

Introduction



aborigines only wearing a short pant.”

I should have my eyes awaked towards culture through travel. People deviating from their daily life could be friendly felt in each other. And, Friends live in various countries, have thought in different and have shared human life. They are all culture creators. Beautiful scenery is still vivid in my eyes. The next scene took my breath away a few times. People drew round to press the shutter and stare at “dancing Australian

I was also at there to take pictures like those people across them. What did modern people eyes including me focus on what aborigines have fun! Maybe, aborigines being fun stimulates their curiosity or beauty as itself. Otherwise, they should try to look deep in themselves something lost.

Aborigines show us that they still live up to nature like human inborn figures in many aspects even though they are modern people. On the other hand, modern people standing cross them and looking at the dancing aborigines live in the other world. We should stand close to prehistoric times as space of both groups.

I met a culture after a few years, which is the most Korean and world stuff. I might say right that I should have lived with this culture in early times without any of understanding its value. I let secret door open to path the culture.

-To readers-

Why I am looking for dolmens that are symbolic of death? Secret is what I more ask for me. Here contains my journey to search for answers.

Dolmens have been waiting for a few thousand years to let your eyes open toward the truth in history. Dolmens distributed in the world, are unwrapping off its mystery by great scholars until now days. But, dolmens have still remained to be unsolved as magic to the public considering study of dolmens beyond 150 years.

First, there is no documentary data of dolmens culture including its construction methods. Second, there is no deep consideration of the original dolmens structure, how professional group related to dolmens could solve the problem without understanding its original structure. Third, the study of remains of dolmens has been progressed in reflecting social, political and economic logic by their intent, mistake and inertia.

Those social climates make dolmens research weakened. So, the dolmens are still wrapped in riddle with weakened educated sense of sight. It looks like lying beyond the boundaries of our knowledge.

But, I see that dolmens have directly reflected its society on the field. I shall answer the dolmens construction through archaeological experiment on the ground works. Speak freely, I think that dolmens issue be answered by realistic technique, proofs and with my imagination. Dolmens should never be unsolved one anymore.

I desire that dolmens stories make readers be happy as the next passage. The next passage was written by “¹ Kim Gu” “I completely satisfy if our nation’s wealth is enough to live our life, our power is sufficient to defend the others' invasion. The greatest culture is only one that I would like to have. The power of culture gives us happiness, and it also provides felicity to the others.”

¹ “Kim Gu” who was one of the greatest Korean readers wrote the passage. " My wishes of Bakbum Diary”

Prologue

Dolmens carry the world crossing curiosity.

Dolmens stories are greatly worth of making histories and rewriting the histories' book.

So, I am afraid that I write information written possibly distorting the truth even though there are a lot of photographs and objective data. But, I am not able to turn a blind my eyes. Many people know "Honesty is the best policy!"

I am not a professional scientist, historian and cultural anthropologist. I am a professional who have got a name of amateur. I worked at the Go-Chang dolmens sites as an English guide for several years. It made me study dolmens culture related. I observed dolmens over and over and over. I breathed with dolmens and I had got a passion by myself about dolmens. I asked myself the next question. What made those monuments for? What did it make different shapes and structure? What were the construction methods? Were there any reasons to build it as values with exorbitant public power? Why~? What~? Where~? How~? Those questions could be asked in the past and current and it will continuously be asked in the future. The answers are not far from us. Dolmens are always of it.

Dolmens should dream about immortality to endure for a few thousand years. It is still standing its original places to wait new millennium promise.

"History faces the future" a word, which is quoted by lot of historians. History is the past, present and future. And yet, I do not want to follow up ancient route that prehistoric people had walked.

Human being has been traveling to the future like the law of inertia, which does not look like restoring. Human being has ridden existing spaceship to go to the future. But, let us bring it up as common culture and communities of Korea and the world to explore fields for base manure of the current and future.

We make dolmens as a common culture between Korean and the world issued that we should explore its being in our sphere.

Dolmens have been understood in the wrong like intangible things, which are tangible ones. Let us face the people of dolmens makers through "facing stones." We can

possess dolmens culture if we carry our five senses out ourselves.

We should take more sweet scent than rose scent when walking through the wild rose trail. We can hear the flutter of wings of various bugs including bees when you close your eyes and gather your breath. We should hear whispers of grass leaf and grass insect not known its name crossing the flap wings of bugs when you indulge in its beauty. Its strong impression such as feelings should have gone in a moment when you open your eyes or speak out. However, do not worry about it. You should feel it again if you close your eyes and hang onto it again. I hope readers see dolmens through eyes of their mind. There is something with dolmens culture that the others should not get touched.

I hope readers feel dolmens through their mind eyes. There is pleasure in dolmens culture that they can feel it. Let us get into the pleasure through his eyes.

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Behind stories

1. Talking about dolmens

A. Dolmens functions and the origin of a word

I find it is difficult and dangerous to define a word because the dolmens are distributed around the world with various types. But, there is some common sense, which is agreed by professionals of dolmens. Most of dolmens generally consist of upright stones with diverse shapes and capstone.

At least, people agree that dolmens functions are tombs if dolmen has skulls or burial chamber. Sometimes it is considered as monuments to be linked with worship toward their ancestors or the sky including nature if dolmens do not have stone coffin.

Last, dolmens names are different ways of following each culture characterized by their languages, regions and nations.

I will introduce dolmens name being Korean standard and diverse ones around world.

Korean calls it "Go-In-Dol" which name is the standard language in Korea; it is also called "Ji-Suk-Myo (Zhishimu)", which is from Chinese expression. Dolmens are well known to the public as stone grave. Chinese call it "Dashikemu or Shipeng" " which is located at SukBung (Shipeng) Mountain.

It is called "Dolmens" in Europe and India. They also get a unique name of dolmens. Generally, they call it "Dolmens or Cromlechs" in Europe. The origin of dolmens word uses in the Celts lives in north France. And Cromlechs come from Wales of England. Dutch call it "Hunebeds" and The German calls it "Hünenbetten"

Reference: Dolmens are also called ' Dokbau, Goenbau, Turtle-bau, Toad-bau, Frog-bau, The Great Bear-bau and Janggun (General) bau. (Dok means stone, Gwaen means support, which is supporting the others, and Bau means is megalithic stone in Korea) Those names of dolmens are called among the people considering its shapes, and related with arrangement and some local legend. For example, it is called "Mamoas" at Gallia in Spain. It is called "poulnabrone" (The hole of the sorrows) in Ireland. It is named "Spinsters Rock" in England, and it is called " hero stone" in India.

Dolmens mean to understand as a "stone table". European archaeologists have understood it covered with soil but some of stone coffin was disappeared through the soil erosion. So, there are a lot of people to see the next tombs in illustration as a dolmen. There are big gap to view dolmens periods, ages and its shapes.

Even some of western people, who are not used to dolmens culture, understand it as a boulder. But, it is the cases of misunderstanding. Boulders' mean is so vast range that we use it distinguished from dolmens. Dolmens have been found in India, Africa, Middle East and the other regions; it must be called "dolmens" or their unique languages.

Reference: <http://faculty.ucr.edu/~legneref/bronze/megalith.htm#DISCUSSION>
: <http://www.stonepages.com>
: http://usuarios.lycos.es/Celtic_Galiza/history.html
: <http://www.tamilnation.org/heritage/dolmens.htm>

2. The structure of Dolmens

Talk about the structure name of dolmens

The structure of ²Baduk shapes dolmens



Dolmens picture is taken from side. The top of left photo is capstone. Support stones are in the middle. And, a lot of assistant stones are among the support stones and burial chamber. There should be foundation stones under upright stones.

The right one is copying the actual dolmens, which is not yet exposed to confirm the full structure. But, foundation stones and burial chamber are drawn as my imagination in the illustration. Only we know when it is excavated to expose in actual. But, we should approach its structure following next data.

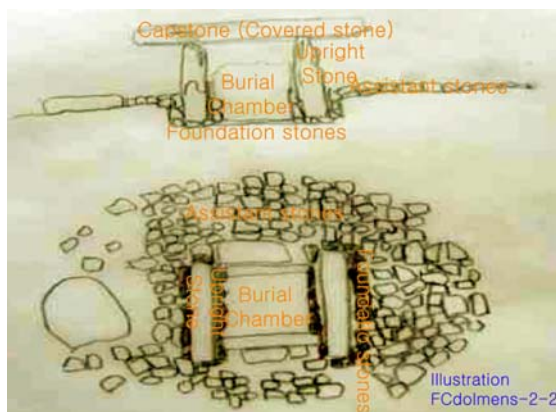


Dolmens underground structure was excavated in 2004. The left scene is appearance after removing the soil around dolmens, which is about 60 tons left by crane. It only is an example of one type of dolmens structure. We can guess dolmens sizes differ from each other, and it shows stone coffin including foundation stones among the upright

² Baduk is traditional game in East Asia like Chess.

stones. The total underground structure is similar to square room. The right one is a scene looking down one of the support stone. We can confirm it with eyes. There are a lot of foundation stones under the upright stone. We can guess prehistoric people put down the basic stone under the supporting stone. The structure of table style of dolmens

³Illustration-2



It is a plane figure and a front view that the result of digging at Kangdong County in Pyongyang City of North Korean. I drew the front view picture as an aspect of top stone being lost long time ago. We can confirm there are a lot of basic stones around prop stone. It also assists the upright stones, which shapes are slabs, and the slab stones support capstone.

The total chamber of tomb is a round shape. At all, the house of dead men: Dolmens structure looks like a dwelling of live men's style. What does it mean? I will see it at the prehistoric people residence space.

Not all dolmens do have a capstone, upright stones, burial chamber, assistant stone and foundation stones but most of them have those materials when building time. There are dolmens, which lost its capstone or burial chamber. I introduce only the general Baduk shape of dolmens and table style of dolmens in here. We should see how many types of capstones and underground structures of it in the main subject.

Dolmens name almost exceeds in 30 depending on its shapes such as capstone, character of support stones, burial chamber, nations and research scholars. This shows that studying of dolmens is brisk but it also disproves of the result not being arranged in integration with the other aspect.

³ National research institute of cultural heritage- archaeology dictionary- Dolmens of Moonhuong village (Suk-kyoung Jun, Study of Joseon Antiquities 1991-4, 1991)

3. Classification of dolmens forms

Dolmens can have its name following the distributed district like that we call Seoul persons who live in Seoul, and we name Busan people who live in Busan. Dolmens character tells the difference and similarity in region such as Seoul people and Busan persons have their language character. But, we must think the various names of dolmens like those.

♣ Classification of dolmens form in Korea ♣

Standard classification	South Korea & North Korea		
Outward shapes	Table style	Baduk style (Gi ban shape)	Gasuk shape
Distributed area	Northern types (O-duck ri shape)	Southern types (Chimchon ri shape)	Mukbang-ri shape

Chart-1

♣ Detailed Baduk shapes or Classification of character by Gi ban, Gasuk and etc shape Dolmens

Burial chamber type	Upright stones existence or numbers	Forms damaged by men or nature	The boundary form facilities of chambers protected by assistant stones	A state of chamber's exposure
Burials chamber joined by slabs	None upright stones' shape	Slope shapes	Round shapes of protected chamber:	⁴ Ground stone coffin shapes:
Burials chamber of round shape made by stones	5 Support stones shape	⁵ Tapa- shapes		
Burials of hollow shapes	6 Support stones shape	⁶ Gulsuk-shapes	Rectangular shapes of protected chamber	
Burials of Weosuk shape	Multi support stones shape			

Chart-2

There are coming out the other names such as Gochang, Gangwha, Hwasoun, Jeju shape of dolmens and so on.

⁴ Ground stone coffin shapes is coffin made by stone was disclosed

⁵ Tapa shapes is a stone pagoda shapes

⁶ Gulsuk-shapes have got some hole.

Academic circles classify table style of dolmens that have their chamber on the ground, the outline of dolmens shapes is similar to table. And Baduk shape of dolmens assort that have got burial chamber under the capstone. Its appearance looks like Baduk board like a chessboard. But some professionals see Baduk shapes of dolmens as Gi-ban shapes. Otherwise, the others understand Baduk form of dolmens is the same shape of Ga-suk shapes of dolmens.

I believe it happen by inspectors' viewpoint and Chinese character according to the shapes of burial chamber being. Dolmens are also called "stone slab shapes and stones piled as a shape of round. Here in Korea, we classify numbers of support stones and existence of upright stones.

There are also slope shapes of dolmens formalized by losing its a few of upright stones, capstone on the covered stone looks like pagoda shape and Gulsuk shape of dolmens resembled a manger of cows or pigs which is hollowed a little bit. And, dolmens are structured without exposing upright stones before digging it out, the case of uncertified support stones though the excavation, covered stone used by Chinese "dubga ga"(蓋) is also none-prop stone of dolmens or set shapes dolmens (Noin shape dolmens), dolmens of Mookbang ri shape confirmed in Pyung-nam in North Korea.

The others will be omitted

We must deeply think the next name of dolmens, before looking the dolmens features, the name of northern or southern type of dolmens. It has been introduced that dolmens placed in the North of 'Han River' and southern style of dolmens located in South of 'Han River'.

To classify northern and southern type of dolmens were divided by Japanese scholar whose name was Doriga in 1916. But it was used to break up Korean by malicious intentions during the Japanese Invasion. North Korea, a representative scholar, Dr. Kyang June, Suk brought it up. In fact, there are many of northern type of dolmens in North Korea than South Korea, but it is 5% more or less considering all of dolmens. There are also more Baduk shapes of dolmens in North Korea, Northeast China than table ones. The previous study of dolmens focuses on table style of dolmens. And, looking around world, there are various types of dolmens. Even table style of dolmens, also called "northern style" have found in the Southern Hemisphere such as "Ethiopia,

Madagascar.” As it is, we should not call “northern and southern type of dolmens” because it is wrong information suggested by impure intention. It means there are placing limits to use some of dolmens name divided by places.

Ground dolmens are also called “Ground stone coffin types exposing the burial chamber on the ground. But, there are some question “how can we call “Ground Dolmens” which do not have the ground and have the ground made by assistant stones of upright stones.

And, there is the same question that called the name of dolmens, which lost its capstone and demolished dolmens by harvesting or eco-system. And excavated one doesn’t have any chamber of burial. What should you like to call ambiguous ones and an oddly shaped stone?

Chapter2. Dolmens! I explore the original dolmens

1. Searching for relating to the original dolmens

Let us see the next dolmens.

Location: Gochang County in Korea

The capstone looks like to be a Baduk type. And the upright stones belong to table style of dolmens. Professionals related in this field, tell us the process of dolmens transformation and spread through this one. Its dolmens shape is mingles with both types



Location: Gochang County in Korea



It is the same dolmens. The left photo looks like table style of dolmens but right one is similar to Baduk shape of dolmens. The general scene should be recognized of ground stone coffin that expose it burial chamber. But, there is no close stone or door stone. The left dolmens upright seems to consist of one support stone shaped of slabs, but it consists of two of slab stones.



Location: Gochang County in Korea

On the other hand, the next dolmens appearance is another shape. Namely, covered stone shape belongs to table style, but support stones, which are short and thick, belong to Baduk type of dolmens compared with table ones. It shows the general shape of Baduk ones. I explain the name of dolmens and word of dolmens. We

just see there are various capstones and (under)-ground structure. Please, do not call it some type or shape of dolmens. We can understand dolmens easily without relating to the name of dolmens. It is difficult to integrate the name of dolmens as it is separated around world. Which has different culture and languages and professionals have vested right.

Those distributed ways will be expanded. But, at all, they are dolmens even though they are divided by the character of covered stone, support stones and understructures of burial chamber and so on.

I use general names of dolmens that have called table style of dolmens, Baduk shape of dolmens and covered stone shape of dolmens, which are known in Korea but cannot agree by all of professional of dolmens

Alternative of dolmens construction explains that is the same process like house building on sand without thinking of those factors.

Here I introduce many of dolmens, structures and dolmens construction methods.

Actually, we guess the dolmens appearance from current structure. Let us consider how the dolmens are on the whole. Dolmens construction of table style is generally well known in public. After piling soil up to support stone, they roll up the capstone that introduce in dolmens guide catalog. And then, remove the soil piled.



Illustration FCdolmens-3-1~4



Illustration FCdolmens-3-2



Illustration FCdolmens-3-3

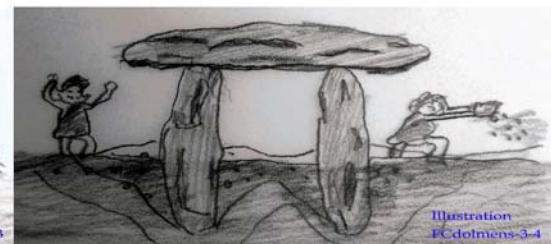


Illustration FCdolmens-3-4

“Prehistoric people dig out the ground to stand support stone shaped slabs and then they pile soil up to support stones and then roll up the capstone, they remove the soil of

piled one”. It looks like reasonable, but many of professionals miss a few of points of its original shapes.

Where did they fetch the soil piled up to top of support stones? What did make them remove soil piled after rolling up the capstone? Answers are introducing at the real experiment. All of dolmens are placed on the ground except a few of them placed in the air. The public thought it as standard dolmens in these days. But the dolmens that we believe like a standard one are not a standard. It is just one type of dolmens.

Dolmens image that we have thought seems never to be changed with easy. But I hope everyone should see various types of dolmens including existing one. When we understand all of dolmens images we should get it more exactly.

Location: Gochang County in Korea

Today's Dolmens have gotten its original shapes as if dolmens are built in recent.

Now we will follow to chase the parameters of dolmens around, if we understand its original shapes. We can approach it objectively.

Faced dolmens all of every days for 4 years, I have continued to search for it to use my imagination. But, dolmens never show its appearance with easy.



Dolmens have begun to reveal the secret stories related with construction by a coincidence following the time. Dolmens said to me “Look at me in love, here are a lot of secrecy that you try to find out.” And unwritten identification of dolmens kept asking me that I should give up my sense of value fixed by social system or education and perversion. First, I have considered the difference of exposing its support stones.

Most of dolmens upright stones are still covered with soil, partially disclosed upright stones. Why are irregularly exposed of its support stones. Dolmens keep hidden its secret of building methods to see in the next example. Let us explore dolmens construction in prehistory.

I touched a lot of dolmens, this dolmens site never get any shabby and rough things.



Footmarks made by people of prehistoric time be grand never erase. Its impression holds the running times for a moment. There are many of black pearls placed on the field of rice and dried field with a good look.

So understanding it is live path of prehistoric time. The average weight is beyond 20 tons and the appearance is in others. Touching and feeling one by one, we would meet people who built the dolmens remained over 2000~7000 years old. And we can also see history of geology through the upright stones and dolmens exposed of its burial chamber.

