting and gathering. This increased reliance on fishing and the concentration of Chŭlmun residence sites along the riverside testifies to the strong influence of the environmental

features of the North Han River Valley on cultural development. Throughout its narrow and deep gorges, from its headwaters to the Lower Han River, the valley is rich with riverine resources.

Another remarkable aspect of the Chŭlmun site distribution pattern is that all sites, except two surface collections, are located in Ch'unch'ŏn and vicinity. This indicates that the size of human settlements in the North Han River Valley is proportional to the size of the plains which dot the North Han River Valley. It is notable that throughout the historical period this pattern of differential settlement size has persisted.

The Problem of the Appearance of Eastern-Type Chŭlmun Culture Traits in the North Han River Valley

As mentioned above, Kyodong Cave is the only Chŭlmun site not located along the riverside; instead, it is found halfway up the slopes of Pongŭi Mountain. As discussed in detail in Chapter III, Kyodong Cave is an artificial cave hollowed out of a fragile, decaying granite slope. The unique artifactual assemblage discovered in the cave, which included pottery, elongated polished stone axes, and one piece of stone composite fishing gear, indicated that it had been imported from somewhere in the Eastern Region of the T'aebaik Mountains.

When Kyodong Cave was first discovered in 1969, all Korean archaeologists concerned with Chŭlmun culture, including W. Y. Kim (1963), who observed the site and wrote a report about it, believed that the artifactual assemblage of Kyodong Cave belonged to the final stage of the Chŭlmun Period (ca. 2000-1500 B.C.). This was because the flat bottoms and scarce surface designs of the pottery resembled typical Mumun pottery. However, in the 1980s, when excavation was begun at the Osan-ni site in the Eastern Region, it became apparent that the pottery and stone-composite fishing gear recovered from Kyodong Cave were directly related to the artifacts at Osan-ni. Thus, when the Osan-ni site proved to be the oldest site of the Chŭlmun Period (5000-6000 B.C. by radiocarbon dating), researchers concluded that Kyodong Cave also belonged to the earliest phases of the Chŭlmun Period.

As pointed out in the description of the Kyodong Cave site in Chapter III, it is strange that eastern-type Chŭlmun culture was ascertained from only one location in Ch'unch'ŏn and was not ascertained anywhere else throughout the entire region of Western Region of the T'aebaik Mountains. As stated in the site description for Kyodong Cave, it is certain that a small group of eastern-type Chŭlmun people had crossed the T'aebaik Mountains to eventually reach Ch'unch'ŏn. Their travel route is assumed to have originated somewhere in Kangnŭng or Kosŏng in the Eastern Region of T'aebaik Mountains and

followed the uppermost valley of the North Han River to reach Ch'unch'ŏn. This opening of a passage between the Eastern Region and the Western Region during the Chŭlmun Period by directly traversing the T'aebaik Mountains is significant not only to the prehistory of the North Han River Valley, but also to Korean prehistory in general. It represents the earliest travel route between the Eastern Region and the Western Region. Thereafter, travel between the two regions expanded throughout the entire prehistory and history of Korea.

With identification of Kyodong Cave as evidence for the diffusion of a cultural tradition from the Eastern Region into the Western Region, questions arise regarding the chronological and social relationships between the people of Kyodong Cave and the western-type Chŭlmun people living in the North Han River Valley. What happened after the group of eastern-type Chŭlmun people arrived in Ch'unch'ŏn? What was the nature of their interaction with western-type Chŭlmun people? Currently, no other archaeological evidence exists that can address these questions. Furthermore, we cannot be certain whether the eastern-type Chŭlmun people who occupied Kyodong Cave reached the North Han River Valley before western-type Chŭlmun people occupied the valley. This is because no site, including Kyodong Cave, has been found where the relationship between the two peoples can be traced stratigraphically. Therefore, the chronological relationship between the Kyodong Cave people and western-

type Chŭlmun people in the North Han River Valley can only be guessed, based upon the general situation in the Eastern Region of T'aebaik Mountains.

Unlike the situation in the Western Region, in the region of the Eastern Region a number of Chŭlmun sites containing both deposits of western-type Chŭlmun and eastern-type Chŭlmun cultures were discovered in their original stratigraphic order. The stratigraphies of Osan-ni, Yangyang County, Kangwŏn Province, and Tongsamdong, Pusan City, all show that the eastern-type Chŭlmun culture component lies beneath that of western-type Chŭlmun culture. Likewise, in the Eastern Region, it is clear that eastern-type Chŭlmun culture had spread from north to south first, and later, western-type Chŭlmun culture diffused into the territory of the Eastern Region.

Against this background, the appearance of eastern-type Chŭlmun culture in the mid-central area of western-type Chŭlmun culture raises further interesting questions. If Kyodong people had arrived at the upper North Han River Valley before western-type Chŭlmun people spread into the valley from the midwestern region of the Western Region, it is difficult to understand why more evidence of eastern-type Chŭlmun culture has not been found. It could be that we simply have to await further discoveries. However, if scarcity of eastern-type Chŭlmun sites in the North Han River Valley resulted from certain socio-cultural causes, further hypothetical interpretations can be proposed.

One possible hypothesis is that eastern-type Chŭlmun people who had left Kyodong Cave failed to adapt to the unique environment of the North Han River Valley, which must have required well-developed river-fishing skills and very specialized wild-food-gathering behaviors, because the Kyodong Cave people originally had been accustomed to marine and/or estuary fishing lifeways. Thus, a small group of eastern-type Chŭlmun people who succeeded in crossing the steep, rugged T'aebaik Mountains and eventually arrived in Ch'unch'ŏn were unable to survive because of their failure to adapt their subsistence skills to the new environment. In contrast, western-type Chŭlmun people successfully adapted themselves to the North Han River Valley because they were already skillful riverine fishermen as well as hunter-gatherers.

Another possible hypothesis is that when eastern-type Chŭlmun people arrived in the North Han River Valley by crossing over the T'aebaik Mountains, western-type Chŭlmun people already were widely settled throughout the valley. Therefore, the eastern-type Chŭlmun people were quickly absorbed into western-type Chŭlmun society, due to their lack of local subsistence skills.

The above hypotheses must await future discoveries in order to be tested. For now, I think the last hypothesis seems to be the most persuasive one. It focuses on the interaction between two different peoples, one having successfully adapted to the unique natural environment of the North Han River

Valley, and the other having undergone many difficulties in attempting to survive in an unfamiliar natural environment. If this had been the case, it indicates again the importance of riverine fishing, practiced in conjunction with hunting and gathering, to the subsistence of prehistoric people in the North Han River Valley.

The Place of Western-Type Chŭlmun Culture in the North
Han River Valley in the Overall Development of
Western-Type Chŭlmun Culture in Korea

As stated above, all Chŭlmun sites in the North Han River Valley, except Kyodong Cave, belong to western-type Chŭlmun culture. Inspection of the distribution of western-type Chŭlmun sites nationwide clearly demonstrates that Chŭlmun people in the North Han River Valley had migrated upriver along the Lower Han River. The distribution pattern of Chŭlmun sites in the Western Region shows a clustering in major rivers such as the Yalu, Taedong, Han, and Naktong, all of which flow into the Yellow Sea. Because of this shifting pattern in distribution, it is believed that ancestors of western-type Chŭlmun people, as well as the earliest members of that tradition, had spread into Western Korea from the interior of Northeast Asia. Where in Northeast Asia such ancestors of Korean Chŭlmun people had originated and the degree to

which their socio-cultural patterns were transformed in the course of diffusion have yet to be satisfactorily determined.

In this broad context, it becomes clear that western-type Chŭlmun people in the North Han River Valley had come from the lower valley of the Han River, where a number of Chŭlmun settlement sites have been excavated, including the Misa-ri and Amsadong sites. These two sites are the most frequently cited as representative of Chŭlmun culture in the Western Region.

