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SOCIAL STRUCTURE IN A MEGALITHIC TOMB SOCIETY IN KOREA

BONG WON KANG

The focus of my paper is a reconstruction of the social structure of a megalithic tomb society in Korea's South Kyŏngsang Province (Figure 1). I examine the archaeological record to track the sociopolitical level and attempt to determine whether tombs were associated with a complex social organization—a chiefdom—or egalitarianism.

My examination concentrates on three major themes: i) chronological problems relating to the Korean Bronze Age and megalithic tombs; ii) general aspects of Korean megalithic tomb cultures; iii) the social organization of megalithic tomb society. In order to address the third theme I have conducted mortuary analysis, primarily based on artefact assemblages of grave goods and physical labour expenditures for the construction of megalithic tombs.

Editorial Note: The chronology of the Korean Bronze Age remains fluid and controversial. Korean scholars tend to date it to 900-400 B.C., but Riotto has recently argued there are two distinct periods, Bronze Age 1 (600-300 B.C.) and Bronze Age 2 (coinciding with the beginning of the Iron Age, 300-100 B.C.). See Maurizio Riotto, The Bronze Age in Korea. Occasional Papers 1. Kyoto: Italian School of East Asian Studies (1989).

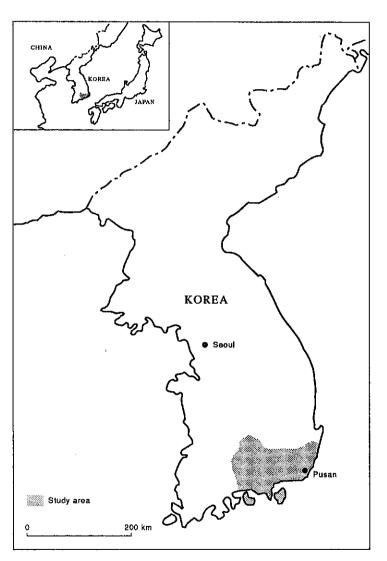


Fig. 1. The study area in the Korean Peninsula.

II

Almost all Korean and Japanese archaeologists believe that megalithic tombs are one of the most important burial types found in the Bronze Age, although other types such as stone cists, pit burials, and jar coffins also occur. Statistical evidence relating the megalithic tomb society to the Bronze Age is, however, unconvincing. So far, less than 20 of the more than 1,000 excavated megalithic tombs in the entire Korean peninsula have produced *in situ* bronze artefacts. Thus, the question which must be addressed is straightforward: if no bronze is found as grave goods, or if no bronze artefacts are recovered in any contemporary habitation areas dating back to the period of the megalithic tomb society, how can the megalithic culture be considered part of the Bronze Age?

Korean megalithic tombs generally yield few artefacts. What is found is most commonly lithic materials, such as polished stone arrowheads, stone daggers, and crescentshaped stone knives. Clearly, these do not support the assumption that the megalithic tomb society was associated with the Bronze Age. Fewer than ten radiocarbon dates asociated with Korean megalithic tombs have so far been determined (Nelson 1982: 113; Ch'oe 1982: 92). To make matters worse, as can be seen in Table I, there is a wide range of fluctuation within the dates. It appears that C₁₄ dates are not conclusive in the establishment of tomb chronology, although 3 out of 4 fall in the first millenium B,C.

Based on recalibrated radiocarbon dating, Yi has argued that the chronology of tombs must be earlier than previously thought (1978: 37). Similarly, based on artefact assemblages, Kim Chŏngbae argues that tomb construction dates go back before the first millennium B.C. (1973: 186-

198). This suggests that megalithic tombs were established earlier than the Bronze Age.

Ш

Megalithic tombs are distributed evenly over the whole Korean peninsula except in the northeastern tip, that is, except in North Hamgyŏng province. The existence of the same tomb style has been confirmed in Manchuria, in the Shantung peninsula of China and in the northwest of the Japanese island of Kyushu (see Figure 2).