We understand support stones exposed high is a dolmen in early, it is reproducibly scaled up the same image by schoolbooks and newspaper and magazine as visual multiplex broadcast. But, there are fortunately many of dolmens in original shapes of it even though a lot of dolmens are vanished and disappeared. Many of dolmens remain as exposed of its support stones, which are placed in mountain without demolishing by people's action. We often find the capstone covered by soil. Why the exposed part is different and what make the capstone is covered with soil?

Location: Gochang County in Korea

The dolmens figures are in one of world heritage sites, 80% percent of dolmens remain as original shapes. Dolmens almost never show its upright stones without harvesting and excavating. One by one, we should draw faces of buried people that they should have lived their own life and different life in the same society as if dolmens differences are in there. I could find capstone rolled on the ground and set it down without removing soil piled on purpose. We have seen a few of special dolmens, which made us thing dolmens lifted by magic. You exclaimed yourself how they roll up the dolmens when you see the next dolmens characterized in unique.



Location: Gochang County in Korea

Transformed table style of dolmens faintly comes into sight over the Baduk shape ones.

There is not anymore natural forest which well woodened by scrub trees among the dolmens, cut the scrub trees and coming-and-going by many people. Upright stones are exposed about 50~60cm in the distance.



Location: Gochang County in Korea

This is Baduk shape of dolmens known by us. But, upright stones are exposed of its ones around 130cm like a table style of dolmens.

The next scene is telling the support stones covered by soil and even the capstone is covered with soil.

Location: Gochang County in Korea



The scene is an aspect where digging at Seonun Temple in 2004. Look at the arranged dolmens in low. You can confirm the ground level, which is standing trees before digging up. And, reconfirm it was covered with soil without exposing to the sun indirectly. So the color of stone is white not being gray or black. To say it again, we can read the difference of disclosing dolmens upright stones on the ground and capstone covered by soil. To be known of different appearance and name of dolmens, it tells us its relationship with soil erosion and piles.

People who have lived in modern cities are possible never understand it without motivating of natural systems even they know the soil erosion and accumulation. It is difficult to get detailed information of soil ones if they are not professionals of linking with this field. They should not understand it because soil variation has changed in slow and it is almost never recognized in visual at short time. But, soil erodes and piles including generates again.

As a matter of course, those processes are science that makes the public understand as an image with ease. But, there is lot of limitations to get the detailed information of soil erosion and accumulation data because of much of intermediation variables. Understanding all of those theories, let us get into the stories.

2. Stories of soil accumulation and erosion

A. Soil pile

Regrettably, I cannot find the date for soil piles in numeral value. It exactly depends on landforms and regions, concurs with soil erosion in magnitude. It is only different the data where is piled more or less so that we should study in getting date of soil accumulation and erosion in near future. For example, it is including much of soil when muddy water is flowing during the heavy rain. And it is the proof of soil pile that we usually call it remains research. I mean historic relics underground made by soil accumulation. It is common state of things that happen in usual. We can understand conditions sometimes confirm it, which appeared in many of remain sites covered with soil.

B. Soil erosion



Location: Gochang County in Korea

Fortunately, we can see soil erosion in visual a lot of area. Let us see the soil erosion around us.

First, I introduce it around dolmens.

It is an underground structure and a covered stone in the next picture. More import viewpoint, roots of pine tree are coming out of ground.

Trees are originally bringing their trunks, roots down having effect on gravity or geotropism. The roots of trees are exposing by soil erosion by rain. It is growing toward underground after sprouting. We see the process of soil erosion increase following environment changed in today.



Location: Pohang City in Korea

We can confirm the appearance of soil erosion in space of different regions. I think that forests around dolmens have been exposed her skin at least two times in Korea. First happen might take place during the same time of dolmens construction by making routes of rolling

the capstone used in timber logs.

Second happen, we may know that all of Korean lands were exposed without trees during the Korean War and its process of modernization as we saw it documents program. Sometimes it happens by woods fire. But, the biggest causes of soil erosion happen by people's behavior. It is continued to happen if there is no grass or tree.

We influence where dolmens placed, have an effect on dolmens by making burial, paths of mountain and harvesting around it indirectly or directly.

Location: Gochang County in Korea



We should see the ground level to use photo before cultivating farmland in a hillock. Most of hill consisted of trees was worked between 1970~1990 in Korea. The original ground level is protected by mound shaped of the representative tomb in Korea. We understand it is the level before working farmland. It seems to be caused that people act has left soil erosion after

farming on the hill for 20~30 years.

The level difference of ground is around 40 ~100cm. Here I introduce that soil erosion data. But, it is possible that discrepancy be there because of various parameters. I think data presented by professionals of soil or research institute of soil is not a big error ranged. But, I reconsider the possibility that the range of data missing is different in special region or status of rainfall. Here, I put or quote the date of soil erosion rate which is similar to "Korean Peninsular" considering weather conditions and land formations. We check why there a lot of dolmens covered its underground structure until now or what makes exposed parts difference such as its height of support stones.

“⁷Everywhere in the world where people change a natural ecosystem into agriculture, the land degrades.” “Soil formation is roughly an inch (25 mm) in 1000 years or 600 t/ha. 1 ton/ha per year is common for natural ecosystems but under cultivation, soil formation increases somewhat. 'Sustainable' agriculture without plowing achieves annual soil losses of around 10t/ha for flat land, to 40t/ha for land with 10% slope, which are still remarkably higher than natural replenishment.

“Soil loss in China averages at 40t/⁸ha/yr. New Zealand lost 30 mm in 100 years of farming.” Soil erosion and accumulation take place by wind, (rain) water, and glacier and so on. Specially, it is up to landform such as its glade or viscosity. The biggest reason is human cultivation like plowing on fields to remove weeds. It makes the soil erosion rate be exponentially elevated.

I put here in detailed information of two references to gain objectivity. It seems like not to make sense of number that expressed in tons by ha of upper data. Here is the data to tell in visual, it is a chart that applies in extension of getting date from the basic of cumulating.

♣ The data of soil erosion expressed in number of grade in landform ♣

	Periods	1000 years	2000years	3000years	4000years
Grades	0	2.5cm	5cm	7.5cm	10cm
	10	10cm	20cm	30cm	40cm
	20	20cm(approxi)	40cm(approxi)	60cm(approxi)	80cm (approxi)

⁹Chart-3

⁷ soil: erosion and conservation . By Dr J Floor Anthoni (2000)

www.seafriends.org.nz/enviro/soil/erosion.htm

⁸ 1ha is the same 3025 Pyang or 10,000 m².

⁹ The grade of the cultivated landform is not beyond 30 degrees in generally. So the soil erosion quantity hits the peak in 15 degrees and it declines.

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♣ Soil erosion rate is around 30mm in New Zealand by harvesting for 100 years ♣

Rate of soil erosion	Terms	100 years	300years	1000years	2000years	300years
	mm	30mm	90mm	300mm	600mm	900mm
	Cm	3cm	9cm	30cm	60cm	90cm

Chart-4

¹⁰‘It is very difficult to validate the soil erosion rate at the global scale for a number of reasons.’ Measured soil erosion rates are fraught with methodological and practical problems and different techniques of measurement of the same erosion process give quite different results (Stocking 1996). Bearing in mind these problems some field measurements of soil-erosion rates is listed.

‘Though there are some discrepancies the measured soil erosion rate compare quite well with the predicted values. In east China, the range from 1.48 to 7.4 mm per year is within the same order of magnitude of predict values. In Western African Savannah the range between 0.37 and 3.7 mm. y⁻¹ of measured soil erosion is very similar to the calculated value of 4.5mm.y⁻¹. For England and most of west Europe the values of estimated soil erosion rate are acceptable although the measured erosion rate is higher than calculated values in East Germany and Belgium’

We know there a lot of parameters to get date of soil erosion rate. So we refer to the next date of it as a reference because there are also placing a limit on. Deplorably, I cannot explain it in detail of model measured by ¹¹DEM.

¹⁰ http://www.geocomputation.org/1998/55/gc_55.htm

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¹¹ (Digital evaluation methods, I should quote it as there is no real size of globe or land. But I guess soil erosion predicted by the result in Korea.

Soil erosion rate in east China is predicted around 1.48~7.4mm per year.

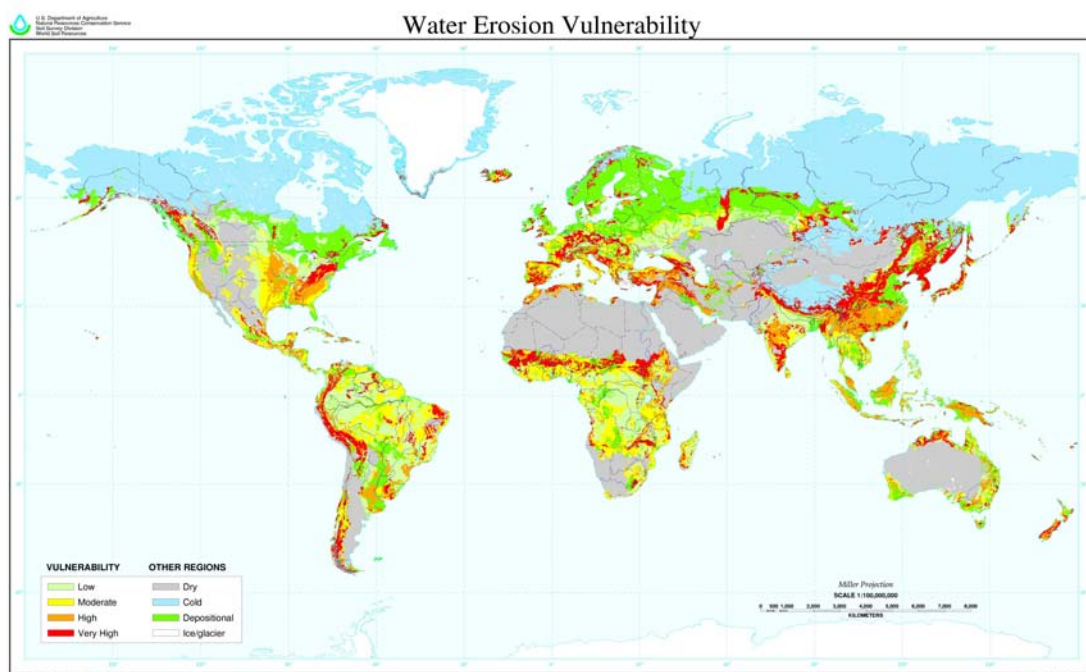
▷ Here is the date arranged in East China which region is similar to Korean weather conditions.

Periods of soil erosion	10 years	100 years	1000 years	2000 years
Unit	1.48~7.4cm	14.8~74cm	1.48~7.4m	2.96~14.8m

¹²Chart-5

It happens around dolmens that soil erosion and pile. So we can meet dolmens covered with soil or exposed its upright stones by those differences.

¹³Illustration-3



It is a section of soil erosion rate happened by rain. The strength of red color shows soil erosion rate bigger than the other regions. Actually, there are great source of soil erosion rate colored by various ones. The drawing is approximately depicted with pencil and Photoshop. So, please read it one of the tips.

Let us meet dolmens have gotten its own geologic histories where they are placed, graded and forested or what they are harvested in each.

¹² A unit is expressed in “mm, cm or m” for convenience in transformation.

¹³ <http://soils.usda.gov/use/worldsoils/mapindex/erosh2o.html>

USDA (United States Department of Agriculture)

Chapter3. Meeting the various dolmens figures

1. Dolmens located in Republic Korea

Location: Gochang County in Korea

It is a typical Baduk shape of dolmen looking like its figures. Dolmens shapes are different in respective, seeing it with wide-eyed. It is close to ticker hexahedron. 6 or 7 upright stones have supported megalithic capstone around 100~120 tons. Burial chamber is not currently confirmed.



There were commoners' houses among dolmens being used of storage space of potato and sweet potato 20 years ago.

Location: Gochang County in Korea

Shape is well known as a Baduk type. Stone coffin is not affirmed in today. Specially, it is placed on the middle hill that someone guesses it as alter not being confirmed of its burial chamber. Both dolmens that we are considered in deep, the current shapes of dolmens are possible to open original forms or lost its existing room for the dead.



If we see it as an original shape, we shall get it as an altar function compared with tomb. But if there is stone coffin, we will see it as a tomb.



Location: Gochang County in Korea

One face of slab remains among upright stones. The length is 160~170cm, the height is about 70~80cm and the thickness is around 15cm.

I suggest that it should be placed on the same ground levels comparing with NO.20 photo's dolmens called Baduk type, which is located next it.

I see it has three upright stones. It is under processing that the dolmens structure is unfortunately demolished.

Location: Gochang County in Korea



It is known as Baduk form of dolmens. There are four support stones. Two of its stones are exposed and two of support stones are almost underground until nowadays, following bank of rice field. The great viewpoint is middle of upright stones and under the capstone.



There is a burial chamber remained as if two of the dead should bury with its size in correct. More surprising fact is two faces of slabs are arranged as a number "11" and one face of slab is thicker than the others consisted of one around of 15cm thick. But the others consists of two slabs about 5~6cm thick aligned "11" in separate.

The figure is burial chamber of No. 22nd picture looking from side. The size of side of faces does not comply with its original shape.

Location: Gochang County in Korea



This dolmen is also placed at the top of hill. Four support stones are under top stone in current, stone coffin consisting of 4 board types is on the picture. One side of stone coffin is a little bit demolished. This place was used to play a role as a playground for children before 50~60 years ago without any of trees according to one

of old men. There should be a great playground for children 20~30 years ago.



Chungnam Boryeong

This one being introduced as table style, the weight of capstone is around 50~70 tons. Two of oddly shaped stones and two of board typed stones are assisted of the top stone. Four aspects of stone coffin are in existence that I read it over. I think there is a support stone typed as a pillar and the others has gone through time. So, support stones being introduced as board typed stones belong to stone coffin structure. There is also so more interesting viewpoint that A is almost natural stone seemed to be rolling on riverside. Here I am saying, "Some of stones used for dolmens were totally natural stones without any of artificial.

We have read dolmens that they do not have any of its stone coffin structure. But most of them have a single, two sides and three aspects of coffin including all aspects of it. I can confirm all of dolmens have its stone coffin with its full aspects when it is built.

Location: Pohang City in Korea



Covered stone is round form as round bread. We see that the total underground structure is arranged of round shape including assistant stones aspect to follow the capstone.

It is a good shape of originals but exposing of ground structure.

If the underground boundary arrange like round.

A good viewpoint is that they use the assistant stones of the paddle collecting around creek even though a burial chamber cannot be confirmed. And we see the left is piled in 3~4 levels but the right is piled in 2~3 levels considering the size of stone. I guess this dolmen does not have any upright stones. I mean it consists in assistant stones to make burial chamber without any of support stones

Locations: Hwasun County in Korea



It is well known as a dolmen of Baduk shape. The capstone weight is guessed beyond 100 tons. I believe “upright stones supporting the capstone have confirmed through the digging process, which is covered by soil.” The assistant stones among the support stones are held up burial chamber strictly. The underground structure of distant view looks like a round shape but square.

Location: Gochang County in Korea



broadcast over 40 years. I think we have to deal with in wide for having a specially structure in character.

It is known as a table style of dolmen. The appearance is beautiful and balanced, so it is recognized as a typical dolmen in early times. Specially, this image is picturing of dolmens among people when talking about dolmens. The reasons, why it makes the public image? Because we have advertised its image printed one such as schoolbook, newspaper, magazines and



among the professionals. But they miss a point to put on between upright stones.

The dolmen is looking at side. Two of characters are coming in my eyes at side. One is that upright stones of slab are jutting out its upright stones toward outside, which make it be impossible to put partition stone. Otherwise, it does not make perfect structure to protect the dead when burying if possible to put partition inside. So it is considered as an altar



The others are “key stones” about 3~5cm thickness between capstone and support stones functioned in unique character, which almost rarely confirm the others’ table style of dolmens. This shows us placing of limitation of building process of dolmens revealed in these days. I will introduce the way of putting on the keystones when

explaining dolmens construction later. Let us draw how the ancestors put into it between them.

Some believes that existing keystones make the heavy capstone not be demolished.

And we have made a lot of stories unproved through it.

It looks like square but it resembles a round shape in back down.

There is soil remained a little among capstone, upright stones and keystones. This suggests proof of building methods and guesses ways of dolmens construction.

Location: Gochang County in Korea

But I think it is bee's house built with soil.

Sometimes, it is found at side face of the other dolmens. Here you go! We can confirm it the other type of dolmens. Most of them have a hole built by bees.



Locations: Hwasun County in Korea



It is recognized in table style of dolmens when seeing it front. But it reaches the breaking rules that we see it at other side. The right picture is burial chamber as itself. So, it is also considered to be ground stone coffin.

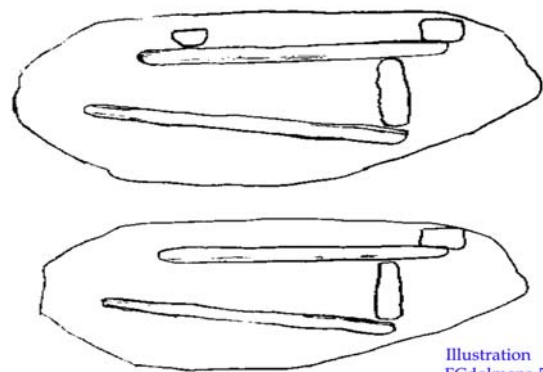
But, Most of those types of dolmens placed in Kwangwha County are introduced like table style of dolmens. There are three upright stones shaped slab and capstone in now days. We can understand one of support stones has lost.

Location: Kangwha County in Korea



The biggest table type of dolmens, which is well known to us in Kangwha at Bougun-ri. The size of capstone is around 650cm in long length and 400~500cm in short length in irregular. The thickness is beyond 100cm a little. I guess the weight is over 40 tons.

Location: Gochang County in Korea



¹⁴Illustration-5

It is called Gasuk shape of dolmens or ground stone coffin by some scholars but the other see it as a table style of dolmens. A careful viewpoint is remaining three faces of stone coffin, and one upright stone is placed in the corner of it. But we confirm there were two of upright stones to use Illustration-4 when reporting in 1992. Here is one more viewpoint that stone coffin is supported by upright stones.

¹⁴ Report of ground surface at Gochang Jukrim-ri

Bakjea dynasty culture research institute of Wonkwang University & Gochang County (1992)



The minor axis is 87~90cm, the major axis is 225~230cm and the average thickness of slab is about 15~20cm. In general, this is great source of dolmens study to understand transformed dolmens, which have both types of upright stones.

A few of professionals see it as transformed type from table style to Baduk shape. We cannot conclude this sample to all of dolmens. But I think this one has more four upright stones to support the covered stone and make the burial chamber be in steady. The other upright stones may be disappeared by people or eco-system except one. I mean three slabs consist of structure of burial chamber.

The weird point of view is north side of coffin shaped of slabs leaning toward outside by ground subsidence. But one of upright stone supports the capstone.