Many examples of typical western-type Chŭlmun pottery were excavated from the Misa-ri and Amsadong sites. In accordance with the development of western-type Chŭlmun culture, Chŭlmun pottery shows certain transitional trends in surface-design composition. Other aspects, however, such as the pointed bottom and overall shape, show no such transitional change.

Most pottery samples pertaining to earlier stages are common in that their surfaces are decorated with full geometric designs, and those designs are well organized and precisely drawn. On the other hand, those pertaining to later and especially final stages show conspicuous disturbance in design organization, and designs were confined to the rims. In light of this general trend in design, pottery from the Misa-ri and Amsadong sites can be classified as belonging to the earlier stages. In Ch'unch'ŏn and vicinity, where most of the Chŭlmun sites in the North Han River Valley are concentrated, both earlier and

later type pottery were identified. Especially large amounts of pottery collected at the Naep'yŏng site show characteristics more typical of the pottery of later and/or final stages.

In the absence of absolute chronological references, it is very difficult to determine how long Chŭlmun culture persisted in the North Han River Valley, because all samples of pottery, except those from the Naep'yŏng site, were found in surface scatters and were devoid of stratigraphic context. However, if we accept the aforementioned transitional changes in design composition, the presence of both earlier and later pottery types can be taken as indicating an extended time depth for Chŭlmun culture in the upstream area of the North Han River Valley. Its long endurance also can be presumed because of the valley's abundant supply of riverine resources and circumscribed environment, suitable for fisher-hunter-gatherers. Throughout the North Han River Valley there are many small areas that are very adequate for the settlement of groups of Chŭlmun people, whose scale of society must have been that of small bands composed of several consanguine families. As pointed out earlier, many isolated small plains lie along the riverside, all of which are surrounded by steep, rugged mountain ridges. These plains and the river flowing in front of them must have provided an ideal ecological niche for Chŭlmun fishermen; of these, Ch'unch'ŏn was the largest in the valley. Once the Chŭlmun people

moved into the North Han River Valley, they made their settlements in such ecological niches. They must have lived there for a long time.

Thus, we believe these two conditions--the favorable ecological niche and the abundant riverine resources--must have been the primary reasons why both earlier and later types of Chŭlmun pottery were discovered in the North Han River Valley. Furthermore, as suggested by archaeological remains at the Naep'yŏng site, Chŭlmun people sustained their culture in the uppermost regions of the North Han River Valley, even into the period when Mumun agricultural peoples appeared.

The Subsistence Economy of Western-Type Chŭlmun People in the North Han River Valley Compared to That of Western-Type Chŭlmun People in General

The Chŭlmun people were typical fisher-hunter-gatherers, and based on present data, a determination of whether or not they practiced plant cultivation remains problematic. Some Korean archaeologists have claimed that some Chŭlmun people did practice primitive plant cultivation in confined areas. They speculated that some stone tools, such as a spade-shaped large flaked stones and grinding stones, were direct evidence of grain cultivation, concluding that they had been used for tilling the ground and grinding cereal

grains. In a confined region of northwestern Korea, some carbonized grains of foxtail millet were identified at the Chit'ap-ni site, North P'yŏngan Province. This could be taken simply as evidence for the gathering of seeds by Chŭlmun people living in northwestern Korea, but some archaeologists regard this evidence as support for the proposition that agriculture had already begun during the Chŭlmun Period.

However, archaeological evidence from other Chŭlmun sites does not support this generalization. Of all the Chŭlmun sites, which are ubiquitous on the Korean Peninsula, grain remains have been found in only one, Chit'ap-ni in northwestern Korea. Moreover, if grain cultivation had been part of the subsistence economy of the Chŭlmun people, evidence of its systematic practice, such as storage pits, tilling implements and other tools, and cereal grain containers would have been found everywhere. Yet, except for the Chit'ap-ni site, archaeological remains from all Chŭlmun sites throughout the Korean Peninsula bear evidence only of a fishing-hunting-gathering subsistence economy. Even at the Chit'ap-ni site, except for the carbonized grains, the archaeological remains are no different than those of other Chŭlmun sites. The spade-like stone tools and grinding stones found at Chit'ap-ni are common to many sites and were probably used for digging roots and processing various wild-plant grains.

The typical fishing-hunting-gathering economy of western-type Chŭlmun people was maintained in the North Han River Valley, which had abundant riverine and forest food resources. Virtually all Chŭlmun sites are located on the banks of the North Han River, and various fishing implements have been discovered. Very little evidence for hunting and wild-plant gathering has been ascertained from the artifactual remains. However, while riverine fishing must have been the primary subsistence practice, hunting and gathering also must have contributed substantially to the Chŭlmun people's success, considering the rich natural environment of the North Han River Valley. As described above, the valley is famous for its forested and mountainous landscape. Most of the mountains are nationally popular for climbing. Furthermore, Kangwŏn Province, in which the central portion of the North Han River Valley is located, is the wildest and most heavily forested of the eight provinces of Korea. It is estimated that the wild animal population is far higher there than in any of the other seven provinces. For example, one public hunting area, designated as such by the Kangwŏn provincial government, lies just beside the North Han River only 10 kilometers from Ch'unch'ŏn. There, a variety of wild animals live, including rabbits, wild boar, deer, Korean elk, and wild fowl. This variety of wild animals, which presumably dates back to post-Pleistocene times, must have made this area one of the most popular for Chŭlmun foragers in the North

Han River Valley.

In addition to wild animal resources, the North Han River Valley wilderness also offers an abundance of edible wild plants. Various species of oak trees are the most widely occurring trees in the forests. In late autumn, many acorn collectors gather in the forests of the North Han River Valley. Acorn jelly is a very popular traditional food, especially for the people living in Kangwŏn Province. Moreover, an abundance of wild plants that bear edible roots and/or leaves grow in the valley forests, even today, including arrowroot, totuk root (Codonopsis lanceolata), and yams. Also, wild grapes, other wild berries, and various kinds of mushrooms can be found. Indeed, many kinds of wild mushrooms are bought and sold in marketplaces as well as along roadsides in the North Han River Valley. For the Chŭlmun foragers, plentiful acorns, mushrooms, and many other edible plants must have been food resources of great importance in their total subsistence economy, no less so than hunting.

Nevertheless, riverine fishing was the primary subsistence of the Chŭlmun people in the North Han River Valley. Unlike hunting and gathering, fishing is verifiable by substantial archaeological evidence, including the location of settlements on the riverbanks and the presence of fishing tools such as net-sinkers and harpoon heads. It would be redundant to enumerate here all the evidence for considering riverine fishing the primary subsistence practice of

the Chŭlmun people of the North Han River Valley. The North Han River is really an affluent natural container of a variety of fishes. Even today, it is considered the best freshwater fishery in Korea, and every weekend great numbers of fishermen may be found there. Almost all of the houses in the villages scattered along the North Han River Valley have fishing nets and boats, and many villagers earn their living primarily by net-fishing rather than farming. A resource as reliable as riverine fishes must have been the foremost food of the Chŭlmun people in the North Han River Valley. It is premature to judge at this point, but in light of archaeological evidence available at this time the multiple resource hypothesis does not bear out in the Chŭlmun culture of the North Han River Valley.

In light of the variety of food resources available to the Chŭlmun people of the North Han River Valley, the question arises as to how they had organized themselves to exploit these resources systematically. Presumably, they lived a certain style of migratory or semi-sedentary life in accordance with the seasonal growing cycles of a variety of wild food resources. I believe that reconstructing the details of this lifeway requires the acquisition of more archaeological data depicting life in the forest zones. Also, the excavation of an entire settlement in the North Han River Valley would be invaluable.

Mumun Culture in the North Han River Valley

Site Locations and their Distributional Patterns

Mumun sites discovered so far in the North Han River Valley are concentrated in Ch'unch'ŏn and vicinity, on the largest plain in the valley. These Mumun sites discovered there can be divided into two sorts: dolmen burials and residential house floors.