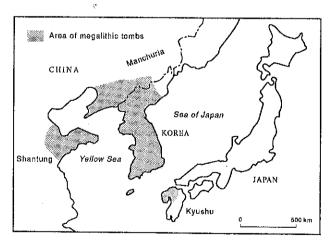


Fig.2. Distribution of megalithic tombs in Northeast Asia (after Joussaume 1988: 279).

<u>TABLE I</u>						
Carbon 14 dating of Korean megalithic tombs						
			Date (BC)	<u>Lab</u> . KAERI-95		
Meg. tomb	charcoal	2170±60	290±120	KAERI-91		
Meg. tomb	human bone	2360±370	460±470	GX-0555		
Pit house under Meg. tomb	charcoal	2590±105	820±80	GX-0544		
	Features Meg. tomb Meg. tomb Pit house under	Features Sample charcoal Meg. tomb charcoal Meg. tomb human bone Pit house under	Features Meg. tomb Charcoal Date (BP) 3900±200 Meg. tomb Charcoal 2170±60 Meg. tomb human 2360±370 bone Pit house charcoal 2590±105	Features Meg. tomb Charcoal 2170±60 290±120 Meg. tomb Luman 2360±370 460±470 Pit house charcoal 2590±105 820±80		

Korean megalithic tombs are small (for examples, see Im *et al* 1987 and Cho 1979) when compared to European megalithic monuments. For instance, the mean length of capstones of recently excavated tombs is 1.71m, whereas that of cairns in Orkney, Scotland, is 24.37m. A few large megalithic tombs have been reported in the Korean peninsula (for example, one has a height of 4m, length 5.5m, width 4.5m, and weights of between 50 and 150 tons; Joussaume 1988: 278, 295; Kim Wŏnyong 1986: 95 and, as "Northern style," Lee Ki-baik 1986), but these are rare.

It has been suggested that European megalithic monuments functioned as more than just burial locations (Renfrew 1975: 199). Although Nelson (1982: 126) has suggested the possibility that the northern style of Korean megalithic tombs may have served as territorial markers rather than as burial monuments, most Korean and Japanese archaeologists agree that the basic function of the tombs was for burial.

Stone cists are not considered megalithic monuments. They have been regarded as a common burial type, dating to the same time period as the tombs. There may be a direct or indirect cultural relationship between these two different burial types, but there remain some chronological and contextual problems that will be explained later. For the sake of interpretation, I will introduce the basic characteristics of stone cists and their relationship with megalithic tombs. The most common form looks like a stone box. The funerary area is almost always underground and the small chambertomb consists of stone slabs, of drystone or composite construction. The cist lies beneath a covering slab. Cists are very small; sometimes they are reminiscent of a secondary burial, although no cist containing human skeletal remains has been found (Chi 1984: 233).

202

The cists are evenly distributed throughout the Korean peninsula. Sometimes they exist at the same sites as megalithic tombs. Fewer cists have so far been investigated than megalithic tombs, for since almost all were constructed underground any remains are less visible on the surface than tombs. Some sampling biases are definitely related to the reported ratio of cists to tombs, so the total number of cists is probably greatly under-represented. relationship between tombs and cists consequently needs clarification. Generally speaking, tombs are bigger than cists and may have required a larger labour force to build them. However, as I have noted, Korean megalithic tombs do not usually contain many grave goods, and those goods which have been recovered are in the main unimpressive artefacts such as broken pieces of pottery, polished stone daggers and projectile points. Rarely are jades discovered. Sometimes, stone artefacts such as polished stone daggers and arrowheads are associated with cists. importantly, however, cists frequently yield exotic and elaborate grave goods such as bronze daggers, mirrors,

belts, and shield-shaped artefacts (J. B. Kim 1986: 209-223).