Location: Gochang County in Korea



Dolmen described at the upper part exists in the right hand. How about the left side? We know it as a Baduk type of dolmens. The top stone was being taken down from the support stones. This one let us know two true facts. The height of burial chamber is the same layer between table and baduk types of dolmens. We can also confirm that top stones of dolmens

are not lifted up. Most of them are set down on the ground relating to construction of dolmens.

We could re-interpret burial chambers of dolmens were underground when I were built. Even though we understood chambers are on ground or underground considering its shapes when I were built.

Location: Yeonggwang County in Korea.



This is a dolmen remained in perfect shape of stone coffin what I see. The capstone is around 80~100tons, placed in center and supported by five upright stones. Burial chamber size is about 50~60cm as a noodle box. It can be seen through the upright stones exposed on the ground. This one shows us the level of burial chamber and upright stones. The underground structure is exposed in now days. It must be covered with soil when building.

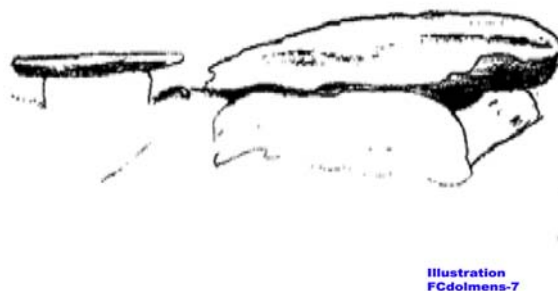
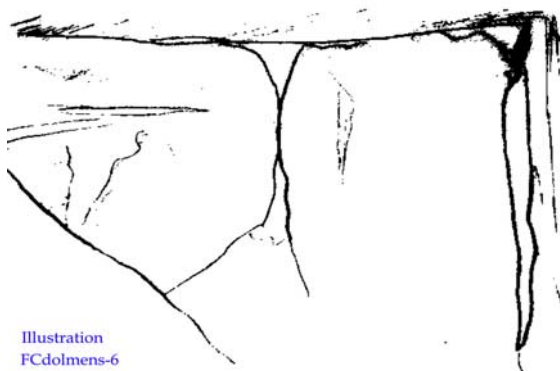
Location: Gochang County in Korea



The view from side and in front of it, there is one of upright stone in face side visually. This one has remained three faces of stone coffin around 50~60 with its length and width. And, one face of stone coffin has not yet confirmed. The difference is that stone coffin is made up of a few of slabs. I mean two small slabs consist of burial chamber.

2. Dolmens placed in North Korea and in World

Let us see dolmens in North Korea, Yodong in China, India, Middle East and Europe.



There are clustered about 150 dolmens around 2~3km at Sukchun mountain of Youngkyang County near Pyongyang City, North Korea. Here remains of stone quarries and various types of dolmens. The right drawing is a group of dolmen Sukchun area. The left is one of indoor structure of dolmens has gotten No.1. Four upright stones of slab type are supporting the megalithic capstone. Here are distributed in 3~4 units of dolmens such as a table style (Oduk shape), Giban shape (Baduk shape). They had found remains such as stone plane blade and stone arrows during excavation in 1961.

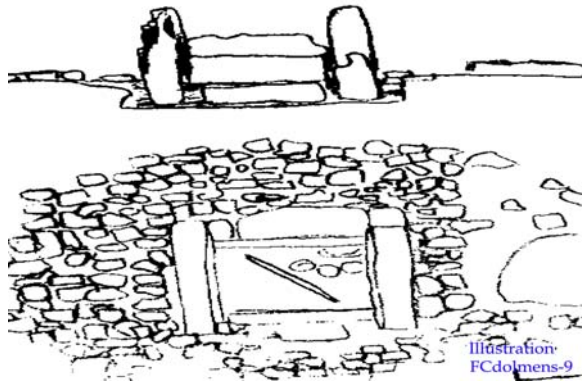
There are stone queries away from 150m of dolmens group. There are remaining keys of making halls to cut materials (a wedge or chock, grooves of V shapes) when constructing. North Korean professionals expect it to be built in B.C 1000.

It is ¹⁷Moonhyung ri dolmen named of table (Oduk shape) in Kangdong County near Pyongyang City. There are about 20 dolmens in a group. 8 of dolmens were excavated. No.2 dolmen is to be seen around No.3. But, it does not have capstone, which dolmen had found 10 of remains such as stone axes and fingers burnt in the past.



¹⁷ Moonhyung-ri dolmens quoted by National research institute of Cultural Heritage (1991-4, 1991) (Suk Kyungjune, Study of Joeson 1991-4. n illustrated book of Joseon remains and relics quoted by National research institute of Cultural Heritage

Location: Pyeongyang City in North Korea



It was introduced when I explained dolmens structure.

Main structure of No.3 dolmen was made of “ㄱ” symbol digging in 70~80cm deep to support the close stone and upright stones. And it must assist where space of upright stones and close stone were held by wedges of stones.

The picture is No3 dolmen of structure, which looks from a plane figure. Those data give us definite proof of construction way of dolmens. We can also see the dolmens underground structure arranged round shape.

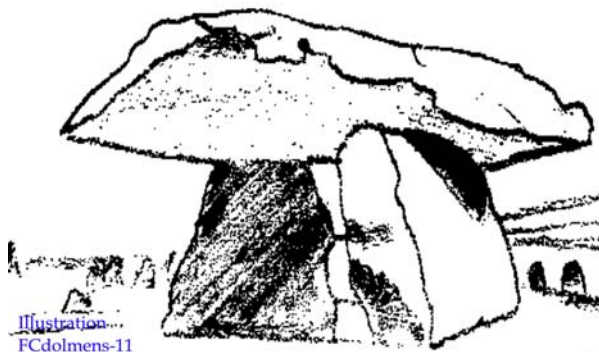
Dolmen joining with stone coffins



It is a dolmen at ManGyeong Dea near PyeongYang City in North Korea. There is a dolmen in the center. It was covered with soil before digging. Specially, A unique character of the dolmen is made of hinge in all of corners to connect cross points. This shows us a touchstone that the developed shape of burials

generates the next generation tomb, which we know as a wooden coffin.

¹⁸Noram-ri dolmens



Noarm-ri at Anak County in HwangHae Province of North Korea

This region is well known to us of mural paintings of ⁱ G(K)oguryeo Dynasty. The capstone weight is around 80 tons, which the major axis and minor axis are about 7.78*5.72 m,

itage; Noarm-ri dolmens written by Suk

kyungjune, Study of antiques of Joseon

and the thick is around 79cm. Grave accessories were excavated such as stone arrowhead, a chisel of stone, a spindle of stone, and a few of broken earthenware in the past.

Dolmens site is far from Whapyung village of a local district at Noarm-ri of Annack County in Whanghe province around 2km facing of west. We also know it one of the biggest dolmens at Korean Peninsula in early times.

Burial remains are a piece of earthenware of a top shape, a spindle of stone, a chisel of stone and stone arrows of triangle shape. Professionals expect it to be built between B.C 8~9 Centuries that tells flat face of under earthenware surface. It is placed in the middle of Noarm-ri considering the district of Anak County, and tomb size is huge. So, the people related with this field believe that belongs to tomb of head chief family.



Illustration
FCdolmens-12

It is located at Gosousuk village, Heasung city, Yoodong in north east China, is well known of table style of dolmens worked in good skill in elaborate. So it is possible to handicraft in advanced deftness. But we can bring it is built after accept of advance tools. The other characterized figures is that dolmen around there be usually standing alone.

I cannot read why this dolmen left alone. Considering Dong mountain or Beruhe remains district, there are a group of dolmens about 10~30 numbers such as Gasuk shape of dolmens and Giban type of dolmens in northeast China.

Jang-ri dolmen

This dolmen has a unique character in Jang-ri of Sangwon County that structures way of ¹⁹Entasis when seeing upright stones of slab. Learned circles tell us it makes the dolmens stood there for a few



Illustration
FCdolmens-13

¹⁹ entasis. In Classical architecture shafts of columns have a greater diameter at the bottom than at the top: the diminution does not result in slightly battered straight inclining slides, but a subtly convex curved swelling called entasis;

<http://www.highbeam.com/>

thousand years without demolishing. So they believe dolmens hide highly developed architecture in old ages.

The next data show the different viewpoints among the world.

²⁰Illustration-14

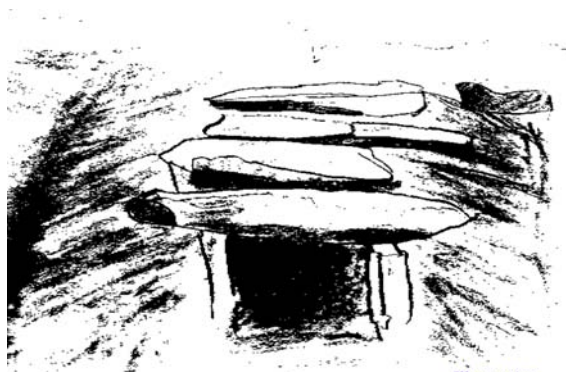


Illustration
FCdolmens-14

top of upright stones.

²¹Illustration-15



²²Illustration-15



Illustration
FCdolmens-16

Those dolmens are located at Brittany in France. The capstones' weights are around 50 tons, which are probably believed as the oldest dolmens in here. A unique character leaves me our attention to see it. Those dolmens are joined together in row.

More interesting viewpoint is that dolmens are still covered with soil up to

Those dolmens also show us one of European characterized dolmens. The previous dolmens are covered with soil but those ones are not. The upright stones are exposed without soil. It is known there are 4,500 dolmens in France. A mold and a piece of stone's fragment were excavated in 1939. Devon (The province of south-west of England)

The local tradition says that this strangely named dolmen was erected one morning before breakfast by three spinsters or spinning women, to amuse themselves as they were on their way to deliver the wool they had spun. The stone fell early in 1862, but with the aid of some sketches made in 1858, the

²⁰ <http://members.tripod.com/Menhirs/dolmen.html>

²¹ <http://www.stonepages.com>

²² <http://www.stonepages.com>

stones were re-erected in November 1862.

This dolmen is thought to be the remains of a Neolithic burial chamber, one covered by an earth mound. The Spinsters' Rock is about 2.7m (9 ft) high; the capstone weight is around 16 tons.

Poulnabrone

²³Illustration-16



This dramatic site, on the karstic limestone pavement of the Burren, is one of the most famous Irish dolmens. The name Poulnabrone literally means 'The hole of the sorrows'.

The thin capstone sits on two 1.8m (6ft) high portal stones to create a chamber in a 9m (30ft) low cairn.

The eastern portal stone was replaced in 1985, following a discovery that it was unfortunately cracked; Excavations during the repair showed that this site dated back to about 2500 BC.

Uncremated remains were found in the chamber, its portico, and in the grykes (crevices in the limestone floor). In particular, there were the main body bones of one newborn baby, six juveniles, and 16-22 adults. Only one of the adults lived beyond 40 years, and the majority were under 30 when they died. An analysis of all the fragments of disarticulated bones revealed a hard physical life and a coarse diet; it was further proved that the bones were naturally defleshed elsewhere (by exposure or burial) and only then moved within the chamber at Poulnabrone.

A number of grave goods were found in the tomb: a polished stone axe, two stone disc beads, a perforated bone pendant, part of a bone pin, two quartz crystals, flint and chert arrowheads and scrapers, and over 60 sherds of coarse pottery. This is probably involved a ritual and reveal an exact planning, but the purpose remains unknown.

A low mound, largely made up of stones, surrounds the dolmen but it seems unlikely ever to have covered the whole monument. It is worth noting that in the same area

²³ <http://www.stonepages.com>

there are about seventy other tombs, like the one at Gleninsheen.

²⁴Illustration-18

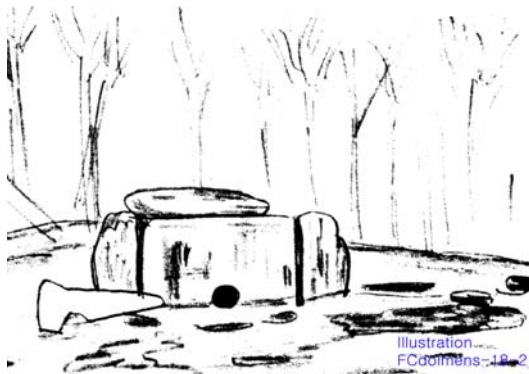


It is representative of dolmen at the Trans-Jordan area in the North-west Arabian Peninsular. Archeologists of Jordan understand it to be in early Bronze Age tomb. The main character is that the close slab has a hole as square shape. It is different shape comparing with dolmens placed in Russia and Eastern Europe. Specially, there are

about 20,000 dolmens, which are a cluster of 300~1,000 dolmens in Trans-Jordan area.

The biggest character is size of dolmens in Trans-Jordan. The most of dolmens size are around belly button or keen height (1M), so the capstones sizes are relative smaller than the other regions. I think that capstones around here carried by poles jointly shoulders.

²⁵Illustration-18-2



Dolmens in Russia

It is illustrated that dolmen is placed at Jane valley. Most of Russian dolmens are distributed around North-western Caucasus of Black Sea. The main character is that dolmen has a hole on its facade. But, I cannot confirm that the remains were made in the same time of dolmens. There are 2400~3000 dolmens in cluster.

²⁴ http://www.owlnet.rice.edu/~reli205/nathan_dolmens/dolmens.html or Negev, Avraham, ed.

1972 "Dolmens." Archaeological Encyclopedia of the Holy Land.

²⁵ <http://Megalith.ru/en/>

²⁶Illustration-19



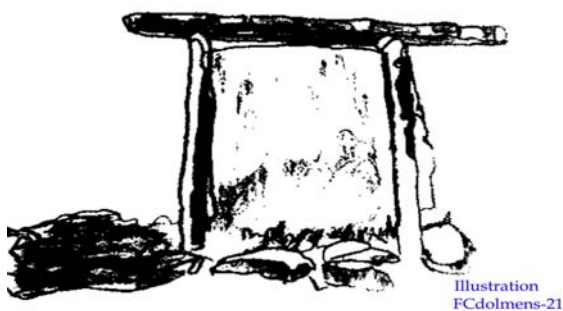
Salem Dolmen”

²⁷Illustration-20



because of its geographical proximity with Galicia that could explain the abundance of traces of this culture in this area. This should be the first great culture.

²⁸Illustration-21



Diagnostic traits; large stone burial tombs and megaliths

"The largest CeltIberian dolmen yet discovered in North America, located at North Salem, New York. The 90-ton capstone is supported on the apexes of five erect peg-stones. There are two opinions that see it as a dolmen and Boulder created by glaciers. The directory at there introduces it made by glaciers. But, someone calls it “North

Dolmen placed at Galicia in Spain, is called “mámoas” at local, which word does not find in general Spanish dictionary. Historians consider that megalithic culture had an oriental source, which was predominant in the Mediterranean area, and one in the Atlantic, which originated in the north of Tagus River. It had to be the latter,

India dolmens

Three major areas were peninsular area (south of Narbada River), extra-peninsular area (north of Delhi to Indus headwaters), and Vindhyan (near Delhi) Migrated between 2000 and 1000 BC from Ukraine across land or from Mediterranean area along coastline

²⁶ <http://members.skyweb.net/~channy/NSDolmen.html>

²⁷ http://usuarios.lycos.es/Celtic_Galiza/history.html

²⁸ <http://www.wku.edu/~darlene.applegate/oldworld/india/civ.html>

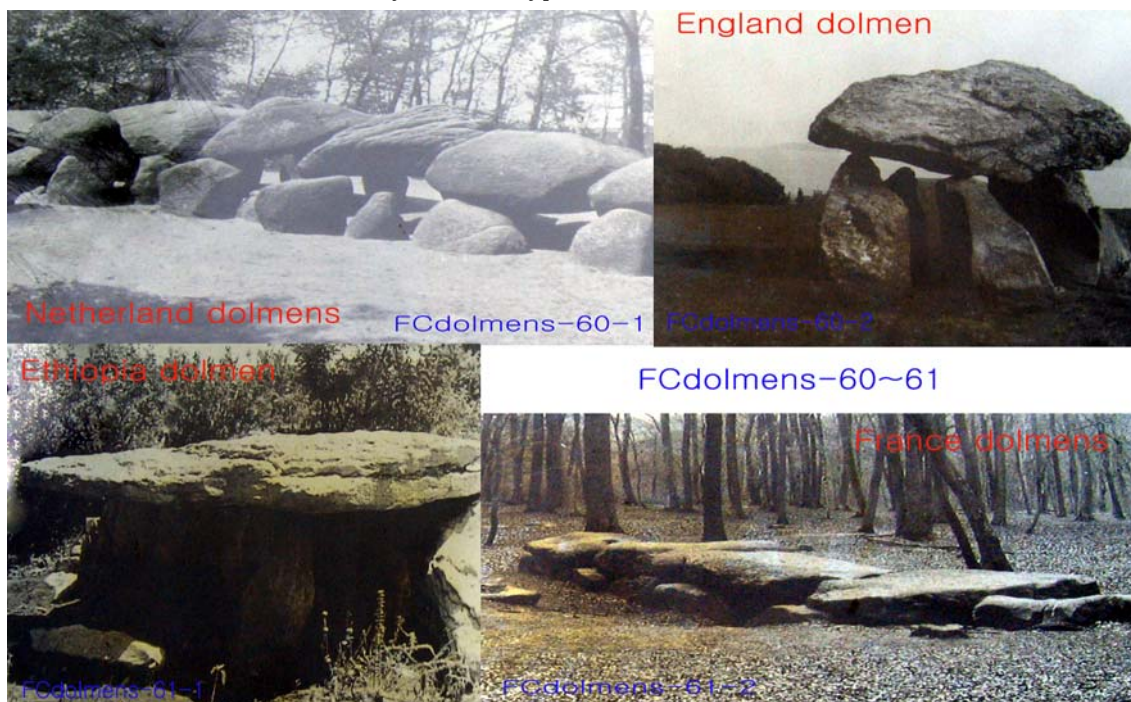
15 types include cairn-circles, alignments, barrows, sarcophagi, umbrella stones, menhirs, and dolmens. Grave goods include iron* plus pottery, copper, bronze, silver, gold, beads, bangles. **Dolmens are also megaliths marking burial sites in India.**



on table styles.

Dolmens in India closely resemble Moonhyung-ri and Gosusukchon dolmens placed in North Korea. We have a look dolmens located in North Korean and around the world. Main character seems to be table style of dolmens. I think that we understand it introduced as a table type of dolmens due to studying to focus

The fact that dolmens are very various types as below.



ⁱ G(K)oguryeo (traditional founding date 37 BC; probably 2nd century BC – AD 668) was an empire in the northern Korean Peninsula and the northeast part of today's China. It was one of the Three Kingdoms of Korea, along with Baekje and Silla.

The modern English name "Korea" derives from the Goryeo Dynasty (935–1392), which in turn took its name from "Goguryeo".