Throughout the Korean Peninsula, dolmens have been easily identified because of their huge capstones. Scores of dolmens have been found through field survey and by chance throughout the North Han River Valley. Dolmens in four locations have been excavated: Naep'yŏng-ni, Ch'ŏnchŏn-ni, Sinmae-ri, and Chungdo.

Throughout history and prehistory, the present-day towns of Ch'unch'ŏn, Kap'yŏng, and Ch'ŏngp'yŏng have been centers of human settlement in the North Han River Valley. Of these three towns, Ch'unch'ŏn is the largest and Ch'ŏngp'yŏng is the smallest. They represent the best locations for sedentary villages in the valley. In addition to these three main towns, a number of smaller villages lie along the North Han River. Upriver from Ch'unch'ŏn are the small towns of Hwach'ŏn, Yanggu, and Inje. Smaller villages may be found

in every plain in the valley. In this context, we may assume that various sizes of Mumun settlements existed, not only in Ch'unch'ŏn but also in Kap'yŏng and Ch'ŏngp'yŏng and even in smaller villages along the North Han River Valley.

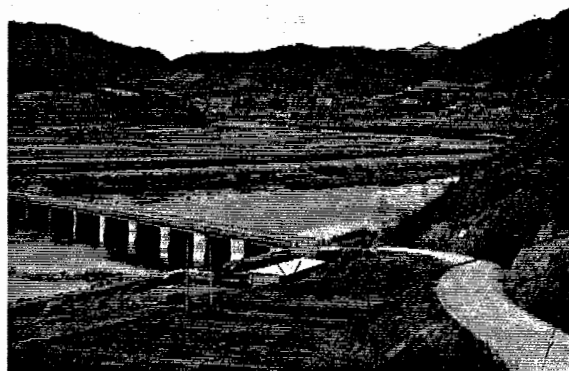
Four settlements have been found in Ch'unch'ŏn and vicinity, and three of them have been excavated: Naep'yŏng-ni, Sinmae-ri, and Chungdo. In addition to these sites, Mumun pottery and stone tools have been found in clusters at Onŭidong, the southern district of Ch'unch'ŏn City. However, consideration of all the incidental examples--such as reports of places where dolmens had been removed, or places where individual stone artifacts or potshards were collected--leads to the conclusion that the Mumun people's activity area covered almost the entire territory of Ch'unch'ŏn City.

However, archaeological evidence of smaller Mumun settlements has increased recently, even in the uppermost reaches of the North Han River Valley. In 1993, evidence for a Mumun settlement at Wŏlhak-ni, Bukmyŏn, Inje County, was found (Hallym Univ. Museum 1994b). This site is located farther upriver than any other Mumun site in the North Han River Valley. One polished stone dagger and 10 polished stone arrowheads were recovered from a dolmen entombing structure found there. Scores of other dolmens were found in the same area, all of them buried by farmers because they hindered cultivation. When the Wŏlhak-ni site was surveyed by the author in 1993, one

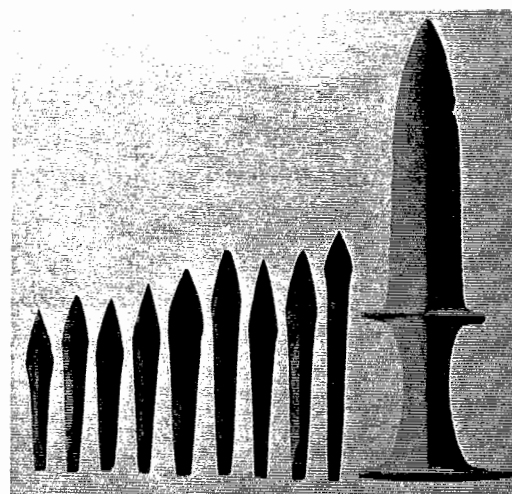
huge capstone was found among the buried dolmens, its side exposed in a paddy levee, and one slab stone used as part of a stone cist was discovered nearby. Two pieces of Mumun pottery were recovered from the low hillside very close to the buried dolmens (Figure 91).

This evidence--the existence of scores of dolmens, the recovery of a polished stone dagger and arrowheads inside one dolmen, and the recovery of Mumun pottery in the area--leads us to believe that a Mumun settlement existed at Wölhak-ni. A Mumun settlement at the uppermost point of the North Han River Valley serves as a compelling clue to the diffusion route of the Mumun people into the valley, which will be discussed further in the next section. Also, the existence of a Mumun settlement at Wölhak-ni casts light on the typical settlement pattern of Mumun society, because it represents once again a uniquely ideal environment for the settlement of Mumun people.

The Wölhak-ni site is surrounded by a plain which has been cultivated as rice paddy. The Inbuk River flows by the site, 30 meters away. The Inbuk is a tributary of the Soyang River, which at Ch'unch'ön unites with another main tributary to form the North Han River. Steep mountain ridges surround the plain. Wölhak-ni village and some dry fields are located on a low hill lying between the mountain ridges and the plain. Today, the village of Wölhak-ni consists of about 30 households. Historically, it is believed that there were



1.



2.



3.



4.



5.

Figure 91. The Wölhak-ni Site (1: A distant view of the site; 2: A polished stone dagger and arrowheads collected from a destroyed dolmen in the Wölhak-ni site; 3: Surveying the area where dolmens were located; 4: Potsherds gathered in the Wölhak-ni site; 5: A slab stone used as the wall of a dolmen).

about 40 households. This village seems to be of moderate size in comparison to the surrounding plains, which have been cultivated as rice paddies and dry-crop fields. Even today, villagers report that abundant river fish are taken by net from the Inbuk River. The narrow river is 10 to 20 meters wide and so clear that fish can be seen easily at the bottom of the river. Even today, fish in the Inbuk are a substantial resource for the Wölhak-ni villagers.

The dolmen cluster at Wölhak-ni strongly supports the view that a Mumun village existed in the region. This view is further supported by the discovery of Mumun potsherds from a nearby dry paddy. Wölhak-ni is considered typical of the sort of ecological niche favorable for Mumun settlement in the North Han River Valley. From the uppermost regions of the valley to its lowest point, where the North Han River meets the South Han River, many similar ecological niches, both small and large, suitable for Mumun settlement may be found. Thus, a plain surrounded by steep mountains and flanked by a tributary of the North Han River is the ideal ecological niche for the settlement of Mumun people in the North Han River Valley. Of such places discovered thus far, Wölhak-ni is among the smallest, and Ch'unch'ön, Kap'yöng, and Ch'öngp'yöng are the largest. Likewise, it is believed that the primary factor in the determination of the location and size of Mumun settlements in the North Han River Valley is the environmental factor.

Origin of Mumun Culture in the North Han River Valley

Evidence for the spread of Mumun culture is a distinctive type of Mumun pottery, known as pierced-rim pottery (kongryŏltogi) and associated artifacts. Pierced-rim pottery is characterized by large, deep flat-bottom bowls, the rims of which are encircled by a row of small pierced holes. This pottery is usually found with the reddish, rusticated pottery known as Hongdo pottery and many highly polished stone tools. Radiocarbon dates from sites in Korea where pierced-rim pottery was found fall into the oldest ranges of known Mumun sites. In a number of locations, stratigraphic evidence indicates that artifactual assemblages containing pierced-rim pottery belong to early stages in the development of Mumun culture. Because of the typological uniqueness of pierced-rim pottery, as well as the uniqueness of its associated artifactual assemblage, it is clear that all of the pierced-rim pottery discovered throughout Korea, even at Cheju Island, belongs to the same cultural tradition. Moreover, of the local types identified thus far in the Mumun culture tradition, pierced-rim pottery shows the widest distribution (Figure 92).