Some other questions should also be addressed. First, as megalithic tombs and stone cists have long been regarded as the predominant burial types in the Korean Bronze Age, their chronological relationship needs to be re-evaluated. Some claim that the cists predate the tombs. Because of their structural similarity, some have suggested that tombs developed out of the practice of building cists (eg, W. Y. Kim 1986: 96-97; Joussaume 1988: 279). According to Ch'oe (1982), both cists and tombs were contemporary burial forms in the Bronze Age. The tombs, however, appear to be earlier than cists, because of their artefact inventories (Choi 1983: 89-90, 98). Choi's inference seems intuitively more reasonable than explanations based on structural morphology, so the chronological span of megalithic tombs should extend back earlier than that of the cists.

The proposed relationship between the two types in terms of their respective socio-political context is also problematic. For instance, Choi states:

...the stone cists are greatly outnumbered by dolmens but yield artefacts which indicate much greater wealth and luxury. These artefacts include items such as bronze daggers, mirrors and shield-shaped artefacts, and thus indicate a highly-developed bronze casting technology as well as high social ranking in the individuals in whose grave they were placed ...We can note that if stone cist builders were contemporary with dolmen builders, and if there were no conflicts between them, then apparently the stone cist builders were superior to the dolmen builders in terms of prestige and technical advancement, and they may have assumed hereditary status as political or religious leaders [Choi 1983: 98-99; my italics].

Thus, when comparing the quality of bronze artefacts from cists with grave goods from tombs, it appears that the culture of the stone cist builders was more advanced than that of the megalithic tomb builders. Therefore, there is an

interpretive contradiction between the stone cist culture and the megalithic tomb culture in terms of the sociopolitical context. This may also mean that the tomb culture was not directly related to a ranked society.

If we are to prove that the tomb societies were organized at a chiefdom level, we must determine that the chronological order of tombs was earlier than that of cists. The two societies must be examined separately. If the two co-existed at the same time in Korea. I do not consider it possible to postulate that the tomb societies were chiefdoms.

\mathbf{IV}

2.04

Sixteen out of 78 excavated tombs (20.5%) have produced one or more artefacts (Table II). If the broken sherds are excluded from the total inventories (since there is a possibility that natural and cultural transformations may have affected the intrusion of these sherds in the tombs), the number of artefacts deposited is much lower. In total, nine artefact types have been observed. No traded artefacts are reported. Although five jades were recovered from the Okpang 2 grave, it is unknown whether these were locally made or traded items. Unfortunately, no skeletal remains have been discovered, and so it is impossible to determine any association by sex or age. Differences in artefact quantity have been observed. Some individuals possessed a relatively large number of grave goods (Table III), yet these goods tend to be local not traded items. Milisauskas (1978) regards the polished stone artefacts as indicators of a ranked society:

Polished stone tools were probably valued as prestige items and functioned in the social and ideological systems of the culture rather than being mainly utilitarian woodworking tools... The polished stone tools that were deposited in graves required more time to manufacture than endscrapers

or other chipped-stone artefacts. [Milisauskas 1978: 114-1151

However, when stone artefacts are compared to bronze artefacts, there is a large qualitative difference. The processes of manufacturing bronze require techniques that are more sophisticated than those for stone.

Kang: Social Structure in a Megalithic Tomb Society

TABLE II Megalithic tomb site locations and grave goods

1				9 9-	
Site	<u>Latitude</u>		<u>tombs</u>	No. with artefacts	
Pusan, Tongnae, Oryŏndong	35°15'	129°07′	xcavated 1	0 к	im & Chŏng 1973
Ch'angwŏn, Chindong, Sŏngn	35°07' aeri	128°29'	1	1	Pak 1958
Chinyang, Taep'yŏngni	35°13'	127°57'	14	7	Cho 1979
Koch'ang, Namha, Taeyari	35°38'	127°58′	4	2	Im <i>et al</i> 1987
Koch'ang, Namha, Murengn	35°39′ d	127°54′	33	3	Im <i>et al</i> 1987
Koch'ang, Namsang, Wŏlp'yo	35°37' ŏngni	127°43'	3	1	Im et al 1987
Hapch'on, Taebyŏng, Yokp'y		128°00′	16	2	Im <i>et al</i> 1987
Sanch'ong, Tansŏng, Kangnu		127°58'	6	0	Cho 1987
Ch'angyŏng, Changma, Usanni	35°27'	128°29′	cluste	0	Kim & Yun 1967
Changwŏn, Chinjon, Koganni	35°07'	128°55'	cluster	sherds	Kim & Yun 1967
1					

^{*16 (20.5%)} out of 78 tombs (excl. clusters) producedgrave goods.