Goryeo-era records say it was founded in 37 BC by Jumong, although it possibly date back to the 2nd century BC, around the time of Gojoseon's fall. Other small states in former Gojoseon territory included Buyeo, Okjeo and Dongye, all of which were later conquered by Goguryeo. It grew into a major regional power of East Asia until defeated by the Silla-Tang alliance in 668, resulting in Unified Silla and Balhae states of Korea.

Chapter4. Getting dolmens materials

1. Capstones, Burial Chamber and Assistant stones including foundation stones

We need four main types of stone to build dolmens. First, we must prepare capstone or covered stone shaped of slab or megalith, second, we need upright stones shaped of slab or pillars, third, we require stones shaped of slabs and small and middle-sized stones to make burial chamber. Last, we also prepare stones to assist the dolmens structure.

Ways of getting capstone

I confirmed that there were a lot of stone quarries where the stones were cut, not far from a group of dolmens sites. But, a good many of dolmens would be used of natural stone as materials around there. Currently, we sometimes can see stone quarries immediately, but most of stone quarries do not look by woods cover, so you can find it to enter woods.



Location: Gochang County in Korea

Most of natural rock bed had already cut by gradual corrosion in natural.

If watercourse is around there, it exists as stones of round shape such as pebble without remaining tough faces.



Location: Gochang County in Korea

It is a stone quarry placed 1km away from Gochang dolmens site generally. It remains of fixed gap grain at confirming lock layers' materials of picture. Lock bed is correctly consistent of dolmens sources by testing of archaeology. I think it is a necessity not to be a chance.

Prehistoric people just used natural stones where it was placed around there. And they had to quarry stones where it was necessary.

Location: Kyangwha Island in Korea



A group of dolmens are densely distributed at ⁱ Goryeo Mountain in Kyangwha Island, specially southern or northern slope of mountain.

I could find stones typed of slabs seemed to be used of burial chamber of dolmens when walking up mountain. Otherwise, it was to be cut as follows lock layers like capstone.

Specially, most of burial chamber is made up of natural stones like stonewall not being made of slabs.

Specially, most of Korean dolmens consist of small or middle-sized stones piled being structured as a brick wall not to be used of slabs.

Location: Gochang County in Korea

And the assistant stones put among upright stones and burial chamber should be gained around there. Sometimes they get it from the next space.

We can indirectly confirm that stone quarries are piled between one of the biggest dolmens and quarries. The remaining stones pile is to understand the process of stone quarries through this.



And, it also tells us that Main stones trimmed in special working space. It shows us to get stones of main materials of burial chamber not to be difficult if they try to get the materials of dolmens with their true heart. Dolmens still remain of its mystery due to huge and heavy weight and size.

2. Quarrying Capstones

How could prehistoric people cut the capstone? It was all in a days work. As it words, I could not live in that time, I do not affirm it 100%, but think of dolmens, what makes a lot of dolmens? Or is it possible that many of dolmens existence? Is it difficult to make a dolmen in process of building one by one? The answer is “No”. It is not hard and dangerous to make dolmens in prehistoric time. We only forget dolmens construction methods, technology and sprit of ancient people. The contents of quarrying methods are full of curiosity in person as way of dolmens construction.

And it is still covered with some veil even though I had experimented dolmens construction. I guess that cutting stone tools are different in age. I mean what they use as a tool to cut the stone. But cutting stone methods are similar to today as a stone pit.

Let us see the process one by one.

A. Wedges remain on the capstone in modern times

1) Wedges remain on the capstone.

Location: Gochang County in Korea

I think it is first step to cut stone by arranging the slice inscription in line to dig hole of



wedges.

There are a lot of chamfers on surface of capstone not known of its ages. But, I should read a few of characters through its faces. You should also read something if you take

into consideration. I believe that you can read when it is made in stone ages or after iron ages. Namely, there are some possibilities to be used of iron tools. This dolmens remain is found in Kyangwha Island.

Location: Kyangwha Island in Korea



Bugun-ri dolmen is well known to us. Not far from, there is a trace of using of iron tool on capstone. The figures are left as its character to be chamfer by iron tools. But I do not know when it happened or who tried to cut it on propose. Specially, a broken iron chisel is in the wedge. I think it should happen after industrial societies with shortage of recognitions when the dolmens were demolished and laid waste by people in 1960~1980's. It is a definite proof but it is also pains of the times

Location: Gochang County in Korea

The remaining figures are left on capstone during the process of cutting. A few of scrapes remain on the wedge in special. Stone quarrying with machinery generates scrapes. I understand it remains in original without changing or wearing of stone after cutting. Those traces usually remain in when they are using iron chisel and iron tools of wedges. I guess it happened in 1960~1980's.



Dolmens never left our ancients' life, the houses or stonewall around dolmens were built by stone after cutting. After then, we built the wall by bricks.

Dolmens were always being together with our ancestors. Dolmens are rarely placed indoor of houses, are occupied as stone bridges or stone fences in case. Some of houses around dolmens seem to be built in using dolmens broken. Rural communities should lay stone fences after inventing brick.



The photo-76 is scene of surface cut by machinery. The surface of hole is arranged and soft with thick and deep and feeling of touch.



B. Wedges remain on the capstone in dolmens times (Traces of quarrying process in dolmens times)

Location: Gochang County in Korea



from rock beds.

We read life of prehistoric people through various wall paintings indirectly. This dolmen has a lot of remains of quarrying; it must answer the question related to dolmens quarrying. But, I couldn't open the mystery of last one that seemed to be opened.

Let us explore the questions after looking the process of quarrying stones



There are remains of cutting face shaped of half moon on the southern face of capstone in left picture. Width is around 10cm and depth is 5~10cm. It shows us that regular spaces among remains are from 3~4cm to 7~8cm. And a wedge is on the corner. I was so excited when I saw it first. I felt like that I found new wall paintings. But, it did not come to an end at there. I was surprised that I could find more detailed process of stone cutting.

The process of stone quarrying left the remains of wedge shaped of half moon. The right picture is referred to see in front of it.



This is whole wedge remained on the capstone. The wedges shaped of chrysalis in left picture are rarely found at the stone quarries. The wedges are the same shape introduced by professional of stones in documentary program. To tell you the truth, I could not find it directly. I cannot assert that those remains were made in dolmens in case of possibilities being left by stone industries after prehistoric times. But, I should analogy it through the next introducing wedges.

It is exactly same shape that professional stonecutters introduce ones such as documentary program. But, I have got questions like these.

What could they dig the wedges on the megalithic stone such as those? Is this thing

remains by people of dolmens builder?

Otherwise, is that cut in iron ages such as ancestor or modern times? But it is solved by a lot of proofs of wedge remains on the capstones.

It is the figures that are seen on the east face of dolmens.



Two of remains showed in the left picture are confirmed that you draw a line of same level of it. Seeing it in detail, the wedge looks like black color as inscribed lines in the below of center. The most interesting viewpoint is not wedges but also that face. You can confirm the other remains when searching for it more detail.

There is a three-pronged spear that middle of line inscribed in deeper or longer than the other.

When you see it on top of dolmens, you can draw the other figures. It contains figures like wedge shadows in correct.

I think it makes the stone cut well. I mean it shows remains when quarrying process to make vacant space. It is possibly to dig with easy that firm stone should not be cut with easy. The tridents shape on the side tells us “people of prehistory did not make the wedge in direct”.

It is trident figures in front of it. The first character, the middle inscribed line is the deepest one considering the others, the others depth are similar to each other. I think it is figures of half moon shape when drawing on it following the tip of line. It is technology to focus on hitting one point when striking from outside pressure to use tools such as a hammer or stones. If the inscribed lines are all the same, the hitting point of strike should be spread. So, quarrying stone is difficult job to be done.

Second, the inscribed lines are not straight lines that have bends and curves as it is. Those inscribed lines must be straight one, if it is inscribed after introducing iron tools with electronic power. The entrance of inscribed line must be thicker than point of tip but the entrance of inscribed one is thin. And, point of tip is thick when comparing itself. I think it is not possible when using iron tools or developed tools such as electronic power tools used.

If you do here, the quarrying is not difficult to depend on materials of stone a little bit. You just need to hit the point of top of wedge made of wooden with striking it straight. After you put the wedge made of wooden into wedge hole.

I can't affirm that any remains of tools to be used in inscription. But it seems to be used of some tools such as a hook. And I still have a doubt how they could inscribe in first.

Location: Gochang County in Korea

But the next figures of dolmens tell a lot of stories. What could they dig the hole of wedge thick like fingers? Using of electronic tools? Rotation power seems to use sticks? Otherwise, using of iron chisel? Including space of wedge arranged in 3~5 cm gap.

It belongs to prehistoric remains indirectly through a lot of proofs. The impression of cutting process remains on the top face of dolmen.

It looks like half moon shape inscribed by carving knives as an impression on a mass of mud. The impression of quarrying left on the dolmens usually makes a right angle to follow joint layers. But, it is about 120 angles between face to face.



Seeing it a lot previous but I could not assert the figures remain after quarrying. I see it as a face of quarrying after searching a lot of wedges. It is confirmed at the first course of dolmen sites of Gochang



Location: Pohang City in Korea

The east sea is faintly seen over dolmens carved a lot of cup marks. There are a few lines inscribed among the cup marks. A few of cup marks are thought as a constellation. But this dolmen also provides us constellation stories with secret information of cutting megalithic dolmens.



Considering the angle, the wedge remains are not seen well. The right impression remains on three of stone faces makes “T” shape in three rows but the left picture shows one. If they get capstone in natural without quarrying, it doesn’t matter. But, the way of quarrying places a limit on supplying water issue to be continued, when cutting in layers of stone bed. Let us image in later.

Quarrying trace of stone remains on it but not to be confirmed its times. There are about 50 dolmens not far from the impression.

Dolmens group at Pohang is one of the clustered places in KyungBuk province.

If the next wall painting is considered as the same times with picture showed in previous dolmens, one fact is clear. Those pictures are famous wall painting located in Chilpo-ri. Wall paintings can be found on the wall of rock and top of it. There are also a few of cup marks. Various types of paintings seem to be abstract. But it is considered as expressed a stone knife or a shield.

Location: Pohang City in Korea



Specially, there is theory that wall painting related with Bronze ages, if we understand the next image made in Bronze Ages.

Quarrying traces have remained next to those wall paintings. So I think dolmens makers have got their own technique to cut stones, through developed technique. Productive power could increase surplus products stockpiling found scope of life, go into action of art, which is called.

Location: Gochang County in Korea



Working times is not confirmed that they use wooden tools to make wedges.

It is one of the proofs insisted by professionals that stones should cut to follow crack line on the stone bed not to be confirmed of its ages. But it shows the quarrying process of stone at least.

We have looked faces of stones quarrying. Please, think stones cutting methods well known to us.

Did they use the quarrying methods to put wedges made of wooden into wedges and then pour water into it to swell wooden as followed holes in low? Did they use just wedges and hitting methods? Otherwise, did they use both of them in ancient times?

(a) Let us image one

Imagine! What is the difference between prehistoric times such as dolmens ages or After Christ like iron ages or modern times?

First, do we know something through shape of wedge?

I introduce three types of wedges in here. Wedges of round shape are usually placed in the center on covered stones. It seems like to be excavated in modern times or after applying electronic power iron ages. Furthermore, wedge of round shape is the same depth when engraving as a trident that middle of inscribed line is deeper than the others. So, wedges of round shape are considered as inscribed in modern times to use iron tools.

Wedges remained in the middle of capstones, closely shaped of square, are confirmed with a piece of crack impression. Correctly, it remains of iron chisel in wedge of stone. It tells us one of proofs made in modern times.

What do you think wedges like chrysalis form? It is placed in the middle of capstone or outline of covered stones without any crack impression.

Finally, we should know the times of processing periods through the faces of wedges to touch sense. I mean to use our hands touching as if it belongs to prehistoric or ancient times. But, I have still questions. It is difficult to answer until now. Touching of dolmens quarrying face is different feelings what I am telling you obviously. It must be progressed in the near future.

The final point of view is that the wedges are placed in the middle of capstone or edge of capstone. Except a few of them, most dolmens are in balance. If someone objectively cuts the dolmen after dolmens ages, covered stone should not be in balance. Here is a saying quoted by professional of stone in history special program. Producer asked him "What could prehistoric people dig wedges on the stone without iron tools in Bronze Age?" The expert interviews like this "I guess that they excavate the stone of using stones or woods before that times.

(b)Image the others

It is introduced that digging the wedges, put the wedges into wedges holes, pour water into it or hit the wedges to use a hammer of stone or something else. Which way is more effective than the other? Otherwise, did they use just one way of it? Or use both of them?

The way of pouring water into wedges hole after inserting wooden wedges looks like a reasonable method. Wedges made of wooden would be possible to get swelling power or water could be frozen or water during the winter season. It might be considered as reliability. But, stone cutting in this way places a limit on itself definitely.

Here is an example that is not confirmed of dolmens or natural stone. But it provides us great clues.



Two wedges lines seem like placing on the covered stone due to angle of picture. But, one is excavated on top of it. The other is on the side of covered stone. I issued this question ahead of phrase. It makes big difference when digging the wedges using water because water flows from high place to low place.

For example, if we pour water into wedge hole water never fill up the wedges on side before wedges made of wooden swell it or water go into ice or water again.

It is common sense to understand. Through this reason, Prehistoric people must have to provide water for wedge holes continuously, but it is hardly possible that they do.

(Reference- wedge holes lined of “T” shape at Chilpo-ri in Pohang)

Location: Gochang County in Korea



The figures were found in chance after stopping raining in late summer season. This can be confirmed at house in common. For example, there is a boil filled with water. We can fill it with water when is positioned as common, but we never fill it with water when it is placed as side formation. I agree that supplying water into wedge holes is possible. But I don't get it fill water into wedge holes located in side. How about the winter season?



Picture on left, wedge made of woods (a jujube tree) in wedge holes is sucking in water. We should provide water into wedge holes until wedge made of woods sucked. But, a little bit water shouldn't go ice until stones cut. I mean that water might be flied off because of dried winter weather condition. Even more, if water

could be ice and water over and over, it seems like to be expanded as water overflow without any closing.

What do you think of hitting wedges methods made of woods, after driving into wedge holes to use hammer?

The scene is driven into wedge hole having got their wedges

All of tests named of historical research have practiced with hitting wedges made of woods except using water. And, excavation related with "Egypt pyramid construction" was performed as it, professional of stone in history special, documentary program in history always use the way of hitting methods. I mean they always hit pressure to use

hammer. The program shows me cutting stone is possible to hit ten times or 10 minutes of using hammer depended on stones' types.

Some of cutting stone wedges belongs to after dolmens age due to processing of stone industry. So I guess some of them do not belong to the same age of dolmens. We confirm it through iron wedges remaining on the capstone.



But, we can also confirm some of them are wedge remains in the same age looking the examples remaining of aspects on the support stones. Definite language (evidence) is placed on an intersection of three streets called Gangwha Samgue-ri dolmens group. This dolmen does not being rebuild and remove including being demolished of its capstone. No, someone should be put its capstone away on purpose. Fortunately, support stone shaped of board have its aspects of stone wedges cut. Say it again! We can determine it belongs to the same evidence remaining considering shapes being of support stones.

Big stone or rock bed should be easy to cut like trees. Human recognize those characters in early times. So we know that prehistoric people have got skills to cut stone of using wedges principle as they make wedges such as levers. Today, we use the same methods to cut stone even though there are differences following times and materials of tools. The way of stone quarrying is still near us that we have thought the technique being lost.

If we do not hand it down to the next generation we should lost it forever. Last generation always hunts one point and hit the wedges to use stone or wood hammer. It makes stone cutting be possible to follow in lows.

We have lived in feeling of prehistoric times as a primitive sense before 10 years. But we also have tried to understand it in new vision in recent. It seems like to be an established theory that life and existence of prehistory is more developed what we draw. We only read the face of prehistory as we have imagination, visual sensation or educated concept. Here, a lot of dolmens say, “ you have improved in all respects but deteriorated that frequency in using yours sense or never used technical sense has

gone” No! We do not know we have quality of potentiality. They expect us to use the sense of lost one again. I will go solving the secret of dolmens construction being lost.

Who could quarry stones?

The characters of Nam river remains in Jinju suggest that people be specialized in labor in times of dolmens. There were found of remains old structure of building such as a place of manufacturing earthenware, stoneware producing arrowhead of stones and room of specification jade. Separated spaces show us the specialization in labor. It is possible that big stones should be cutting by stone professionals. Professionals should log trees as we call woodcutter. If we agree that, the public built dolmens for the dead in general such as you.

Values never be low even dolmens are constructed by common people. Moreover, the worth is more acceptable. I appreciated that the professionals who have the detailed information. Someday, they would experiment it using water.

We have to shift capstones to burial place to build dolmens.

Let us see dolmens spaces and stone quarries before I explain it.

All of dolmens are distributed above sea level 20~50M. Sometimes, it exists on the height of mountain about 200~300M. There are also stone quarries where were used to stone cutting for using underground work around dolmens group. Quarries are located in gentle slopes or steep slopes where it doesn't seem to be movement route. It also does not look like handling by manpower during the moving process in direct.

Through the most important materials, we can understand the process of movement when quarrying capstone from quarries to burial place. Between the quarries and place of dolmens group, the nearest one is about 20~200m, but the farthest one is away from the quarries around 4km.

Let us open doors to understand dolmens society.

Chapter5. Dolmens possess

I mentioned that dolmens function was tomb or altar, family's tombs or public cemetery through its obvious features. Moreover, I will look that dolmens contain times.

1. Tombs and altar

I think that we can guess the dolmen is tomb or altar to through today's mound. Let me see it, we can confirm there are tombs such as a private tomb, tombs of families, the National Cemetery and a public cemetery. Mound sizes, shapes and stone monument such as guards depend on their regions, culture and economic conditions. Furthermore, there is a stone of altar in front of a tomb or not considering those conditions when officiating priest to the tombs, which used to be a stone table to put foods and drinking on it. And, we also confirm it in the public cemetery related with a monument to the loyal dead or a memorial tower. This place should be a space for consoling the dead or their spirit.

Location: Gochang County in Korea



It is representative of Korean tombs in these days. Nobody denies it is a tomb. But, I have doubts its function just carrying out tombs. There must be other opinions. It has played a space to be used as an altar in 2 or 3 times every year. Tomb functioned tomb as itself. It was also used to an altar. I believe dolmens function is the same plays. It is the tombs and altars.

Let's go back to dolmens.

The fact that dolmens is considered to be a tomb in general, but there are still debits, it belongs to tombs or altars that dolmens are placed in special space with a few of dolmens.

Location: Gochang County in Korea

It depends on professionals' study and local viewpoint. It is also difficult to lay numbers of dolmens down as tombs or altars before digging it out and search for burial chamber. Current viewpoint of dolmens show us important clues.

It is representative of table style of dolmens at Dosan-ri in Gochang.

I had already explained its unique character comparing with the others.