Pierced-rim pottery sites are concentrated mainly in northeastern, central, and southeastern Korea, with a limited presence in the outer regions of eastern and southwestern Korea, but rarely found in the northwest region, nor in

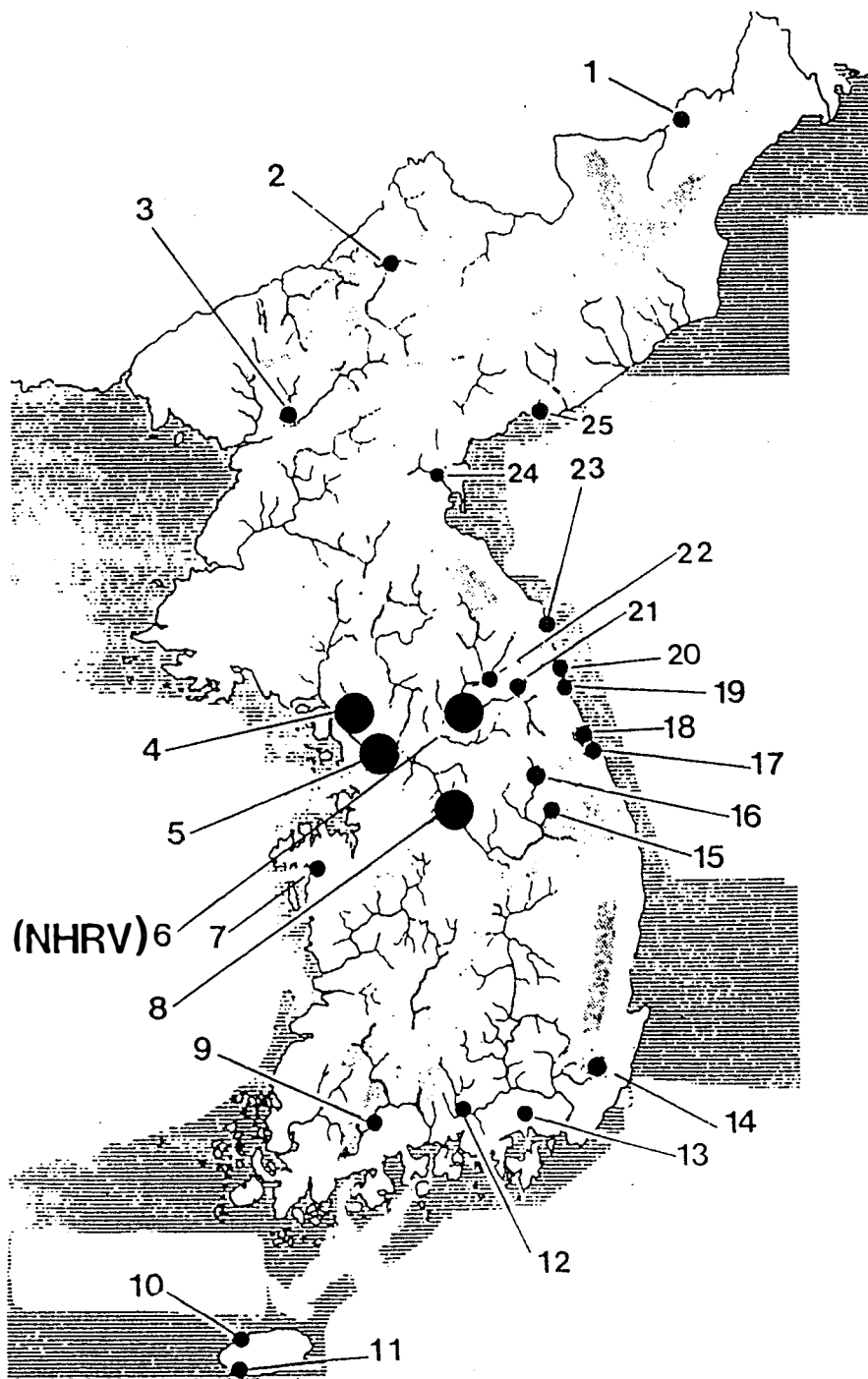


Figure 92. Distribution of pierced rim pottery sites.

- Note:
1. Hogokdong, Musan County, North Hamgyŏng Province
 2. Konggui-ri, Kanggye City, North P'yŏngan Province
 3. Saejuk-ni, Yŏngbyŏn County, North P'yŏngan Province
 4. Oksŏk-ni, Gyoha-ri, Sikhyŏn-ni, P'aju County, Kyŏnggi Province
 5. Yŏksamdong, Karakdong, Myŏngildong, Seoul City
 6. Chungdo, Sinmae-ri, Onüidong, Ch'uchŏn-ni, Taegok-ni, Ch'unch'ŏn City and Ch'unsŏng County
 7. Hyuam-ni, Haemiŭp, Sŏsan County, South Ch'ungch'ŏng Province
 8. Hŭnam-ni, Yŏju County, Kyŏnggi Province
 9. Taegok-ni, Usan-ni, Sŭngju County, South Chŏlla Province
 10. Guakji-ri Shellmound, Aewŏlŭp, North Cheju County, Cheju Province
 11. Sangmo-ri, Daechŏngŭp, South Cheju County, Cheju Province
 12. Daep'yŏng-ni, Chinyang County, South Kyŏngsang Province
 13. Sŏngsan Shellmound, Masan City
 14. Kŏmdan-ni, Yangdong-ni, Ulju County, South Kyŏngsang Province
 15. Sogol, Chŏngsŏn County, South Kyŏngsang Province
 16. Daeha-ri, Yaksu-ri, Ŭngam-ni, P'yŏngchang County, Kangwŏn Province
 17. Ponamdong, Kangnŭng City
 18. Pangnae-ri, Myŏngju County, Kangwŏn Province
 19. Powŏl-ni, Yangyang County, Kangwŏn Province
 20. Choyangdong, Sokch'o City
 21. Wŏlhak-ni Inje County, Kangwŏn Province
 22. Kodae-ri, Kongsu-ri, Yanggu County, Kangwŏn Province
 23. Hwajinp'o, Chodo-ri, Kosŏng County, Kangwŏn Province
 24. Yŏnghŭngŭp, South Hamgyŏng Province
 25. Sinchang Tosŏng, Sinchang County, South Hamgyŏng Province

Figure 92. (Continued)

Manchuria to its north. In view of this distribution pattern, there is consensus among Korean archaeologists that the pierced-rim pottery tradition spread from the northeastern region to other parts of the peninsula mentioned above.

However, there is no agreement concerning the exact route of diffusion.

One prevailing view is that, starting from the mid-regions of the Eastern Region, on the east coast, the Mumun people entered one of the many stream valleys that extended through the steep mountain ridges of the eastern side of the T'aebaik Mountains. Following such a valley, they could have attained a high pass of the T'aebaik Mountains. Once there, it would not have been difficult for them to select one of the valleys stretching down the western sides of the mountains, descend into it, and thereby reach on the tributaries of the North Han River. From there it would have been no problem for them to move into the valley proper.

In light of a mere distance of 30 kilometers. between several pierced-rim pottery sites found on the east coast at Pagnai-ri in Myōngju County, Kangnūng City and its vicinity, and Choyangdong in Sokch'o, and the Wōlhak-ni site in the upper reaches of the North Han River Valley, (see Figure 92) it was most likely that the Mumun people crossed the T'aebaik Mountains at the point connecting these two areas. This also happens to be the most rugged part of the T'aebaik Mountains. If the Mumun people could traverse this point, they

could have done so with relative ease at other points in the T'aebaik Mountains, which were less difficult to pass.

Among the relatively easy routes was the one through the Ch'ugaryŏng Rift Valley, which extends from Wŏnsan City to the Ch'ŏlwŏn Plain, where pierced-rim pottery has been found. Another likely route starts from Samch'ŏk on the east coast and continues into the uppermost region of the South Han River. There a large amount of Mumun pottery, including pierced-rim pottery and polished stone tools, and a cluster of central dolmens were discovered. This undoubtedly testifies to the existence of a Mumun village settlement there.

In light of these archaeological evidences, I posit that a multilineal model best accounts for the diffusion of the pierced-rim pottery tradition in Korea (Ro 1994a). The model holds that the pierced-rim pottery tradition crossed the Hamkyŏng and T'aebaik Mountains at several locations and spread throughout many areas in the Western Regions.