TABLE III								
Artefact inventories for Korean megalithic tombs								
Pottery A B	Poli C	shed s	stone E	artefa F	cts G	<u>Oth</u> H	<u>ers</u> I	<u>Total</u>
Sôngnae#1 sherds Okpang #2 1 Okpang #3 Okpang #7 Okpang #8 Okpang #9 sherds Ohun #2 Ôhun #5 Taeyari #1 Taeyari #2 Sanp'o #3 Sanp'o #8 Sanp'o #8 Sanp'o #26 P'yôngch'on #2 Yôkp'yông #5 sherds	1 1 1 1 1 1 1 1 1	28 42 1 13 1	1 1 1	1	1	5	1	1 9 1 4 2 0 1 1 29 43 2 14 2 1
Totals 1	10	86	4	3	1	5	1	111
Key: A: plain B: decorated C: daggers	E: 0	rrowh rescer hisels		ives	H: j	ground Jade Jet sin		

Although some distinctions in the quantity of grave goods has been noted, it remains difficult to argue that the tomb society was necessarily ranked. It is clear that "even in autonomous villages, chiefs may sometimes [have been] sufficiently honored or wealthy to be buried with sufficiently more and finer grave goods than anyone else" (Carneiro 1981: 53).

If the presence or absence of grave goods is a major criterion for determining whether or not a ranked society

existed, a number of speculative but important assumptions may be made. First, the tombs themselves were not necessarily reserved only for high status individuals (the chief and/or their family), but could also have been used by lower status individuals. Even if there was a ranked society associated with megalithic tombs, the tomb itself cannot be a symbol or direct indicator of the existence of a stratified society. Second, many Korean megalithic monuments have been reported, yet there are no descriptions of a standard "common people's" tomb style. Thus, it can be assumed that a sociopolitical hierarchy is not associated with tombs; rather tombs may have been a common burial type during the period.

V

Expenditure of energy during the mortuary ritual has been regarded as a significant factor to identify the rank levels present in a society. A number of archaeologists (Binford 1971: 21; Peebles 1974; Tainter 1977: 332) agree that there is a strong positive correlation between the higher social status of a deceased individual and the disruption of normal community activities and greater amounts of corporate involvement in his or her funeral. According to Tainter, evidence of energy expenditure should consequently be reflected in burial facilities (the size and elaborateness of the internment) and grave goods. According to Peebles, the underlying assumption is that "persons who are treated differentially in life will be treated differentially in death" (1974: 68). Further, it has been argued that the amount of physical labour required to construct megalithic tombs is a good indicator of the existence of a hierarchical society. If this is true, a rough estimation of the volume and weight of the capstone in relation to labour expenditure might provide information in

regard to social positions and differentiation in the megalithic tomb society.

It has been suggested that 15 to 20 men are required to pull a 1 ton weight, so even a modest 3 ton to 6 ton stone would require approximately 80 to 100 men working cooperatively (Hawkins 1965: 65-68; Kim et al 1977, cited in Yi 1982: 41). It is possible that frozen ground or the use of logs could reduce the manpower required or that draft animals would have made the transportation of capstones much easier. But there is no evidence for the presence of draft animals, and there are some doubts that these experimental figures are valid. It is, nonetheless, certain that the construction of a megalithic tomb took a tremendous amount of labour. Based on the estimated number of work hours, Korean archaeologists and historians have claimed that the megalithic tomb society was hierarchical (Choi 1983, 1987a, 1987b; Yi 1984: 55; Yi 1982: 28-47; Lee 1986: 12-13; Yi 1990: 31-32). In the case we are considering, 43 capstone cases are available. It is not possible to precisely determine the capstone volume, but to determine approximate volumes, three dimensions (length, width, and thickness) are multiplied. The data is summarized in Table IV. A comparison of Korean and British Orkney cairns reveals that the Orkney carins are significantly larger and thicker than those of Korea (cf Fraser 1983: 354, 357). As I previously mentioned and as can be seen in Tables IV and V, Korean megalithic tombs are small in comparison to European monuments.