There are still questions involved in dolmens constructions. Let me put explanations off for a moment. This dolmen should be placed at the top of hill grown lots of bushes and trees when it was built. Even though it is located in the backyard of house in current.

And there are few of stones, which should play a role as altar stones, in front of table style of dolmens that we see the altar stone in front of tombs shaped of mound in today.

And its space should be used for praying something like that we pray families and nations peace, health and wealth with burning candles with this dolmens in recent. But, I don't have any idea when it has been started.

Location: Gochang County in Korea



There are a heap of stones at the left and right in our eyes sight and over them a group of dolmens are placed. But the scene was like illustration around 10 years ago,

which not remains anymore.



There was no the heap of stones, was a group of stones played like altar stones. But, late recognitions that make us not appreciate those figures in direct.

We should satisfy that we see data of the altar stones regretfully. But if there are the greatest restoring skills we should rebuild it. Otherwise, leave it as its current states.

I have talked the possibility to be the altars through standing alone on the top of

mountain. There are opinions that they see it as connected with path of admiring the forces of nature, heaven or the sun. And they also expect it to be a bright particular star or god with leader of priest. So we should understand it as dead man's resting-place and path involved with their space of region.

It is also showed that dolmens should be used to be a priest function for ancestors in dolmens times like that we have priests in space of tombs in today. Why there is no burial chamber in the biggest one in usual? I put on this issue that there should be no burial chamber when it was built. It is considered that dolmens should be built for families of community or constructed for altars. I believe there should be a burial chamber when it was built. But the burial chamber was destroyed by human behavior or using for a slab covered on the flues of the radiant heating system; an ^{iv}Ondol stone or a stone using tools such as stone bridge or by natural system. Otherwise, it was built on propose of priest.

Why some dolmens don't have its burial chamber? Let us see the possibility that dolmens belong to families' tombs, tribe's tombs. Otherwise, it belongs to be public cemetery through the next scene.

2. Families' tombs and public cemetery

Location: Gochang County in Korea



Tombs shaped of mound are representative of current burial types in Korea and are placed among dolmens. Six of dolmens are arranged like tombs on the small hill. The next picture shows us that a group of dolmens is clustered.

I think that we can recognize dolmens clustered four and six of them or around ten of dolmens as families one. And it should be seen as leaders' group if we see it with today's viewpoint that involving with manpower to be mobilizing by educated sightseeing

How we can guess the next figures?



Location: Yeonggwoung County in Korea
We can see 45 dolmens are arranged to follow a few lines based on center. The dolmens in the center should be used in special purpose including tombs' function. There are dolmens exposed its upright stones but most of them are placed as it looks like natural stone. Here, dolmens remains among 2~3cm.

Location: Jangheung County in Korea

When I come to here first, bushes and trees hid dolmens. But, dolmens still remains well when I visit again. There are over 90 dolmens distributed. The general aspect is made of an oval from south to north way. I understand the capstone's faces are sleeking with relative, which seem to be moved around watercourses.



Location: Gochang County in Korea



The figures are one of world heritage site in Gochang. We should understand dolmens grouped around 30~ 40 numbers or 200~500 numbers in a place as a public cemetery. As we have studied over, dolmens have a few functions such as tombs, altars, clans or tribes cemetery including public cemetery as we have a look. We should get dolmens in narrow approach if we try to understand partial

figures.

Next, I will have look wall paintings, which are considered to create in the similar time of dolmens.

Dolmens have left us the paths to communicate with predecessors including prehistoric people. Prehistoric people didn't leave any characters. But, they have left us language of stone

3. Dolmens posses its sprite

Location: Yeosu City in Korea



Mural paintings inscribed on dolmens at Orimdong in Yousoo.

Mural paintings including human figures are considered and quoted as one of data to understand dolmens society. A stone sword is expressed in bigger than human figures expressed in faint. Specially, the stone sword drawn in a case is peaked, not rub stones. The right picture is revised from the left scene that human figures are faint.

We call it perspective drawing. Those techniques are seen at Inbee-ri in Pohang and at Bangudea mural painting in Woolzoo County.

Location: Pohang City in Korea



This is the Inbee-ri mural painting inscribed on dolmens. I felt that it looked like fishes when I saw it firstly. I guess that people who live around the middle and upper Hyungsang River make it inscribed after catching fishes drew mural paintings. But, professionals in Pohang expect it as stone swords. There are inscribed with two of

stone swords and one stone arrowhead.

³⁷“The stone swords were faced to the sky in long time ago. But it faces the east by sinking of the right side of dolmens. The edge of swords is covered with two folds. It is also known that swords are expressed as a perspective. There is also an arrowhead under the stone swords but it is not seen with eyes”.

But, a part of underground structure is exposed, which is figures zoom out in the right picture. What should I understand the above data even the underground structure remains?

Location: Pohang in Korea



Location: Gochang County in Korea



There are also two of mural paintings, which look like as an incomplete work at Chillpo-ri in Pohang. If we reflect the right one on the left one, it resembles the mural painting in Inbee-ri. But there are still the other opinions to see it. Some of professionals expect the left one to be an incomplete of stone sword but the right one is expected to be a stone arrowhead.

Sunhyuel is cup mark on stones. We call it egg hole or egg rock (rock art) and rock holes (cup hole) having egg holes in Korea. It is called cup marks in Europe and North America. It is definitely contained of a lot of stories to see cup marks. It is also laying cup marks down a lot of means by professionals following regions that show a lot of words of cup marks. It has been found in every region

in the world Most of them are found on dolmens but it is rarely found on menhirs or rocks or stone monument on top of mountain or stones remained in old buildings.

³⁷ Report of researching the surface of earth at Wowlsung County and Youngil County-1985 Paintings on stones in Youngil . Gyeongju regions-Paintings on stones of Korea-Korean historic & folk institute-1996 (Minsokstudy of Korea)

And, most of them irregularly exist in different types and shapes. But a few of them are confirmed as arranged regularly. There are opinions that those cups marks show us constellation of hand-embroidered in the night sky. Cup marks show us that it is related with harvesting society. Ancestors prayed richness, fruitfulness and fecundity through those ceremonies to make cup marks. So we should learn spirit, ethos and consciousness of civilization or religious thought as a receptacle.

But, I believe it is achieved on stone monuments and natural stones among the people until these days that they pray something.

Location: Gochang in Korea

There is lot of cup marks on foundation stone of the result of an administration of local governors at MooJang castle in Gochang, which was built in early Josun dynasty (1417). I believe that movement methods and construction technique are disappeared from passing generation. It seems like that people thoughts of stone have developed generation to generation. I mean that folk customs of prehistory is continuously remained in today.



Location: Namwon City in Korean



There are also cup marks on the rock next to Bongsuda mural paintings in Namwon. The cup marks diameter is beyond 15cm in average. But, the stone in here belongs to sandstone. Some part of stone can be dug by branch of trees. Cup marks are usually about 5cm. It shows us that cup marks should differ from the size by stone materials.

Location: Pohang in Korea



There are around 400 of egg hole on the left capstone, which have its different size. It is well known as number 26th of 27th of Dongchon-ri dolmens but it is placed at outdoor Haman museum now. Notice board tells it as a symbol of having babies or good harvest. Furthermore, it feels like constellation when connecting the egg holes.

The right one is the same dolmen that I mention the face of wedges. It is placed on the middle of hill. You can see the East Sea when walking around there. We don't have any idea that those cup marks or mural painting contain much meaning such as catching an earnest fishery to see the East Sea and praying their wishes during the sun rising.

I show a photo in different faces because I would tell stories of cup marks, which is recently in news. There are some of constellations looking like the Great Bear or Dipper shaped of cup marks and Cassiopeia shaped of "W" character in English when linking in line of cup marks.



Location: Gochang County in Korea

Most of cup marks are so soft face that seems to be rubbed by strong stone. But, those one are very tough that we don't know what they use tools.

Ring marks

Location: Haman County in Korea



³⁸Dohang-ri dolmens

There are ring marks and cup marks at outdoor exhibition of the Hamann museum in Hamann. It is not actual one, but it is recreated that ring marks and cup marks found on the dolmens in Hamann. Cup marks look like to be dug by peaking and rubbing inside it. Here I confirm that 7 of ring marks are arranged well, it is known

as a representative of the sun for good harvesting. It is also understood that ring marks show us supplications and richness related with prehistoric people who inscribed on the dolmens. Specially, ring marks found around world are symbolized of the sun god like Helios.



Location: JangHeung County in Korea

It is contained of rainwater after stopping raining. I believe it is common culture and direct proof shared by human beings that it has been found around world such as the Russian Federation Ireland and North America.



Location: Goryeong County in Korea

I introduce a painting shaped of rings, which is manifested in the same way to be used in dolmens. I confirm ring marks on the square stone at Chunjeon-ri in Woolsan. What do they mean with those ring marks among actual and abstract mural paintings. The academic expect it to be the Sun God [Helios in Grace].

And, it is also considered that prehistoric people admire the Sun and Water related

³⁸ A school bulletin of ancient history of Old Korea- Remain of Dohang-ri in Haman- Korean ancient historical society-1992-

with starting of farming.



Location: Ulsan City in Korea

It is huge stone bed that length and height are some 9.5 * 2.7M. There are a group of deer and animals not known their name in the left part of stone bed. And, there is a ring mark in the middle of stone bed. I quote stonewall in the center because I cannot explain the full story. There is a face of man and a few geometric patterns of diamond

around ring mark.

Location: Yeonggwoung County in Korea



It is called “Mal stone”.

The pronunciation is exactly the same with Horse in Korean. I mean that ‘³⁹Mal’ and ‘Horse’ are homophones in Korean. Here is a hole on the capstone, I mean that tool of weights and measures were used for measuring produces. The rectangular hole is about 25cm, it is not the same size that we use it in today. An

eighties old man who lives in this village said to me “It is old measurement tool. It is too high to climb the capstone with its height and structure even though support stones are demolished. I mean that should be used in daily tool when it was built. So, people could climb it without ladder when they used it a long time ago. But you might use a ladder to climb it in these days. I could not confirm when the measurement tool was excavated in dolmens times or after that time (ancient times such as iron or modern times. But we also see one point that we image the soil erosion.

³⁹ A Mal- a mal is tool in using measurement of harvesting and it is the same with 4.765 U.S gallons.

Location: Yeonggwoung County in Korea

It is called ⁴⁰Doe stone, one Doe is also measuring basket when checking the produces of harvest. This one is not far from the “Mal stone”. Of course, it is also a dolmen like “Mal stone”. I have still questions why did they make it. There should be wooden tools of measurement it should be possibly created after iron ages.



I believe that it would be made in prehistoric times.



The words of “⁴¹Sejang mountain of Yuohung Min’s” are inscribed on the dolmen. This dolmen is the biggest one located at Desin-ri in Chunyang ⁴²myun; It is around 220~290 tons like sized the bulk of a house. And it is also called Pingmea stone considering as one of the biggest dolmens in the world. People live in village call it “General stone or Pingmea stone”. Pingme, one of old lady in legend, throws a stone who is called Mago, grabs the huge stone in her width of a skirt to go to WounJu temple. She let it leave by bursting of her skirt. It is the stone that she leaves here. Stone placed at Kumjangdong at Honghea town has similar legend even though it was buried.

The dolmen has a written contract that Yuohung Min’s Sejang Mountain; it means that the Min’s family has buried their ancestors from generation to generation as an ancestral graveyard. I believe that it should be inscribed in ^{iv}Joseon dynasty. This huge

⁴⁰ A Doe is the same with 0.477 US gallons

⁴¹ Sejang(世葬) means Min’s family burial places generation to generation.

⁴² A kind of middle sized village in county.

and heavy dolmen is about 7.3M, 5M and 4M with its length, width and height. Weight is to be guessed around 280 tons.

Location: Gochang County in Korea



landscape after matching with nature made by human.

Location: Gochang County in Korea



intertwined with vines and a castor-oil

plant. I should never think it is a dolmen if I do not have any interest.

The right dolmen in backyard with stonewall and bamboos.

It is a great example that dolmens remain to be used-how to be even it were constructed of a tomb when building. This one let me be felt warm-hearted.

This one also has a written contract on its one face as “⁴³Segoegi” of Sungsan Kim’s family. The meaning is the similar to Sejang(世葬). We should understand that Sungsan Kim’s family had lived for a long time ago. There are three of dolmens around 30 tons. But an aboriginal who live there told me, they are going to build a pavilion among them. I expect the

The left picture lets the sightseeing get



Most of dolmens remain in original places before being modernizations. Our ancestors keep away from dolmens when bringing under cultivation to be harvesting of rich soil. I expect dolmens not to be damaged anymore. But, it is difficult to find that we leave the dolmen as itself after being modernizations and introducing heavy machinery. It

⁴³ Segoegei means Sungsan Kim’s families have lived in this village generation to generation.

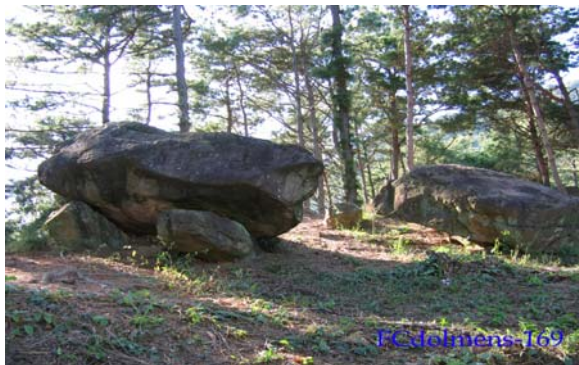
proves lost dolmens for 20~40 years in recent are more than in past thousands years.

It is the fact that dolmens are not to be designated of heritage site and local culture assets. So it will have gone forever if there are any cares. I believe that our ancestors had lived with harmony with environment without damage. And it makes great elegance in natural. But, we must consider it deeply and discuss it cautiously with opening doors when we have to decide those issues.

Dolmens asserted with stonewall and bamboos are good example that we have to preserve dolmens from any damage or applying it in resources to be used in much field.

4. Dolmens have incorporated its hurt tears

Location: Gochang County in Korea



Location: Gochang County in Korea

Firmly standing dolmen is demolished. Even it had been stood over 3000 years. The exposed upright stones are close to 140cm. What made dolmens destroyed for? I do not have any doubts that dolmens are destroyed with its structure default.

I believe that dolmens are demolished by natural or human. Because there are tombs among dolmens, which shapes are mound.

It means that the ground around dolmens dug for burial another generations in the past. There are actually three of tombs over two of dolmens, which seem to lose its posterities. And there are a few of trees having rooted over then 30 years.

Location: Gochang County in Korea



The left slab that used in capstone of table style of dolmens. But, there are no upright stones. It should be moved by the people who live in village, by carrying with poles

jointly shouldered about eight persons. It means that capstone was left off the ground by men's power. It was also used as stone bridge with great harmony with natural 20 years ago. It is covered with concrete nowadays with losing its scene of nature.

The right one is the one damaged in front of elementary school abolished. Someone inscribed numbers and name on it. I couldn't find any of mural paintings when researching but I have confirmed dolmens using around us in these days.

Location: Gochang County in Korea



Uncountable dolmens are lost in doing business with cultivated field for harvest. Even some of them do not leave any traces. But, dolmens left on marshy land under mountain remain without plowing in huge scale.

Burial chamber of megalithic dolmen is exposed of its skin following a drain line in the right picture. The assistant stones supported the burial chamber has lost its original form; the remained one is just capstone gutted and a side of slab.

Location: Gochang County in Korea



The huge capstone has a long time to be broken by harvesting in the left picture. If we adhere in both faces of stones, it is exactly accorded with each face. And, the burial chamber made of slab is exposed between gaps.

The right one is the bridge stone placed at the same space. But, it seems to be moved from a part of burial chamber. It is correctly same shape, thick and size.

Location: Ganganghwa County in Korea



It is confirmed that table style of dolmens has got four of upright stones shaped of slab form at Jum village Buguen-ri of Kangwha. So we should understand table style of dolmens has got four of support stones when it was built. I believe it is under process of demolishing. It is well known to us that we call it table style of dolmens. Capstone is not on the upright stones even though it is placed in mountain.

Location: Gochang County in Korea



This is one of the remains. But it is lost of its whole burial chamber by professional grave robber or among the people having gotten curious. So I should understand that dolmens burial chamber or upright stones are disclosed.

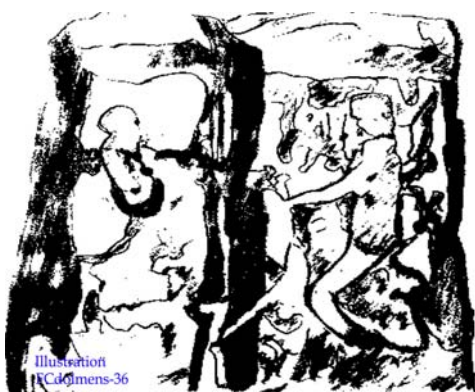
Chapter 6. Skulls, Grave goods (Accessories) and Burial Ceremony

1. Skulls affirmed at the burial chamber

The dead usually return to soil in acid soil over a few hundred years. The most Korean soil belongs to acidity, the skulls hardly ever find in the dolmens burial chamber due to those reasons. But, limestone formation, foreshores or special space belong to alkali soil have shown skulls that passed around a few thousands years.

Location: Daegu City in Korea

⁵⁰Jinchundong dolmens;



There were excavated of grave goods such as a stone sword, four of stone arrows. Specially, there were human bones in the 3rd burial chamber No B. And, human skulls and 11 pieces of teeth had found in the first burial chamber, thighbone was also there. By resulting from search at jinchun dong in Deague. It seems to be 20th old lady and her son as followed teeth structure remained in burial chamber.

It shows buried man's position in their society. I mean we should read their social position through burial accessories being found in burial chamber or not being found any of grave goods when excavating research in a group of dolmens of one place.

We can confirm that lady and child were buried together in a coffin. It is good example that shows one of burial methods in dolmens times.

⁵¹Whangsuk-ri dolmen



A group of dolmens site was made in lows piled field of 103M above the sea level at the upper of the Namhan River, at Whangsuk-ri in Jechun county of Choungbuk province. It was the first skull being found in Republic of Korea. It has suggested dolmens used to be burial tombs and focused on dolmens as a clue.

I don't have any idea that dolmens have drawn

⁵⁰ Ginchundong dolmens in culture district of prehistory and ancient times in Degue-The Organization of Korean Historians-1980, 1990

⁵¹ National Cultural Properties Research Institute of Korea- archaeology dictionary

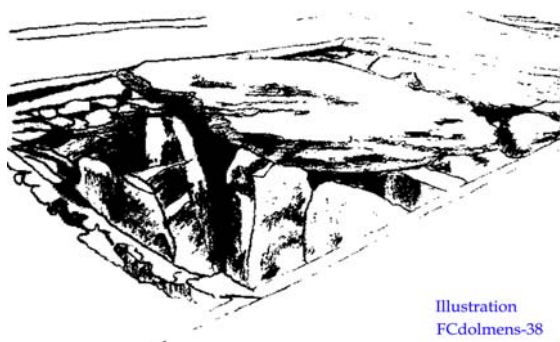
its veils. The buried skull did not belong to a short-skull, which is characterized of Korean in common but be comprised with long-headed. So, a few of professionals sometimes try to understand it as a related Indian and European. One or two of ten people having being shaped with long-headed have lived in Choungbuk province.