Mumun Culture and Society in the North Han River Valley

Korean archaeologists who study Mumun culture generally agree that the Mumun culture began to appear throughout the Korean Peninsula from about the fifteenth century B.C., and for more than a millennium, continued to

expand, establishing settlements in every region where crop cultivation and sedentary village life were possible. This wide distribution is convincingly demonstrated by the dolmens that can be found everywhere, even in the farthest corners of the North Han River Valley.

Mumun houses have been found either individually or in clusters. Cluster sizes range from a few to dozens of houses. However, the number of houses archaeologically reported in a cluster does not necessarily indicate the actual size of a Mumun village. It may be a result of traditional excavation habits in Korean archaeology. The importance of excavating the entire area of a prehistoric settlement has been recognized only recently among Korean archaeologists. Traditionally, interest has been only in ascertaining the tradition and specific type of archaeological culture of a settlement. Therefore, we expect that most Mumun sites in which only one house structure was excavated must have been part of a larger settlement, and the sites in which several houses were excavated must have belonged to settlements of considerable size.

In this situation, the distribution of dolmens turns out to be a very useful tool to reconstruct settlement patterns of Mumun society. Unlike subterranean residential houses, dolmens are easily visible because of their huge capstones, which remain on the surface of the ground. Moreover, because of their enormous weight, which ordinarily amounts to several tons or sometimes even

ten times that amount, most of them have been left *in situ*. Therefore, although a certain number of dolmens have been destroyed by various human activities, field experience tells us that most of them remain intact.

The distribution of dolmens on the Korean Peninsula shows patterns which are strongly correlated with geographical conditions. Dolmen cluster sizes range from several dolmens in one cluster to more than 100 in another cluster. This differential size among dolmen clusters is probably closely related to that of Mumun village settlements and reflects a certain pattern in geographical location. Correlations among dolmen clustering, village settlement, and location can be summarized as follows:

1. Due to the sedentary nature of Mumun society, it is highly probable that the size of a dolmen cluster is proportional to the size of its associated village community. The dolmen cluster must represent the community cemetery for that Mumun village. It is possible that, in some cases, several Mumun villages shared a single cemetery. However, in such cases, it is still likely that there was a regular correspondence between the dolmen cluster and Mumun village settlements.

2. The distance between the dolmen cemetery and the village settlement must have been no more than one or two days' walk. Therefore, the distribution pattern of dolmen clusters can be assumed to match the distribution pattern of

Mumun village settlements. This correspondence between village settlements and the dolmen clusters is supported by many archaeological examples.

Moreover, the fact that, generally speaking, each dolmen was a tomb for one person shows that the size of every dolmen cluster which is measured by the total number of dolmens in a cluster must have been roughly proportional to the size of the associated Mumun village settlement, which also can be measured by the total number of residential houses in the settlement.

3. To date, all dolmen clusters found in the Western Region usually consist of several dozen dolmens, although clusters of more than 100 dolmens were found in both the southwestern and northwestern regions of the Western Region. On the other hand, in the Eastern Region, most of the clusters contain far fewer dolmens; clusters of more than 10 dolmens are very rare. In the Western Region, the larger clusters are located in open plains or on lower slopes of a small mountain on the western side of the region. In the more mountainous areas on the eastern side of the Western Region, however, including the North Han River Valley, dolmens have been found in clusters of more than 10.

4. These correlations between the size and distribution of dolmen clusters and those of village settlements reflect a proportional correlation between population size which could have been supported by the agricultural

productivity of individual Mumun villages, the amount of arable land available to that village and the length of time settlements were occupied.

In view of the aforementioned Mumun settlement patterns, some characteristics of Mumun culture in the North Han River Valley are presented below. As stated in Chapter III, dolmen clusters in the North Han River Valley have been identified at a number of locations along the river. As shown on the distribution map of those clusters (see Figure 43), of the seven dolmen clusters currently known, four are located in Ch'unch'ŏn and vicinity. The concentration of dolmen clusters in Ch'unch'ŏn is largely a result of the geomorphological features of this area. It contains the largest plain in the North Han River Valley, which means that the largest area of cultivated land and, consequently, the valley's largest population may have been located there during the Mumun Period.

The largest dolmen cluster in Ch'unch'ŏn contains about 20 tombs. Other clusters in the North Han River Valley range in size from less than 20 to less than 10. This variation in the size of dolmen clusters reflects the rugged nature of the North Han River Valley. Although it is difficult to estimate the exact size of Mumun village settlements anywhere in Korea based on the size of corresponding dolmen clusters, it seems likely that the modest size of dolmen clusters in the North Han River Valley corresponds to the modest size of village

settlements there. This correspondence is a result of the unique geomorphological features of the North Han River Valley.

The Evolution of Mumun Society and Its Social Structure in the North Han River Valley

Regarding the social structure of Mumun society, two questions arise: Was Mumun society egalitarian or stratified, and what is the archaeological basis for framing Mumun social organization? The egalitarian-versus-stratified argument continues today among Korean archaeologists as was discussed in Chapter II. Regardless whether the social structure of the Mumun society is defined as egalitarian or stratified, it is evident that every individual Mumun society on the Korean Peninsula had undergone an evolutionary transformation from its incipient egalitarian structure through more and more complex forms, eventually resulting in a stratified society, as is testified by the archaeological evidences of second century B.C. Moreover, the pattern of this evolutionary process is assumed to have varied according to different regional conditions.

Then, the following question must be asked: How do we reconstruct the process of transformation from simple egalitarian society to complex stratified society over the period of time spanned by the Mumun culture in North Han River Valley, and in what specific way it had been progressed, and what did the

main role in that progress?

As for these matters, geomorphological features and environmental conditions are believed to have been a primary factor in this socio-political process. In short, environmentally circumscribed Mumun society in the North Han River Valley could have maintained its original egalitarian social organization until more powerful socio-political influences encroached, archaeologically indicated by the presence of iron technology and hard wheel-made pottery.

It is believed that a major marker in the socio-political development of Mumun societies in the North Han River Valley is the process of daughter villages branching out from a mother village. This phenomenon is suggested by the valley's scattered, narrow plains, which can accommodate small agricultural settlements, rather than large, single population centers that would gradually grow more complex socio-politically. The latter process would be expected in more open plains, which can accommodate the growth of settlements and cultivated fields. In such open areas, branching out of daughter villages from a mother village was less likely. As population increased, problems stemming from increased social complexity would have been ameliorated through internal processes, such as a rearrangement of relationships among community members.

One of the best examples for this can be found in the study of a dolmen society conducted by Rhee and Ch'oi (1992) in the southwestern part of the Western Region. In a Mumun settlement located on a broad, fertile plain in North Cholla Province, increasing population led to an increasing need for more arable land and higher agricultural productivity. Growth of the society could have been ameliorated by multiplying the social role of community members and by hierarchical diversification of such status. They cited differences in house size, the unequal wealth of community members, and a series of differently sized groups of dolmens as evidence of such role multiplying and hierarchical intensification.

Rhee and Ch'oi (1992) tested the degree of social stratification and extent of social complexity of the Mumun settlement in North Cholla Province with reference to a checklist of the following archaeologically identifiable characteristics: (a) differential distribution of artifacts among houses of the village settlement, which can be taken as evidence of differential wealth among community members; (b) the presence of extraordinary goods, presumed to be symbolic objects indicating special social status; (c) differences in house size, which indicate differences in political power and/or wealth possession; and (d) the presence of a special type of burial system, the size and scale of which might indicate the differential status of those entombed. In the case of Mumun

society, this would include the presence of megalithic dolmen burials as well as differences in the size of dolmens in a single cluster.

The assumption that intensifying vertical social stratification is proportional to the increasing size of dolmens allowed them to conclude that there had been a two- or three-tiered social hierarchy in the dolmen culture zone, at least during its advanced stage (ca. 2400-2300 B.P.). They also concluded that a complex chiefdom-level society, in which the members of highest rank were buried in the few extraordinarily large dolmens, developed during the later Mumun Period in North Chölla Province.