TABLE IV

Capstone sizes

Size of tomb	Frequency	Percentage
0.01-1.32m ³	$\overline{27}$	62.8%
1.33-2.64	9	20.9%
2.65-3.96 3.97-5.29	5	11.6%
3.97-5.29	2	4.6%

Total number of cases: 43

Mean: 1.382m³ Min: 0.022m³ Max: 5.28m³

Standard deviation: 1.3314m³

Source: Im et al 1987

TABLE V

Dimensions of capstones and graves

(Unit: meters) Capstones Graves mean s.d min max mean s.d min max length 1.71 0.65 0.5 3.2 1.13 0.30 2.60 width 1.08 0.32 2.33 0.440.58 0.24 0.20 1.40 depth/ 0.50 0.30 0.07 1.23 0.26 0.17 0.07 0.85 thickness

Source: Im et al 1987

Based on the great amount of energy expenditure required to construct British monuments, Colin Renfrew has asserted that societies of a chiefdom level of complexity had emerged by the late Neolithic era (Renfrew 1973). Other European archaeologists, however, disagree, claiming that even the largest monuments such as those in Wessex may not be related to a ranked society (Bradley 1984). As Tainter

(1977: 332) points out, though, the evaluation of energy expenditure does not provide an absolute criterion for all problems of mortuary analysis, although it gives an objective measurement that can be used to make inferences about social differentiation in prehistoric societies. O'Shea also noted that "at best, levels of energy expenditure inform us as to the minimum level of ranking differentiation operating in a given society, and any further claim for the measure cannot be accepted" (1984: 18).

In Korea, some megalithic tombs do indicate a large labour investment. Overall, though, the small scale indicates that this is not the case. Furthermore, it is clear that we cannot exclude the possibility that the construction of tombs represents co-operative volunteer work, either within a village or between local groups, without any recourse to a centralized authority (cf Joussaume 1988: 298; Pearson 1976-1978: 88). Thus, the suggestion that increased labour expenditure correlates with ranked societies cannot be justified.

VI

Based on Service's socio-evolutionary model, some Korean scholars (Choi 1983; Yi 1982; Yi 1990: 31-32) have concluded that the megalithic tomb society was hierarchal. This conclusion is based primarily on the assumption that the construction of tombs implies the power to draft workers to erect the structures, the presence of specialized craftsman, sufficient supplies of food to support workers, and a relatively efficient bureaucracy to administer the entire operation. These features are, of course, representative of a chiefdom, as Choi accepts (1983: 94-95).

Some polished stone daggers and arrowheads found in Korean tombs do show great skill and represent a major time investment on the part of their makers, but even so they do not support the theory because they are still not technologically comparable to bronze artefacts. The opposite is true in the case of stone cists, which would seem more supportive of a ranked society. The seeming contradiction between artefact assemblages in tombs and cists has not yet been resolved. Yet it is clear that there is a critical difference (cf Choi 1983: 89).

Overall, the megalithic tomb society in the southern portion of the Korean peninsula lacks the characteristics of a chiefdom. In the first place, there is an absence of features associated with permanent leadership. There is no significant use of luxurious grave goods, no evidence of internal or external trade, and little to reflect institutionalized politics and periodic ceremonies. Based on the available evidence, we can say that the tomb society was essentially egalitarian in nature.

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