But, I mean Korean having short-headed are in nine cases out of ten.

Exhumed burial accessories are 6 of stone swords, and 40 pieces stone arrows, non-pattern earthenware, red earthenware and so on. And, skulls and ashes were picked from six of burial chambers. Especially, the perfect skulls remain in the number 13th chamber. The dead man was about 174cm tall when restoring.

“Dongchimshinjangwojang” (Here is in Chinese ;東枕身展仰臥葬) Generally, the head of the dead is toward and the body is straight laid down-It tells the dead buried by burial customs. The dead body is usually twisted in case of burying without any burial customs.) It suggested around 2360 years \pm 370 B.P by radiocarbon dating research result. "shenzhan yangwo zang"

Location: Sungchun dolmen in North Korea



There is a big burial chamber in the center, two of burial chambers are placed on each east and west side of middle one, and three of the others are located in each northern and southern side.

The more interesting fact is that two of dead men were buried in the center. And three or four of dead man were buried in each burial chamber.

So, total of men buried in this dolmen were about 30 bones confirmed. There was buried in shape of disorder including children's skulls in small burial chambers.

Some of professionals interpret that they should be buried as buried of the living with the dead. The result tells the skulls and a top vessel by 'nuclear fission indications' and 'Paramagnetic resonance'. The data of absolute chronology gauged as B.C 31. It is suggested that the date show us times of dolmens a little bit earlier than skulls of ¹DanGun

It is guessed this dolmen is a tomb of class leaders when the bronze ages or the beginning ages were dismantled to follow class society happens. But, there are the other possibilities that we see it as families if we look at it the other angles like people

being sacrificed by any accident. And, I could not find any of reasons.

We must understand that low class is also buried under the dolmens if low class and class leaders' class were buried together in a dolmen. I mean that dolmens were tombs of among the people lived in ancient times.

Conclusion: We have seen the burial chamber of dolmens considering that sizes and structures. It shows us the process of burial methods that one dead man was buried in each chamber, more than two of dead men as joined together, cremation and the second burials including the first burials.

But, it is so inimitable that dolmen has shaped as itself at Yongsan-ri in Sungchun county of Pyungyang.

We have a look that partial skulls and ashes in dolmens placed in Both Korea. Those figures are confirmed in Europe.

Let us see the characters in North Korea and the dolmens located in Europe and India and so on.



⁵²Illustration-39



⁵³Illustration-40

Bones in the burial chamber were found at Channel Island off Normandy coast in France. (Trento, 1978:192, plate 46)

The left one is a lot of skulls that discovered in burial chamber at Bascules in France (Joussaume, 1985: 160, plate 15).

We see the face that they buried together in a dolmen or buried in a group as burial methods.

⁵² http://www.ownet.rice.edu/~reli205/nathan_dolmens/dolburial.html

⁵³ http://www.ownet.rice.edu/~reli205/nathan_dolmens/dolburial.html

Face grave goods excavated

There are some cases that we should find dolmens having been gotten capstone or not. I mean most of dolmens have burial chamber with capstone but some of them doesn't have any of capstone next to existing dolmens. Otherwise, it could be understood that burial chamber was lost its covered stone by natural or human before excavating. Most professional seems to be understood it as dolmens with a tomb attached. There are really much of sameness between dolmens without covered stone and Sukgyuan myo (sarcophagus); chamber tomb except the covered structure.

Here is more detailed information among dolmens without capstone and tombs consisted of slab of its burial chamber.

Stone graves without covered stone next to dolmens were built as dolmens burial chamber. Stone graves have its covered stone, but its shapes are really small, slice and tiny style considering the capstone of dolmens volume.

Most of them are independently placed, but some of them are also located next to dolmens. There are often found of grave goods in sarcophagus like a little bit late ages. If there are any of covered stones with slabs, they are exactly same structure.

So, we put it on the agenda that we should set the point of sameness or differences among their relationships. Alternatively, Researchers of dolmens suggest that dolmens without covered stone are mentioned as dolmens in their reports even though there is sameness and differences between them.

We could see the point of sameness and differences among remains found in dolmens or stone chamber tombs. I believe it depends on speculation or background of environment that they should think hereafter world is different.

It showed us that stone axes, stone adzes and stone chisels were related with lumbering trees or trimming timbers to make movement route and to use tools when moving. And, stone knives shaped half moon and stone grain sickles were linked with farming or harvesting in ages. Furthermore, vessels or earthenware jars without patterns and so on were telling us the stories of their life course.

And, stone swords, bronze swords and bronze balls including Jade etc, were recognized that we saw representative or actual their social positions in life considering their aesthetic sense.

But, there were no stone knives shaped of half moon in North East China, as I knew. In other words, it could be suggested that there was no harvesting rice at North East China in dolmens times. The poorness of grave accessories round YeongSan River and Gochang was linked with after death.

We should also see the difference of prehistoric people thoughts through the grave accessories that found in low or in various at the burial chambers.

If they believe the next world, they put a lot of grave goods in burial chamber to be used in another world like tools being used in daily. If they don't believe the next life, they don't put any of remains in burial chamber. It makes the differences which dolmens do have poor of accessories or do have a lot of remains in its burial structure. But, I still have a doubt there is any possibilities that they could use the same burial styles if they think in contrast with each other.

Of course, those theories should be changed through research excavated of dolmens in numbers in the future.

Concurrence and discordance of accessories picked up in burial chamber of dolmens in each region depend on the creators. And, it is also really great materials to understand dolmens builders' and people live in the same times.

Specially, factors of discordance leave us many of mastery and it lets us be in the corner that we argue whether dolmens society belongs to bronze ages or new stone ages. I question myself that dolmens society seems to be cut by ourselves as a Neolithic ages and bronze ages relating with tools.

It constrains us to be understood that dolmens belong to bronze ages without considering midpoint ground of culture share. Dolmens voice tells us that we should throw the educated sense away.

2. Looking grave goods

A. Yodong and Manju regions

⁵⁴Dolmens in Yodong and Manju regions:

There were burnt down a piece of skulls and earthenware like jars, stone axes, stone adze, and stone drill etc. Total of it is about 26 pieces under table style of dolmens as we have a look dolmens placed at Notewoo Mountain in Gaju city of Yoyoung region. It is a good example of grave accessories found in Yoyoung. There are any cases that they have found remains with table style of dolmens except those one.

Most of grave goods have been confirmed in Gasuk shape of dolmens in Yoyoung, like bronze swords, accessories made of bronze, and bronze buttons including earthenware similar to Misong-ri shape and stone axe, stone arrows, tools of spinning or weaving tools (we call it Bangchucha or Garackbaqui) and stone adze.

Grave accessories are really one of good data to see dolmens society. I could not introduce all of dolmens remains in here. I will explain that general one and unique one excavated in the coffin. We are trying to travel the dolmens society through grave goods excavated.

⁵⁵Illustration-41



numbers of dolmens were placed in the firm ground like fan shape.

All of them were Gasuk shape of dolmens; the line of upsides was directed towards south and north except number 1. Specially, there were traces of a piece of bones burnt in No.1 dolmens and stone axe, stone chisel and “Garackbaqui” including two of jugs

⁵⁴ National Cultural Properties Research Institute of Korea- archaeology dictionary

⁵⁵ National Cultural Properties Research Institute of Korea- archaeology dictionary

were found No.6

I am leaving references written in Chinese.

Dong Mountain (鳳城 東山 支石墓)

遼寧省 鳳城縣 草河經濟管理區 管家村 西赫家堡子.

Reference: 古朝鮮地域의 dolmens 研究(河文植, 白山資料院, 1999), 鳳城東山·西山大石蓋墓 1992年發掘簡報(崔玉寬, 遼海文物學刊 2, 遼寧省文化廳, 1997), 紀元前 2千年期後期 및 1千年期初 遼寧東部地方의 考古學(鄭漢德, 先史와 古代 5, 韓國古代學會, 1993), 鳳城東山大石蓋墓發掘簡報(許玉林·崔玉寬, 遼海文物學刊 2, 遼寧省文化廳, 1990)

Dolmens remains located in Yodong and Manju tell us uncountable viewpoint. First, we see a lot of Gasuk shape of dolmens placed in Yodong and Manju. And, we can confirm second burial including cremation that should support burial methods in small sized burial chambers as we look. We can understand small sized structure of burial chamber, which seems not to be buried of general adults or even children including babies.

Dolmens remains recovered computer graphic and excavated at Boramjum city in Yoyoung of China:

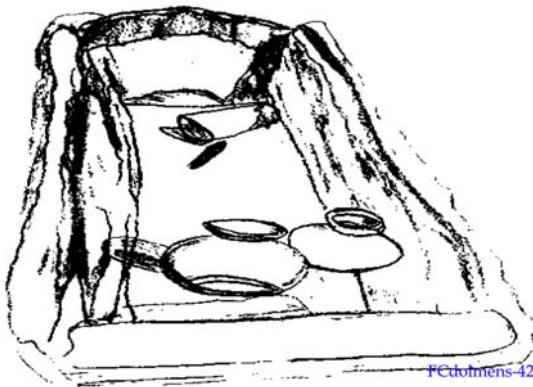


Illustration-42

There should be reported that Gasuk shape of dolmens are in this regions in the near future because most professionals are studying to focus on table style of dolmens.

Jugs resemble Misong-ri shape and Bipa shape of bronze sword

There are a couple of jugs in burial chamber. Specially, it is guessed that dolmens have been found beyond 300 of dolmens in Yodong and Manju. 170 of dolmens belong to table style of dolmens and the others belong to Gasuk shape of dolmens.

B. North Korea and Mid-regions of South Korea

There were bronze ball, friendly relations made of bronze and bronze sword including Misong-ri shape of jugs etc; such as stone axe, stone arrows, spinning tools made by various materials and knives shaped of half moon being read of dolmens society unaccountably. There were one of table style of dolmens and 7 of Giban shape of dolmens including 4 of house sites at ⁵⁶Chimchon-ri dolmens district. And, grave goods such as earthenware shaped of a top, stone chisel, stone knives of half moon shaped, stone arrows, stone sword and stone adze were excavated.

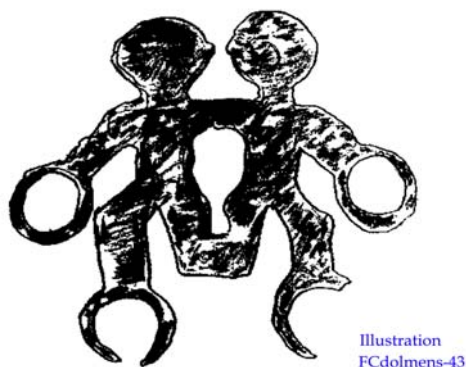


Illustration
FCdolmens-43

⁵⁷Illustration-43

There were also found of stone knives, stone sword and stone arrows including earthenware called Mukbang-ri shape.

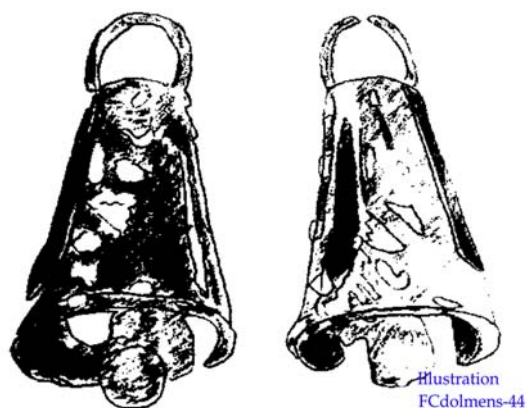


Illustration
FCdolmens-44

⁵⁸Illustration-44

And, stone axe, Garackbaqui used in spinning tool, stone knife shaped as a half moon

It shows that the grave accessories were in accordance with grave goods in the dolmens. 21 of dolmens in a group of Oduk-ri shaped called table style of dolmens had been excavated of grave accessories such as stone axe, stone axe shaped star, stone arrows and stone sword and so on, and earthenware like a top shaped was found.

⁵⁸Jang-ri dolmens: 50 dolmens are distributed at Jang-ri in Sangwon County of Phyang city. 10 of dolmens among them are located at Gisukdong village. Dolmens sites are registered one of remains to be protected. Two of table styles of dolmens were excavated of placing in north of it. There were friendly related decorations made of bronze, bronze ball and bronze chisel in No 1 dolmen.

⁵⁶ National Cultural Properties Research Institute of Korea- archaeology dictionary

⁵⁷ <http://blog.naver.com/casahoo?Redirect=Log&logNo=20001514991>

⁵⁸ National Cultural Properties Research Institute of Korea- archaeology dictionary

⁵⁸ <http://blog.naver.com/casahoo?Redirect=Log&logNo=20001514991>

and stone arrows including earthenware shaped of a top and earthenware of Misong-ri shaped in No 2. Specially, there were a piece of charcoals.

We can see technologies of craftsmanship through bronze ball and bronze decoration shaped of friendly related to inscribe in dolmens times.

Gangwon Province and Chungcheang Province of mid-region in Korea

There were four pieces of earthenware with non-pattern at ⁵⁰Gode-ri dolmens in YangGu County of Gangwon Province and were stone sword, stone arrows, Knife shaped of half moon, whetstones, stone lances, stone spear and spinning and weaving tools called Garackbaqui (Bangchucha) including earthenware with non-pattern and stone pieces at ⁵¹Sangjapo-ri dolmens in Yangphyang and at Sunbudong in Ansan of Kyuongi Province.

Specially, stone sword was excavated at Sangjapo-ri dolmens, which was rarely found in dolmens.

Stone hammer, whetstone and a piece of stone axes were found at ⁵²Sangick-ri dolmens in Buyou region of Chungcheang Bipa shaped of sword, stone arrows, red earthenware and Jade as a jewel were excavated at ⁵³Bireadong dolmens in Dejuen City. And, there were well known of dolmen being excavated of skull including stone sword, Knife shaped of half moon, stone plane, stone arrows and earthenware fragment at Whangsuk-ri dolmens in Jechun County of Chungbuk Province

⁵⁰ National Cultural Properities Research Institute of Korea- archaeology dictionary

⁵¹ National Cultural Properities Research Institute of Korea- archaeology dictionary

⁵² National Cultural Properities Research Institute of Korea- archaeology dictionary

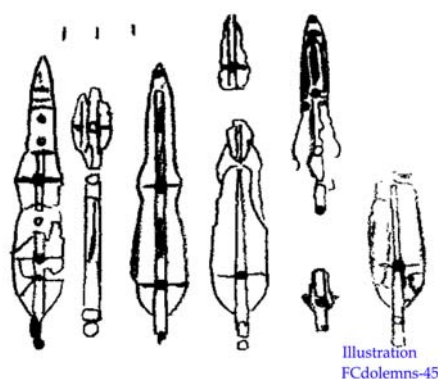
⁵³ National Cultural Properities Research Institute of Korea- archaeology dictionary

C. Southern part of Korea (South regions)

3. Looking funeral ceremony Let us look grave goods and bones excavated in burial chambers in each region.

If we see examples of grave accessories in Kyungbuk Province and Kyungnam Province, there were excavated of stone sword, earthenware with non-pattern and red earthenware at ⁵⁴Jinchundong dolmens in Degue. There were found that stone sword, stone arrows, earthenware with non-pattern and red earthenware including knife shaped of half moon at ⁵⁵Sampo dolmens in Guachang County of Kyungnam Province. And, there were also stone arrows, a piece of bronze arrows, Jade of Jewelry and fragment of earthenware at ⁵⁶Mooga-ri dolmens in Kimhea City of Kyungnam Province.

It seems like to be found of a lot of grave goods considering any other regions.



⁵⁷Illustration-45

Junnam Province, places where dolmens are mostly located in Republic of Korea So I believe that there were excavated of a lot of dolmens. The total numbers of dolmens excavated are more than 350s during the process of road construction, farming field arrangement to make large and straight line of banks and linking with district of water soaking in dam.

There were bronze swords of Bipa shaped, Javelin of bronze, stone sword, jade, adz and so on.

There were a piece of fragment of earthenware shaped of top, stone knife shaped of triangular, fragment of stone axe shaped of moon, bent jade and balls around Bosung River. There were excavated about 14 numbers at ⁵⁸Sangjuk dolmens of Jukryangdong in Youchun of Junnam province in 1989. A few of burial chambers were found during the research. 25 numbers dolmens were found at there. The main grave goods were 7 of

⁵⁴ National Cultural Properties Research Institute of Korea- archaeology dictionary

⁵⁵ National Cultural Properties Research Institute of Korea- archaeology dictionary

⁵⁶ National Cultural Properties Research Institute of Korea- archaeology dictionary

⁵⁷ National Cultural Properties Research Institute of Korea- archaeology dictionary

⁵⁸ National Cultural Properties Research Institute of Korea- archaeology dictionary

sword made of bronze, stone sword, two of stone chisels and Garackbaqui (Bangchucha) used in spinning and weaving including earthenware with non-pattern and red earthenware and so on.

Those regions are southeastern part of Junnam Province. But, here is good collation that we see the difference of grave accessories.

There were a few pieces of grave goods such as stone arrows, earthenware with non-pattern around Youngsan River where excavated of 15 dolmens.

Gochang is most cluster group of dolmens where dolmens are placed all of natural villages.

There have been excavated around 23 numbers from 1965 until these days. But, it is the place where grave goods of dolmens show poor data compared with the others even though there are a lot of dolmens. The excavation in 1965 by national museum of Korea at ⁵⁹Sanggab-ri 3 dolmens, there was no grave goods except a fragment of stone sword near that ground. And, there was earthenware, which belonged to earthenware with non-pattern in the burial chamber, which did not have its covered stone next to the dolmens. I am not sure the difference of grave goods depending on the regions. Gochang has really poor grave accessories. But just think of the number excavated dolmens.



Location: Gochang County in Korea

It is earthenware called Jumtodeetogi, which belongs to earthenware with non-pattern and Garackbaqui (Bangchucha) used in spinning and weaving tools. It was found at chamber tomb called sarcophagus next to dolmens when excavating dolmens in recent. Ancestors should harvest produces to use stone shaped of half moon.

It makes their produces increased as followed surplus output and then they must need storages of produces to be protected of famine or disaster. I mean that they provide against emergencies.

It is also attached of its mouth on top. And, it belongs that Moonmontogi; a kind of earthen vessel, was fashioned at South Korea in early iron ages. It is confirmed when excavating at Susuk-ri remains of Yangju around Han River in 1961. And, it is

⁵⁹ National Cultural Properties Research Institute of Korea- archaeology dictionary

reaffirmed that earthenware belongs to period of Se-shaped sword made of bronze, which was found with Se-shaped sword made of bronze at Kyujungdong of Dejuen in 1967.