Their conclusions for the Ungok Valley contribute to the reconstruction of diverse evolutionary patterns of socio-political structure for Mumun societies in other regions. Thus, they have useful comparative value in the reconstruction of the social structure of Mumun society in the North Han River Valley. The North Han River Valley is quite different from the Ungok Valley. The dolmens there are all grossly similar in size with no significant differences among them. In regard to the Mumun society of the North Han River Valley, it seems more reasonable to conclude that the relationship was basically egalitarian rather than hierarchical in the political sense. In other words, mother and daughter villages maintained similar levels of egalitarian social organization. In short, the contrasting environments of the North Han River

Valley and the Ungok Valley led to a contrasting socio-political evolution of egalitarian Mumun societies. This observation supports the generally assumed hypothesis that prehistoric peoples living in different ecosystems tended to follow different paths in their societal development.

In the case of the North Han River, after Mumun people first settled in the upper reaches of the valley, practicing agrarian economy, population gradually increased. Because their settlements were surrounded by steep mountains and possessed limited arable space, the population increase put stress on established social equilibrium. Consequently, people regularly moved out of the villages and migrated downriver along the narrow valley corridor, much as people today follow the four lane expressway from Ch'unch'ŏn to Seoul. In other words, the North Han River has continuously served as a conduit for transferring extra population from the upper valley to the lower valley, where open areas are available for crop-cultivation settlement.

In the upper reaches of the North Han River Valley, arable lands are not only highly delimited but also scattered, separated by small but steep mountain ridges and tributaries. Thus, Mumun village settlements show a similar scattered pattern, as seen in the distribution of house remains and dolmen clusters. In addition, individual dolmen sizes show no significant difference; they are grossly similar in size. If this phenomenon can be correlated with

certain kinds of social organization, as Rhee and Ch'oi have done with the dolmens in Ungok Valley, we can conclude that all the people entombed in dolmens of the North Han River Valley were of equivalent social status.

Because of these patterns in settlement location and dolmen clustering, the socio-political structure of Mumun settlements in the North Han River Valley would likely have been highly stable, characterized by community-level cooperation. Therefore, the basic socio-political structure of Mumun society in the North Han River Valley is assumed to have been an elementary two-tiered hierarchy consisting of a village leader and villagers.

In contrast to the Mumun settlements of mid- or southwestern parts of the Western Region, where unlimited arable lands existed in all directions, and, therefore, certain socio-political evolutionary processes continued to take place, those in the North Han River Valley maintained a social structure based on a two-tiered hierarchy until about the second century B.C. Then, cultural forces associated with the new iron and wheel-made hard pottery technologies encroached from beyond the steep walls of the valley and changed the peoples' lives forever.

Bronze Cultures in the North Han River Valley

In the North Han River Valley, archaeological evidence for Liaoning bronze and Korean-style agrarian bronze cultures is very sparse and only recently has been discovered. Therefore, a more meaningful accounts of these cultures' characteristics and assessment of the extent of their social influence must await further archaeological data. In this description, I assess the place of these two cultures in the developmental process of the prehistoric culture of the North Han River Valley. The discussion is organized in the context of what we know about the Mumun Period as well as the State Formation Period.

Evidence of Liaoning Bronze Culture in the North Han River Valley

Archaeological evidence of Liaoning bronze culture in the North Han River Valley consists of only two specimens of the mandolin-shaped bronze dagger. These two specimens were reported in the 1930s, and only roughly made drawings are available to document them; all related contextual information has disappeared. Without explanation, the drawings of these two bronze specimens were included in a survey report illustration of stone tools discovered in Ch'unch'ŏn. Without their contextual information it is difficult to

assess their socio-cultural significance in relation to the North Han River.

Korean-Style Agrarian Bronze Culture in the North Han River Valley

In comparison with the tenuous traces of Liaoning bronze culture in the North Han River Valley, Korean agrarian bronze culture left greater evidence of its existence. At present, three surface scatters are known in Ch'unch'ŏn, two of which contain simply potsherds. The third is a destroyed portion of a residential settlement, which was salvage-excavated in 1994. Excavation of the Ch'ilchŏndong site resulted in the first discovery of a Korean-style agrarian bronze culture settlement in the North Han River Valley.

Prior to discovery of the Ch'ilchŏndong site, it was very difficult to imagine the extent of Korean-style agrarian bronze culture in the region. Since the discovery, it has become possible to propose that the advancement of Korean-style agrarian bronze culture from northwestern Korea into the southern Korean Peninsula extended far into the upper regions of the Han River Valley. After the Korean-style agrarian bronze society, an advanced form of Mumun society, was established on a small scale in the North Han River Valley, it persisted until the beginning of the State Formation Period, when further change overtook all of the societies in the valley.

Societal Development During the State Formation Period
in the North Han River Valley(ca. 200B.C.-A.D.300)

Archaeologically, iron tools and wheel-made hard pottery are generally taken to be index traits for this period. Korean archaeologists generally believe that the introduction and propagation of iron and hard-pottery technologies were the forces disrupting the social equilibrium of the indigenous societies, rapidly rearranging them into a new equilibrium embodied by state societies.

Many of the iron artifacts pertaining to the State Formation Period were practical implements, used for crop cultivation, housework, and weaponry. At the same time, the introduction of powerful iron weapons implies increasing warfare among different groups. It is highly probable that the struggle over the acquisition of iron technology induced great social disorder, accelerated the breakdown of the indigenous equilibrium, and created a new socio-political order.

Certain aspects of social structure can be inferred from the residential remains and burial structures. The three excavated house floors--two in Chungdo and one in Machang-ni--have basically the same structure, and two of these three houses, one at Chungdo and one at Machang-ni, had been abandoned because of fire. This could be interpreted as indicating social conditions during the State Formation Period. Chapter II described the State

Formation Period as a transitional time when socio-political change progressed very rapidly and dynamically. During this period, the traditional socio-political order was being transformed and conflict between villages, and between village members, must have increased as people struggled to gain political power.

Other inferences can be drawn from the artifactual remains. For example, in the three excavated houses, iron and stone tools were found together, but the iron tools were found in much greater numbers. In House 2 at Chungdo, only one small stone axe was found with a large number of iron tools, including a dagger, a reaping knife, arrowheads, and pointed implements. Relatively more stone tools were discovered in the Machang-ni house, such as axes, arrowheads, a semilunar reaping knife, and grinding stones. The only iron implements were some unidentifiable flakes and slags. However, in addition to iron slags, a cylindrical clay tube, used in the process of iron reduction, was found on the floor of the house. The existence of iron slags and the cylindrical tube in a house structure in a village settlement testifies that iron technology was already common in society at that time. The village evidently had a blacksmith, which indicates the specialization of iron metallurgy during the State Formation Period.

Social stratification, another significant development, is indicated by the appearance of stone mound tomb in the North Han River Valley. In terms of

structure and construction technique, the stone mound tomb cannot be considered an evolutionary result of any burial structure of previous times. Rather, it represents the sudden appearance of a new burial form. As such, it reflects the significant socio-political changes that took place in the North Han River Valley during the State Formation Period. Mumun people had been constructing dolmens for several hundred years all over the Korean Peninsula. Then, at about the second century B.C., dolmens began to disappear, and new burial forms such as small stone chambers, large stone cist tombs, and the stone mound tombs appeared.

This abrupt change in a long-standing burial tradition during the State Formation Period is evidence that society had undergone a fundamental structural change. Moreover, considering the fact that the stone mound tomb had very large mounds and contained a large amount of hard pottery and iron tools, and that there were very few of them as compared to the large numbers of dolmens, we can infer that these burial tombs had been constructed for persons of high social status, much higher than persons entombed in dolmens. Furthermore, it is clear that there was a greater centralization of political power and correspondingly greater social stratification during the State Formation Period than in previous times when dolmens had been constructed. This phenomena bears out our hypothesis that the North Han River Valley, as it

became increasingly circumscribed following the appearance of Mumun agrarian economy, underwent profound social change, toward more centralization and stratification.