We can see that ancestors come true their clothing through Bangchucha made of born or stone or wooden etc. It is mostly found at house sites of remains.

It tells us weaving originally came true in bronze ages. There are holes in the middle of it, thread puts into hole to hold it up, not to move it. Edges of thread tie and then spin round Garackbaqui, thread is tightly made to use materials clothes. We can image that our ancestors made clothes to use it. They must put clothes on, consisted of leather, wool and fiber of plant or natural source, which were found at all of background.

It is a stone knife shaped of half moon to be used in harvesting grains in prehistoric times. The shape is similar to half moon, so we call it Bandaldolkal in Korean. It was found around Yoha River in Yang Sao culture times, which belonged to Neolithic ages, and then was confirmed around Abrock River and Duman River remains where it is flowing boundary between North Korea and Northeast China, Bladikbostic of Russia.

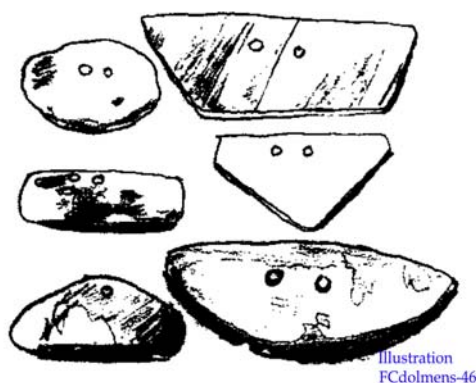


Illustration
FCdolmens-46

⁶⁰Illustration-46

Stone Knife was fashioned at southwest of Korea such as SongGuk-ri during the mid or late bronze ages. Stone Knife was found in all of house sites remains in bronze ages without any of exceptions until now, it was also commonly occupied and representative in bronze ages. We should read that production activity among the people was the most common activity to be farmed or harvested through stone knife considering specific gravity.

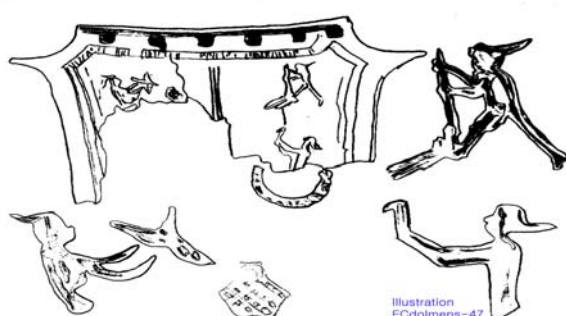


Illustration
FCdolmens-47

We have known that farming of rice has started from bronze ages. There are a lot of researches relating with harvest but there is no research with stone knife shaped of half moon considering that dolmens society has social position.

⁶⁰ National Cultural Properties Research Institute of Korea- archaeology dictionary

We could have a look the life of dolmens Ages through the next tools.

Flint arrowheads are mostly found in burial chambers such as grave goods as I have kept quoted.

We should read possibilities of wars and hunting through flint arrowhead in common days. People of dolmens must live in depending upon nature. I mean they started with collecting produces from nature and then they did harvest basically at brook side to store up provisions for hunger or disasters or applying to natural change.



Thus, there are confirmed that we see tools or decorations such as bronze sword, stone tools, and wooden tools. It shows us the factors of social positions of prehistoric people as great families, in dolmens chambers and chamber tombs of representative in bronze ages such used and made in dolmens times.

I believe that a dichotomy or stone arrows were related with farming or hunting or fight. Earthenware jars must be used in putting water in or tools related with food storages or containers of grains or tools of water boiled.

Most of habitation sites were contained that leader class and common class as related with families. Dolmens are also included with grave goods as tools, which would be used by constrictors when they are alive as it is dead man house.

They have improved the productivity and producing power of human and natural. It gives that people of prehistory have deep consideration and then, Human have done it over and over transforming culture.

People made bronze sword following stone sword, they created their unique mirror consisted of bronze, which seemed not to be recreated even these days. They established the standard of visual beauty by themselves. They put on earrings and necklaces such as accessories of body to use jades. And, they put one step and one step toward new world.

We have tried to read dolmens society through grave accessories of bronze tools excavated in the burial chambers. Absolute numbers of grave goods belong to earthenware, stone tools such as stone knife, stone arrows, stone axe, stone chisels

and stone plane.

I am telling you it is closely related with the public. So, I will answer the question. Who did make dolmens? Common people like you built most dolmens for them. And some of dolmens were built for leader class to use their community power. We can meet dolmens society not only leader class but also common class to see those tools or grave goods.

But, the gap between classes is not too big as we leant. I believe dolmens society was a great community that they shared a lot of things like families.

Dolmens are burial remains like that people dedicated of their families and communities. So, let us guess the burial behavior to use grave goods and structure.

3. Looking funeral ceremony

Tombs are by-products that result from funeral practices, but it is overlooked until now. I will travel the funeral customs. We have looked a lot of burial chambers in different size and structure as we see.

A piece of charcoal was found at Jang-ri in Sangwon County of North Korea. And, a piece of bones remained as burnt down by fire distinctly affirmed in most of dolmens location at Yodong Region and Manju of China. Dolmens in Gilim Region had a little bit big sized burial chambers comparing with others. Skulls were also found in its burial chambers even though I don't have any of picture data. Moreover, we should see that cremations commonly took placed with Gasuk shape of dolmens as its funeral customs. Specially, there were three of Gasuk shaped at ⁶¹Jaokiuogouo dolmens in Dongpung County of Gilim province of China. Each burial chamber had got two or three of bones in its chamber. Structure of burial chamber was divided into two layers that skulls of human were on top of ashes in volume. Cinders of pine barks were also on top of skulls.

We could read dead men were cremated in the burial chamber through this information. There are dolmens with burial chambers being structured of 40~60cm, the dead could not be buried in its burial chamber directly considering the size of it.

So, there must be possibilities to be buried with burnt bone or ashes after cremating outside of burial chambers or dead men were buried at the other places and then, they were moved into burial chamber of dolmens when losing dead men muscle structure or their skins. I mean that dead men were buried at the other places until people in

⁶¹ National Cultural Properties Research Institute of Korea- archaeology dictionary

dolmens times prepare dolmens materials such as capstone and underground structure.

Those ceremonies of burial have taken place in southwest regions in Korea recently. But we did not use megalithic stones anymore.

We see burial customs in dolmens, there were various types of burials such as joined together, cremations. It belongs to second burials customs. But, dead man was also buried in direct like bent burial and straight burial.

I found it possible to depend on construction groups. It shows us related with builders and dead men buried. Considering that all of those stories, dolmens were one of fashioned burial customs in prehistoric times.

Chapter7. Facing habitations of prehistoric people

1. The spaces around dolmens and resident sites

Living space of prehistoric people in Manju seems to be placed next to dolmens that stone tools and earthenware excavated at remains sites accord with its ages.

It is considered that dolmens were built near the housekeeping area on propose, it should be great data to understand their catchments area and activity area.

Mud flat in Gochang County and seawall in Kangjin county



There are developed out of wide sand dunes and tideland faced the West Sea of Korea. Specially, the tideland, when appearing by difference of inflowing of the tide, has a great abundance with sea food such as shells or crabs and nutritious produces with mixing inland water and sea water.

So, the earth in both inland and tideland produces her plenty seafood. Prehistoric times, people could pick shells and crabs up when ebbing tide as we have done in today.

I think many people should remember there were a half fish and half water where inland water and seawater meet, which is already our remembrance. Mid or late thirties in Korean Society should catch fishes with their hands or net in creeks when they were young without environment contamination. Prehistoric people should catch fishes through the next net.



The picture shows restored net, Garackbaqui (Bangchucha), knife shaped of half moon and Misong-ri shape earthenware at exhibition room in Suncheon Dolmens Park, which was confirmed in main bronze ages remains. We guess that prehistoric people did fishing to use net, wear clothing to use Garackbaqui (Bangchucha) after making it. Furthermore, they harvested grain and had food around a

cooking stove after carrying water to use earthenware. They should have a rest and sleep.

People completely depended on nature started collecting, fishing and hunting to get foodstuffs, they did harvest around creeks or riverside using of nature.

Where did dolmens builders live or what did they for a living?

Let us see distribution conditions and background of environment on the whole.

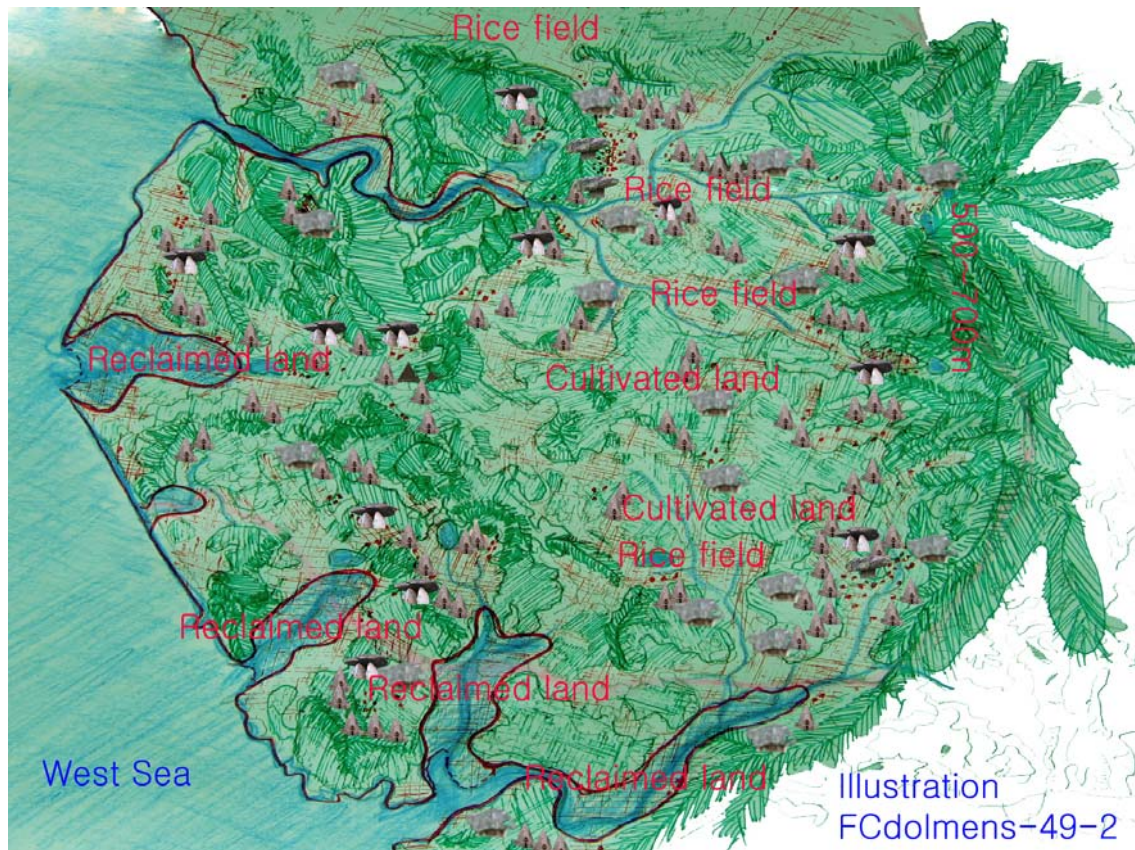
I will introduce dolmens placed around Korea



The above illustration is dolmens distribution sites around Korea. I hope people

understand it as an example not being related with its shape even there are about 46 thousands dolmens.

A good example; we are going to see the representative closest sites of dolmens at ⁶²Gochang County. An illustration is expressed of the main mountains, watercourses and sea



There is main mountains around 700~500M above the sea. It is placed in the direction of southwest from northeast if I explain it in detail. Rich mud flat is formatted off the sea, 200~400m mountains are there. And the red thin line around main watercourse is rice field, faint green is main hill around 40~150m. It is almost (farm) land after cultivating.

The blue in inland are watercourse and reservoirs. The scarlet spots tell dolmens distribution sites. Most reclaimed land was reclaimed before 80~100 years ago, seawater had surged around reclaimed line.

⁶² The size of land of Gochang County is about 603.16 km². You can compare it with Seoul City sized 605km², Boston City sized 232.1km².

There are dolmens at most of natural village as we see it in illustration. It tells our ancestors have kept building houses on the building sites for generations. I think that the hole of foundation stones must dig deeper than ever following the transformation of building materials (getting heavier than ever). So, it is possible to find building sites of dolmens constructors that we have a good break.



FCdolmens-185



Many people could get the general information such as landform in above picture.

It looks like plain but there should be small hills. Fields among the hills and watercourse should tiny and teeny. It has been big plain through cultivating.

The right picture shows us developed plain over a group of dolmens in today.



Location: Gochang County in Korea

I believe that it belongs to water of rain field for harvesting rice. Anyone doesn't farm in here but it seems to be harvested of rice during the 1950~1980s. Our ancestors made banks to follow lines of dolmens. Its width is about 2~3M or 5~6M that shows us remains of rice field.

It consists of small stones that seem to come from dolmens underground structure.

Location: Gochang County in Korea

There were found of big resident sites in the other regions. But, it is not affirmed in Go-chang County. There was no example of finding big resident site at Gochang County. The right picture shows one of resident sites found in Gochang. I just give you photo information that was excavated in recent, but it was not introduced to the public.



It looks like big site even though I quote a part of resident site. I believe there were houses of prehistoric residents to use reeds or rice straws.

2. Representative residents sites and remains in bronze ages

A few of well-known habitations such as Songguk-ri in Bouyeo, Nam River in Jinju and Yongarm-ri in Whachun are introduced of bronze ages.

A ⁶³Buyeo Songguk-ri

There were found about 100 habitation sites to face plain at hill when seeing and dig a pit and wooden barricade surrounded village. The resident structure of square shapes was contained of remains fired. And, we call Songguk-ri shape belonging to earthenware without pattern or red earthenware, which were excavated at the sites of house. There were a lot of remains such as stone swords, stone arrowheads, and stone knife, Garackbaqui of spinning tool and stone axe. Specially, rice seeds considered great source were found that we could understand bronze ages related with harvesting of rice.

⁶³ National Cultural Properties Research Institute of Korea- archaeology dictionary

B. ⁶⁴ JinJu Nam (South) River

Remains of Nam River supply us with great data of the indications of the times. I previously quoted there were specialized in division of labor in bronze ages. We should see there were also digs a pit and wooden barricades surrounded village to prepare to and prevent from outdoor invasions. There were specially possibilities that we advised dead man was died by stone arrowheads piece found in the burial chamber in correct. We can guess that dolmens society was radical whirls through ashes without skull indirectly.

C ⁶⁵ Yibgarn-ri in Whachun County

There were found about 170 habitations in 3,400 Pyeong at Yongarm-ri in Whachun County of Kyangwon province. Most of them were distinguished from 5 Pyeong but 8 numbers of habitations sites with big and wide room. The remains seemed to use a group of resident's sites by fourth at an alluvial fan. It is reported that habitations sites were ruined by fire when looking of ashes in every sites of house. There are also good data of social changes to see tools such as finished product and unfinished goods. There were in common with habitations burnt down, trench surrounded village and wooden barricades. And, we could also see the manufacturing process of stone tools related.

But, professionals had confirmed that chamber tombs made of slabs were commonly placed with or without dolmens considering burials.

It shows us there was possibility that they mainly did not bury dead man with dolmens even though those sites have been known as well as representative habitations in these days. As it is, I mean why there are not dolmens or sarcophagus tombs or earthenware coffin around great villages.

⁶⁴ National Cultural Properties Research Institute of Korea- archaeology dictionary
Prehistoric remains of Dephyungri Okbang 5th district in Jinju (Sunmoon academy, 2001),
Excavating report of Nam River remains. (Museum of Dong-A University 1999) and so on.

⁶⁵ National Cultural Properties Research Institute of Korea- archaeology dictionary

Do you have any idea where the habitations are gone with dolmens placed with groups? If they were destroyed and disappeared to somewhere, it should be buried underground. Otherwise, we should not find it forever. Those inconsistencies draw us out of our curiosity and leave us wonderfulness of prehistory. Moreover, there is much note to be solved with relationship between dolmens and sarcophagus tombs and burial chamber placed without covered stone next to dolmens.

Those sites provide us with important clues to read dolmens society objectively. We could read rice farming with rice seeds burnt and stone swords shaped of half moon. We could also guess that works were specialized in dolmens society through stone tools and earthenware vessels in numbers. Moreover, Professionals tell us that wars should happen in dolmens times from quoting remains of fire, cutting edges of stone arrowheads and ashes without skulls. We have learnt that most of professionals have devoted to reading dolmens society as a class structure. Ostensibly, we should accept most of theories. But, they misunderstand many viewpoints when getting a glimpse of what is going on behind veil of diplomacy.

For example, Stories of leaders class have been on the stage as their exclusive possession of political powers and economic powers to build the big houses using mobilization of manpower at the viewpoint at Yongarm-ri. But, we see low class group did not live without their houses directly.

What should I say? Prehistoric people lived in their own houses. But, I found it difficult to answer that leader class lived in big house or not and low class just lived in small house.

D. Structure of dugouts and difference of habitations

First, what is the difference between house in Neolithic ages and bronze ages? Most habitations were placed at riversides and offshore on concentrate in Neolithic ages. But, the space of residents' sites was expanded in bronze ages towards hills and top of mountains like villages of dig a pit in unique style.

Here we must recognize that they never give up their original habitations for moving the other places. I mean that people habitations should be continually expanded out. But, a lot of people are still living in offshore and riversides through the times as we do in

today. Places of beginner's dwelling provide us with great geographical locations until nowadays.

What is the structure of dwelling?

It is dug around 80cm in Neolithic ages and dug about 50cm with average in bronze ages if I quote report that has mentioned in Academic. It was confirmed that northern regions commonly dug in deeper than southern regions. And, Neolithic ages one was deeply dug considering bronze ages closely related with weather conditions, heating system and clothing development. And, draining structure must consider being solved with pump out water because it was built on half basement (this structure were not too bad to live in because the temperature must be held a little bit like a cave or they should choose hills to solve those problems in natural.

A dugout at Gochang dolmens sites



I believe that the figures of prehistory are not different conditions even though ecosystems are experienced of big transitions by a little temperatures change. Main Mountain is formed among hills and watercourses.

People of prehistory should build their house on places that not too far from rivers or creeks to get drinking water but

not so close to prevent from a flood following sunny places and avoiding cold north winds without introducing Feng-shu; a geomancer thought.

They should understand to be available nature at utmost from generations to generations. So, I believe that people related with dolmens had been lived in rooms of living.