Such centralization of political power and intensification of social stratification seems to have occurred abruptly, as suggested by the fact that there had been no gradual change in the size of dolmens nor in the quantity and quality of burial goods contained in them. Instead, dolmens simply disappeared during the State Formation Period, replaced by a completely new type of burial. In other words, instead of dolmen-building society gradually transforming into a more stratified and centralized society, very abrupt and innovative social change must have occurred during the State Formation Period.

In summary, the fact that a totally new type of burial appeared to replace the traditional dolmen burial in the North Han River Valley must be taken as evidence that the transformation of society from the end of the Mumun Period to the State Formation Period was a rapid, short-term process rather than a gradual process generated from within indigenous Mumun societies. At this point, it seems to be highly likely that the introduction of the efficient and powerful forces of iron technology and wheel-made hard pottery accelerated this rapid transformation.

Distinctive Characteristics of the Pottery and Its Social Implications

Among the many features observable in the archaeological record of the State Formation Period in the North Han River Valley, pottery clearly reflects some aspects of the aforementioned social transformation. The considerable amount of pottery collected from the Machang-ni and Chungdo sites can be divided into two types, according to their different manufacturing procedures and cultural traditions. One type is known as Chungdo-style pottery; it is a variant form of traditional Mumun pottery, which had been used for more than a millennium on the Korean Peninsula. The other type belongs to the wheel-made hard-pottery tradition, which, along with iron technology, had been actively introduced from China at about the second century B.C.

In view of its form and manufacturing procedure, Chungdo-style pottery undoubtedly lies in direct succession to Mumun pottery, which had been used by the indigenous people of the North Han River Valley. However, the pottery discovered at Chungdo and Machang-ni possesses a certain uniqueness in comparison with traditional Mumun pottery. Pottery of the Mumun tradition from both sites can be classified into two major types: (a) shallow, flat-bottom bowls with flaring sides and (b) flat-bottom pots with straight or slightly flared sides and short necks. Both types were found in abundance at the two sites, no

less so than the wheel-made hard pottery.

Combined with the fact that, stratigraphically, settlements of the Mumun Period predate settlements of the State Formation Period, the large amount of Chungdo-style Mumun pottery discovered at the Chungdo and Machang-ni sites strongly indicates that the people of the State Formation Period in the North Han River Valley were direct descendants of the indigenous Mumun people.

Disappearance of Dolmen Construction and the Appearance of
the Stone Mound Tomb(Chöksökch'ong)

Another notable archaeological phenomenon in the North Han River Valley during the State Formation Period concerns the stone mound tomb burial type. Of the burial types found in the valley, iron tools and wheel-made hard pottery were found only in the stone mound tombs. Indeed, not only were such artifacts not found in any of the dolmens examined in the North Han River Valley, but also they were absent from all dolmens investigated on the entire peninsula. This fact seems to reflect significant social change, although it is too early to conclude that dolmens suddenly ceased being constructed and stone mound tombs suddenly began being constructed at the beginning of the State Formation Period. However, it does seem reasonable to say that the stone

mound tombs replaced traditional dolmens in accordance with the type of social change I have been discussing. This transition in burial tradition in the North Han River Valley conforms with the type of transition that occurred all over the Korean Peninsula during the State Formation Period.

At the same time that the stone mound tombs appeared in the North Han River Valley, beginning about the second century B.C., other new burial types, such as the complex stone cist and the wooden chamber tomb, began to appear in other regions of the Korean Peninsula. This displacement of the dolmen also testifies to the speed and scale of social change taking place at the time. The fact that there was not just a transformation of the traditional dolmen style but a complete replacement of it by an entirely new form strongly suggests that social change was not gradual but abrupt.

Again, the direction of this transformation was towards greater centralization of political power and intensification of social stratification. The large size of the stone mound tombs and their variety of burial goods indicate that they were built for a special class of people. The stone mound tombs, which were all comparable in size, structure, and content, must have been tombs for persons of the highest political status in a stratified society. Moreover, those persons must have been leaders in the society that was established in the North Han River Valley during the State Formation Period.

CHAPTER V

CONCLUSION

In the North Han River Valley, evidence for major cultural traditions found elsewhere in Korea, including Chŭlmun fisher-hunter-gatherers, Mumun agrarian culture, Korean-style agrarian bronze culture, and the stage of the State Formation and Three Kingdoms Periods has also been found, with some regional variations. In the following pages I concisely summarize the conclusions developed throughout this study.

The type of Chŭlmun culture that developed in the North Han River Valley belongs to the western-type tradition, which is characterized in the archaeological record by pointed-bottom, linear-designed pottery and by a mixed subsistence economy depending heavily on riverine fishing. Because of the productive ecological conditions of the North Han River Valley, which offer abundant wild-plant, and animal resources, it is assumed that the western-type Chŭlmun people living there were, like their counterparts at other sites in the

Western Region, practiced hunting and wild-plant gathering as important supplemental subsistence practices. Thus, they had no difficulty in sustaining their culture for a long time without serious social irregularities or subsistence difficulties.

It is not certain exactly when the first Chŭlmun people settled in the uppermost regions of the North Han River Valley. However, it is assumed that there had been no large temporal gap between their settlements in the Lower Han River Valley and the North Han River Valley. As indicated by radiocarbon dates obtained from the Amsadong site, Kangdong District, Seoul, the Chŭlmun people's first appearance in the upper North Han River Valley must not have been much later than 5000 to 4000 B.C., considering a distance of less than 100 kilometers between Seoul and Ch'unch'ŏn, centers of the Lower Han River Valley and the North Han River Valley, respectively.

Because of the closeness in age and distance, as well as the direct migration route, between the two areas, the Chŭlmun people in the North Han River Valley and those in the Lower Han River valley must have been directly related to each other. However, the author does not believe that one group of Chŭlmun people encompassed all of that territory. At a certain point in time, probably before 4000 B.C., an independent group of Chŭlmun people, who had branched off from settlements in the lower valley, diffused into the upper

valley, centering on the vicinity of Ch'unch'ŏn. Once they had settled in the upper North Han River Valley, they lived an independent existence in a region geographically isolated and rich in natural resources.

About the fifteenth century B.C., the Mumun people, who were originally sedentary agriculturalists, migrated into the North Han River Valley by crossing the T'aebaik Mountains and settling in many of the small plains that could be found throughout the valley. As the Chŭlmun and Mumun peoples became neighboring societies, they began to share each other's subsistence knowledge. Because the two societies exploited different resources, they were able to coexist, cooperating with each other and benefiting mutually over a long period of time. Eventually, the Chŭlmun people are believed to have been absorbed into Mumun society.

Thanks to their incorporation of the great skill of the Chŭlmun people in exploiting the rich riverine and other wild resources, the Mumun agriculturalists in the North Han River Valley came to enjoy a much richer diet than Mumun peoples in other regions of the Korean Peninsula, who primarily relied on agricultural resources. Although the Mumun people of the North Han River Valley were unable to carry out extensive crop cultivation because of the limited size of the arable plains, they were able to enjoy many other natural benefits of the valley, including a variety of river fish and many delicious edible

wild-plant and animal foods. There is no doubt that the Mumun people's successful adaptation to the environment of the North Han River Valley, a wild and heavily forested region, was due in large part to the guidance of the preceding Chŭlmun people.

Unlike the Chŭlmun fisher-hunter-gatherers, the Mumun agriculturalists must have found the North Han River Valley, deep, narrow, and surrounded by steep, rugged mountains, with only a few narrow, arable plains, a less than ideal place to settle at first. But they proceeded to move down from the uppermost regions of the valley, establishing many village settlements in small and large plains. The sizes of such settlements must have been proportional to the sizes of the plains, as has been archaeologically indicated by the clustering of sites in Ch'unch'ŏn and vicinity. After a certain period of time, as people moved downriver, daughter villages began to branch out from mother villages.

The direction of this movement was a result both of the river flow and the steep mountain barriers. As the population increased and people searched for locations to construct new village settlements, there seemed to be nowhere to go but downriver. Although Mumun people's basic social tendency was to be sedentary, migration must have been unavoidable. This is well indicated by the wide distribution of Mumun pierced-rim pottery, which was crossed the T'aebaik Mountains, spread along the North Han River Valley, and finally into

the mid- and southwestern regions of the Western Region.

Given the present condition of the archaeological record, it is impossible to specify the time frame for the spread of Mumun culture into the North Han River Valley and the establishment of a network of Mumun villages there. This must be a task for future archaeological research, as more settlement data become available. From a chronological perspective of the pierced-rim pottery tradition across the entire peninsula, we can say that the Mumun people's entire existence in the North Han River Valley occurred as early as about the fifteenth century B.C. A more detailed chronological description must await the acquisition of more absolute chronological data.

Korean-style agrarian bronze culture appeared in the North Han River Valley. When evidence for Korean-style agrarian bronze culture village settlements emerged in 1994, at Ch'ilchöndong, Ch'unch'ön, it was clear that this culture had a large presence there. This raises the question of the relationship between Korean-style agrarian bronze society and the preceding Mumun society.

At present, only a few answers can be proposed. First, unlike the Mumun culture, which had diffused into the North Han River Valley following an upriver-to-downriver route, Korean-style agrarian bronze culture diffused into the North Han River Valley from somewhere in the Lower Han River

Valley. As explained in Chapter II, Korean-style agrarian bronze culture had formed through the interaction of Mumun society with Liaoning bronze society. It first took shape in the Taedong River Valley and spread south, establishing three regional centers: (a) the Taedong River Valley in northwestern Korea, (b) the Kŭm and Han River Valleys in midwestern Korea, and the Naktong River Valley in southeastern Korea. Thus, Korean-style agrarian bronze culture reached Ch'unch'ŏn via a downriver-to-upriver route from the Lower Han River Valley, where the modern capital of Seoul is located. Further conclusions about the relationship between Mumun society and Korean-style agrarian bronze society in the North Han River Valley will require more archaeological information.

The nature of the interaction between Mumun society and Korean agrarian bronze society is interesting study in the reconstruction of the development of prehistoric cultures in the North Han River Valley. It is my position that, in the case of the North Han River Valley, the basic structure of Mumun society was not altered seriously. For several hundred years before the people of the Korean-style agrarian bronze culture entered the North Han River Valley, in the third century B.C. or shortly thereafter, the Mumun people had been well-established there. Their village settlements were adapted to the unique environmental conditions. Therefore, for the indigenous Mumun

villagers in the North Han River Valley, the newly arrived strangers would have been of little threat to their way of life. Although the newcomers possessed bronze tools and might have had a more complex social organization, they were probably not strong enough to subdue the indigenous Mumun societies and more likely merged with them. Unlike iron tools, bronze tools were not much stronger or more practical than skillfully made and adroitly used stone tools. Also, the basic subsistence economy of both Mumun and Korean-style agrarian bronze societies was sedentary agriculture.

Eventually, from about the second century B.C., a total transformation in cultural makeup, including fundamental change in sociopolitical structure, swept through all of the village settlements in the North Han River Valley. The impact of the new sociocultural forces that accompanied the advent of iron and hard-pottery technology, which spread over the entire Korean Peninsula, reached far into the North Han River Valley, as indicated by the existence of iron-processing sites at Machang-ni, Kap'yŏng County, Kyŏnggi Province, and by many large village sites at Chungdo, in Ch'unch'ŏn, where many iron tools and much wheel-made hard pottery have been excavated. By about the beginning of the Christian era, indigenous Mumun society in the North Han River Valley, which had been sustained by a sedentary agricultural economy, was transformed completely into a complex, fully stratified society.

Archaeologically, the scale of this grand shift is symbolized by the sudden appearance of a totally new burial practice, the stone mound tomb, which replaced the traditional dolmens that had characterized the indigenous Mumun people's burial methods for several hundred years. The scale and structure of these new stone mound tombs strongly support the view that they were burials of political leaders. The sudden appearance of these structures and the simultaneous disappearance of dolmens both indicate the emergence of centralized political leadership as well as social stratification. It is concluded, therefore, that indigenous Mumun society in the North Han River Valley was rapidly transformed, just as societies all across the Korean Peninsula were being transformed during the State Formation Period.

More than any other factor, iron technology and the motivation to control this powerful resource induced the upheaval of traditional social structures in the relatively short period of two or three centuries. The new social atmosphere, which stimulated a rapid convergence of competing polities, must have accelerated power struggles for political hegemony. After a period of great flux, a new, centralized political system emerged in the North Han River Valley, just as it had done all across the Korean Peninsula.

Stratified chiefdom-level societies took shape in many parts of the peninsula, and, in several areas, fully established states emerged: (a) Paekche,

in the lower valley of midwestern Korea; (b) Silla, in the Nakdong River Valley of southeastern Korea; © Old Chosŏn, in the Taedong River Valley of northwestern Korea; and (d) Koguryo, in the Yalu River Valley of northwestern Korea. However, in the North Han River Valley, whose inhabitants had enjoyed an isolated and affluent existence during the Chŭlmun and Mumun Periods, sociopolitical transformation during the State Formation Period was relatively slow. The unique geomorphological circumstances of the valley arrested the pace of change so that development did not proceed beyond the level of a local complex chiefdom within a small, confined territory.

Contrary to the situation in the North Han River Valley, the Lower Han River Valley's broad and open terrain permitted socio-political development there to proceed to the stage of full-fledged state society. Indeed, after the first century B.C., the North Han River Valley was gradually absorbed both socio-politically and culturally into the Lower Han River Valley. This eventuality, which had begun when iron technology and hard pottery entered the area, resulted in the North Han River Valley becoming part of the Paekche state.

In terms of the working hypotheses we set forth at the beginning, our investigations have revealed several points about the prehistoric and protohistoric North Han River Valley. First, in regard to subsistence, the Chŭlmun period inhabitants of the valley were mainly dependent on riverine

fishing. At this time, archaeological data supporting "adaptation by exploiting multiple resources" are lacking, but in light of the abundance of wild game animals and wild plants, berries, nuts, and mushrooms more available in the valley than in other regions of Korea, it is also reasonable to conclude that the riverine fishing was supplemented by hunting and gathering of wild vegetation. This itself would not have been unique to the valley; however, a complete lack of marine and estuarine sources such as shellfish facilitated the exploitation of the riverine resources more actively. During the subsequent Mumun cultural period and afterwards, agrarian economy increasingly became dominant in the valley, and the subsistence based on food production was richly supplemented by the riverine fishing long established there. Undoubtedly, the abundance of wild game animals and vegetation further contributed to the enhanced diet of the prehistoric valley residents.

Secondly, the circumscribed environment of the valley impacted on the valley's societal organization, especially beginning with the advent of Mumun agrarian economy. Initially, as farmers needed arable land, they moved into pockets of plains, and a new pattern of permanent sedentary village settlement emerged. In time, the agriculture-based society continued to move, with increasing population, toward a greater societal complexity. By the second century B.C., it was undergoing a process of centralization as well as

stratification, as indicated by the emergence of impressive stone mound tombs.

However, the North Han River Valley, as it became increasingly circumscribed due to saturation of arable lands and the natural limitations of the valley itself, could not evolve into a state-level society. It waited only to be absorbed by Paekche, an emerging state in the Lower Han River Basin, near present-day Seoul.

Thirdly, the North Han River Valley's geographical proximity to the Lower Han River and its connection with the latter via the Han River corridor inevitably brought it under the influence of advanced cultures emerging in the Lower Han River Basin. The process began at the end of the Mumun period , and has continued to the present, first during the Korean agrarian bronze period, and next under the emerging Paekche Kingdom in the first century A.D., Koguryo which replaced Paekche in fifth century A.D., and under all subsequent states which came to control the Seoul area.

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