But, some of them were placed at the corner of it in unique. I think that people of prehistory should intake cook food to prepare at the cooking stove as we see earthenware without pattern after carrying drink water from water courses to use it. And then, they must take a rest and sleep in it. The dugout was restored after professionals had confirmed remains of house ground structure with hole of timber logs or foundations of building. The roof used with rice straw and reeds was made by their

imaginations. The picture data looks like lyrical scene but people life of prehistory must be energetic and dynamic conditions.

I here quote that Jang Piear Mohan mentions, He is the head chief in The Louvre Museum of France. He mentioned at the interview with History Special of Korean Broadcast System (KBS). He interviewed “⁶⁶there was communal life when people of prehistory build the megalithic monument, they constructed villages and started harvesting. Megalithic culture is symbol of community life and it was the times of settlement”.

The most interesting viewpoint is that the structure of dolmens be correctly in accordance with habitations structure. Most dugouts have (long) square shapes of (oval) round types. How about dolmens underground structure to be considered as whole of underground parts? It is very interesting that the dolmens are in accordance with shelters of live man and rest spaces. I believe that they made the burials to follow the living space. And, we also image their thought toward the world after death through the grave goods used in their daily life and found in burial chambers of dolmens. Specially, the square shapes and round shapes are one of the leading stabilities.

⁶⁶ History Special of Korean Broadcast System

Chapter8. General principles seeing dolmens

1. When or which ages were dolmens built?

A. Telling the periods

Dolmens period gauged by the absolute periods in Korea is known as the next data
⁶⁷“It is reported about B.C 1590 at Yangsu-ri in Yangphyung of Kyunggi province. It is also recorded as B.C 1145~900 at Beradong in Dejeun Metropolitan of Chungnam Province, it tells its periods B.C 910~740, 1012~802 and 770~600 at Whajangdong in Yousu of Junman Province. Desin-ri dolmens in Whasoun County are recorded about B.C 720~390, and Dolmens placed at Oksuk-ri in Paju of Kyunggi Province mentions B.C 900~740 as its ages. And, Sangjapo-ri dolmens hit its ages as B.C410~170. Whangsuk-ri in Jechun County of Chungbuk Province is about B.C 930~ AD 10”. There are a lot of data as considered B.C 2400~2600 in North Korea established by ERS (electron spin resonance) or FT (fission Track) and so on) even though they drag up its periods around B.C 4000.

Generally, we have learned dolmens were built up to late Neolithic Ages. It was representative tombs during Bronze Ages. It was disappeared in early iron ages in Far East Asia. It belongs to BC 3000 ~AD 100 as its periods. But, European professionals believe it was built in Neolithic Ages and Bronze Ages as it belongs between BC 5000 and BC 1500 years. Why is the main stage difference? I still have questions that dolmens are still unveiled with mysteries.

B. Telling the ages

There are two types of burial never changed beyond 2 thousand years even though there have been a lot of styles of burial in Korea. It is a grave mound as its out-shaped and earthenware coffin, but earthenware coffin seems like to be gone, which rarely took place until 1970~1980s.

We know that there is something not to change with easy. Tomb types are hardly ever changed in any society and any ages. I mean that burial customs changes prove against that they are really conservative. If we agree that dolmens were used as

⁶⁷ Cultural assets laboratory of Honam, Gochang County

representative burial style in bronze ages considering the differences depending on the regions.

We should accept opinions that some of professionals insist it to be built in Neolithic ages and early iron ages act as a buffer between ages.

Dolmens cultures never take place in bronze ages suddenly as we think. I mean bronze ages were unexpectedly not to drop from the Sky. Dolmens should meet the golden age in bronze ages, which took place from new stone ages. The theory places a limitation that dolmens were built in bronze ages because earthenware was rarely found in dolmens burial chamber, which belongs to new stone ages' tool.

There is not big deal that dolmens confirmed in Pyungyang districts, Yodong regions and southern part of Han river even though there are a few of differences. It is proved that prehistoric people share the same burial customs, similar thoughts and same tools in daily.

It is considered that dolmens belong to the same poach with Old Josun dynasty. All of Korean never forget territory lost in ancient times, so we have a dream recalling of going into continental. Old Joseon Dynasty of Korea was in Northeast China and North Korea, as I know.

If we accept it, what the dolmens located in southern part of Han River show us? Is that we lost history? Restoring those ones is to find our identity lost.

I do not want to deny that we have learned and practiced history in books. But, a few portions just showed us a foundation stone of history after old times.

There are still a lot of stories being nervous that they have waited to meet us. I have questions our society and myself that our history piled on the foundation stone, which has been experienced in honors and pains.

Are they formed in right! Do you believe that today is building the future draws without addition and subtraction? It often seems like to be written of despair without hopes. Where are the leading stars of history not being supporting actors or actresses, a lot of leading stars of this land hidden?

I question anthropologists and historians that histories with many of viewpoint were

twisted. Furthermore, it is possible to restore leading stars lost that professionals must study and recognize true values of dolmens or history. Where were common people buried before and after historic times? It is time to answer, if anthropologists and historians introduce its proofs being reliable.

We have been tried understanding dolmens that mural paintings confirmed a few of dolmens or faces of stone bed. Furthermore, grave accessories found in burial chambers after taking excavations through reasonable research or pretended to gain huge complex facilities of land like road constructions, sunk district by water to make dam.

Recently, we have tried to understand dolmens society, culture and people through moving experiment of capstone as guessed with manpower of mobilization when moving capstone named of experiment anthropology.

It is too difficult to make clear dolmens society. We are on the process to understand dolmens as a result of burial customs. We understand dolmens as a process of burial customs by experiment anthropology in these days. But, most information seemed to be monopolized by a few professionals and it is the fact that theories are continuously expanded and reproduced toward one side.

There are rooms that dolmens could be regarded as tombs of leaders class depending on numbers in a few regions. This theory should lose itself where we see dolmens placed in every natural village. Here, the theory, which common people in prehistoric times were buried in dolmens, gets persuasion powers considering numbers and sizes.

2. Looking through the literature written

It is poor data of dolmens to read documentary records. I quote it in case there are beginnings of some stories as a middle of novel like that we cannot read.

I will quote originals

Documentary about dolmens was firstly appeared in literature named of Dongguklisanggukgib written by Lee Guibo in 1200 of Korea; Joseon;.

He mentioned that dolmens as a Gisuk (support stone) is technology of mystery and he quoted the next sentence "People say it was built by holy men or sages"

孝昭元鳳三年正月 泰山萊蕪山南匈匈 有數千人聲 民視之 三石爲足 石立處 有大石自立 高丈五尺 大四十八圍 入地深八尺 有白鳥數千集其旁 (卷27 五行志)

There is documentary literature named of Jinhanseo Junhan literatures (before Han dynasty of Old China) BC 78 it mentioned like this "A big stone is standing as itself, the height is about 5⁶⁸cheek; the volume 48 surrounded, and its upright stones with three is stuck underground when people see it"

初平元年 ... 時襄平延里社生大石 長丈餘 下有三小石爲之足 或謂度曰 ; 此漢宣帝冠石之祥 (三國志 魏書 卷8 二公孫陶四張傳 公孫度條)

Sagukgi (Stories of three ancient dynasties of China) of Jinsu in AD 190

A big and huge stone was stood at pavilion of alter in Younryou of Yangphyung county, the volume and size are beyond 1 Jang; 10 ja; 3.314 yards. Three of supporting stones look like giant stone legs. Someone said to Gong SounDo "it resembles a crown of the preceding Emperor.

DOLMENS AND THE BIBLE

The ancient Hebrew is recorded setting up stones as monuments. Jacob set up a pillar and anointed it: *" Jacob took the stone that he had set up for his pillows, and set it up for a pillar. (Genesis 28; 18-19) He later set up a pillar and a heap of stones together (cf. 35; 14). "And Jacob set up a pillar in the place where he talked with him, even a pillar of stone: and he poured a drink offering thereon, and he poured oil thereon

⁶⁸ 1 cheek is of 30.3cm, 0.994ft

(Genesis 35; 14). *

"Now therefore come thou, let us make a covenant……"And Jacob took a stone, and set it up for a pillar."And Jacob said unto his brethren, Gather stones; and they took stones, and made a heap: 47). Single pillars (menhirs) or Heaps of stones (cairns) or one stone upon another (dolmens) and stone circles are types of monuments known from both Israel and Western Europe. In popular parlance the said structures are collectively often all referred to as "dolmens".

3. Opinions of dolmens spread

Generally, there are three theories considering dolmens diffusionism. First, dolmens should come from Siberia's megalithic culture as called "Northern Generation". Second, dolmens should stem from India and Southeast Asia routes as named of "Southern Generation". Finally, dolmens should be born in Korea as its spontaneous generation.

We had a look dolmens distributed around world and we also confirmed that the differences of opinions with visual sensation depended on each nation gotten a lot of data involved in dolmens culture.

But, archaeological and scientific facts are possible to be distorted by superiority of each race or nation in anytime. I think there is almost no immediate relationship among Northeast Asia including Korea, Middle East, Europe, India and Africa dolmens even though it is a common culture of the beginners in the world.

It seems like that the theories related with Northern Generation and Southern Generation should be possible to be reported. I believe that we must see speculations of stone in prehistoric times before we make any decisions of the dolmens diffusionism. Even though there are a few of prevailing assumption of dolmens diffusionism. I believe dolmens developed independently in difference regions have got similar background.

People living in nature get materials from its system such as foods, clothes and shelters. They never use anything that they do not attain from nature.

They should bury the dead underground without stone and wooden coffin. But the other materials have gone by passing times except stone. So we almost could not find many of those. Why were they used of megalithic stones to bury? Let us infer considerations of stones of prehistoric people!

⁶⁹"Ancient people believe that stones are perpetually growing underground like plants even they use stone tools in daily. They also believe stones have got its imperishable sanctity and never rotten powers by being bud off from ground. Even among the people, stones apply to remedy disease that plants and animals should take patients disease off

⁶⁹ <http://www.go-estone.net/> Stone and Shamanism

because they believe stone inherently have powers as itself.

So, they sometimes rub stone on the affected part to remove disease. “

We had done the similar thing when we get one of eye diseases. When I get some eye diseases, I put my eyebrows between stones after pulling it out. When I was young, I believed eye diseases should move the other who kicks off the stones. Like this, our consideration towards stones is fraught with meaning.

I believe that dolmens were built by people faith toward natural objects gotten its permanent indestructibility and spirit of dead men like Shamanism.

Religion belief has never accepted by persistent demands. Human live in nature must trust and apply their life in company with natural objects. Human is not getting out of the solar system until now. There are still a lot of unsolved riddles with dolmens like deep spaces even I have tired to make it clear without any quality. Kindly, anthropologists are still exploring to find new reliable proofs.

The matter is on dispute, we could see the traces of human at each place in the old continent about 200~70 eternity years ago. Specially, there were confirmed that human related with current people lived in every region as our progenitors before 49~30 thousand years.

I believe each culture of beginners take place in its original districts without invasion their territory. I mean that the culture was spontaneously generated by among the people. Maybe, as we know, population of the world have been increased that weather conditions is getting better and tools used in old ages were developed. Do you think that you could fight if there is no competitor within your boundary? How can we fight without competitors? It seems never to be possible. Proper competitions make people develop ones culture. But, competitions beyond its boundary could make people ruin by its strong point and weaken point. Cultures have walked toward world when it meets limitations or when people try to explore the world or trade or war after hitting the turning point.

4. Genesis and extinction of dolmens

The dolmen is one of burial shapes. There should be possible to put stones relatively small and thin ones on the coffin or use earthenware pots or bury underground without coffin. But, they put the heavy and huge stones on burial chambers. Why they put the huge and heavy stone down on the burial chamber? Let us see their considerations why they did bury dead men or why they did make tombs before I answer the question.

There are three theories that tombs take place with originations

First, people should believe world hereafter. So, we could find daily grave goods remaining in burial chambers such as stone knives or axes etc. Otherwise, how should understand those tools?

The next theory is that people of prehistory supply their shelters of dead men and provide clean and neat surroundings for people living as caused environment background.

Finally, tombs were built that people should fear the death and dead men they tired to cut the relationships. But, it should be poor possibilities to happen that we see the secondary burials. If they fear dead men, what makes they do rebury dead men in secondary to pick ashes and skulls up pieces around their living spaces.

Here, I introduce burial customs took place around 40 thousand years ago that we see prehistoric people thought about the world after death.

Stories of Huongsu child

⁷⁰“ There were teethes estimated as 5 year olds, brain volume measured around 12 year old ages and named of Hungsu child laid down on flat limestone at Dourubong limestone cave of Chungbuk Province in 1983. Research report tells that soft soil was spread on his body and a lump of chrysanthemum was also on his chest on purpose. Because chrysanthemum should pick up the other places considering the height of cave above the sea, was not naturally grown at there.

We should read burial customs of old stone ages through it. They must put chrysanthemum next to dead child when they take a burial.

I think we could also guess thoughts about the world after death with prehistoric

⁷⁰ Report of unearthing of Cheongwon Dourubong cave and so on

people who built the dolmens. Dolmens took place by thoughts of stones of prehistoric people as we have a look their thoughts toward stones. It should be understood with natural religions such as Shamanism that people believe natural objects have got its genius.

But, they should use wooden coffin if big trees are also being its sprits. Why did they not use wooden coffin? No! They might use wooden coffin. But, it must be rotten by passing times so the proofs are not found in general.

Dolmens could be built by multiplex reasons considering all of factors.

Dolmens and its society should ride rapid stream by transforming tools inflowing new culture through taking breathes like wars and piling developed technology. Those processes made prehistoric people thoughts and their consciousness toward stones different to break down its community.

The process is also confirmed in Korean society. Tombs shaped of mound remain beyond 2000 years and stand with the core of with changes in Korea. But, burial ceremony has been changed to ashes to rest as cinerarium because “We do not have any land to give to next generation and we should use land more effective. Of course, tombs shaped of mound have never gone its burial customs in someday. But, tombs with charnel house must be main burial customs as commended. It is already under processing to be standard. I say that dolmens should have gone by social and cultural change or requirements.

Chapter 9. Facing the dolmens society

1.⁷¹Opinions of the academic seeing dolmens

It is expected that dolmens were built by public communities group of clans or tribes for leading group considering society and economy backgrounds with mobilizing a lot of manpower. It is not expected to build in nomad society of northern districts without any settlement. So, Professionals have recommended a lot of theories to see dolmens society such as clans' societies, patrilineal societies including matrilineal societies, tribe societies and public community societies by courtesy of their group with regions of prehistoric ages.

The families' society and patrilineal society are related with blood relations that dolmens should build for families' public cemetery. Those theories are taken in North Korea. Specially, patrilineal society is impartiality. Society is that seniors or leaders gotten abilities were buried at dolmens. Theory of elder of a clan is opinion that there were spread of commerce and culture among the regions through developing process of society in prehistoric ages.

The class happened to basing on settlement with farming. It is also considered to be public community society that dolmens are placed as arranged with groups in rows. It is believed dolmens built in cooperation with public communities related with families and blood, when seeing dolmens located in dolmens over 10s.

Those communities acquire territory through wars and spreading culture to integrate its society that absorbs the other groups. They should be based on creating small nations to appear strong group and leaders. So, it is also believed that dolmens were built for contributors as sacrificed by wars took place between group neighboring.

I describe the theories reported by institution of national culture assets. There are a lot of theories out of textbooks like this. Why do textbooks tell us one theory? It should start with cuffing our hands and foots by invisible powers even though we have previously learned that we must think in creative. It is not only my job but also your jobs that we have to restore the grass roots level lost.

⁷¹ National Cultural Properties Research Institute of Korea- archaeology dictionary

Let us look dolmens society to find us lost.

2. Dolmens society that I see

What were motives of building dolmens? Who did build dolmens? Who were buried in the chambers? This subject must be clue of dolmens understanding.

A. Facing remains to be excavated and mobilizing manpower when building

The textbooks were most written by leader classes who win in history. Specially, most of handling parties focus on those points. It makes me feel distressed that history of modernizations should be distorted, afflictive and a biased fact. I desire that tombs of leader classes in community must get back to members shared culture in their community.

Now, Let us meet dead men buried in the dolmens chambers.
I show dolmens society directly or indirectly through grave accessories by excavating research result. And, I quote mobilizing manpower including dolmens construction with cap stone size and weight.

First, 1~5 tons' dolmens are occupied beyond 50% considering in its number. If I give up 100 steps, those dolmens could be built about 3~15 dedicated and skilled adults that the way I suggested.

Capstones weighted around 6~20 tons should be possible to build around 15~50 adults with health. Those numbers are beyond 90% considering all of dolmens. Do you think there were buried with leader classes such as head of a family? Positive, it is. Leaders' class was buried in its burial chambers because they were also communities' members.

But, maximized dolmens beyond 40~50 tons and 100~300 tons make issues that I still have a question. Most of them have its burial chamber. But, megalithic dolmens rarely have its burial chambers. As it word, it should not be tombs' functions.

It should be used for the other functions like altar. Of course, we guess that the difference of economic conditions buried in the chambers depends on its capstone size

and weight. But, dolmens society does not look like differences considering those reasons. There must be buried of members of community including head of families in prehistoric ages when I see manpower being mobilized to move it.

When I consider grave goods such as stone swords or bronze swords found at dolmens burial chambers. Dolmens look like tombs that used for leaders of families and the chief priest. The leaders made the pace and led their society. They also protected human rights and profits. They should not be hardhanded rulers. The owners with grave accessories must do lead their society. Who could bury with stone chisels and knives shaped of half moon and Garackbaqui: spinning and waving tools and earthenware? Did the chief of families cut the trees with stone axes and trim the timbers to use stone chisels and extract thread with spinning tools, and carry drinking water with earthenware to cook food or drink water? It is also possible that they also belong to members of community. But, those tools or materials that often found in burial chambers were contained of members' traces of community without leaders. Dead men buried in its chambers with their tools used in daily.

I introduced that bones excavated in burial chamber with joining together estimated mother and baby at Jinchudong dolmens in Daegye and cremated burial ceremony was fashionable at Yodong and Manju regions. Even we see the example of buried together beyond 10~30 dead men under one dolmen in North Korea and Europe. What it should tell us if there is buried with the head chief of families and priests of clans? Skulls found in burial chamber of dolmens also contains figures of members of public communities not only leaders but also general persons.

It is also spoken that life of settlement must be there to build dolmens, which belongs to agricultural society. And, it is telling political and economic power that viewpoint of mobilizing manpower is to build dolmens and to pile produces. The former is the necessary conditions but the latter is sufficient conditions not necessity always. I found it easy to build dolmens when dolmens society is strong group being possessed of conscious of public communities.

Here, I try to read prehistoric ages of Old Joseon dynasty; Old Korean dynasty as considered related with dolmens society directly.

B. Looking at 8th laws with Character in Old Joseon Dynasty.

We have learned that dolmens society is classed society through legislations of 8th characters in Old Joseon dynasty. There are three of regulations remained in old literature named as Hasugirigi written by Bango

- Put murderers to death.
- Pay back or reimburse with grains injurers or wrongdoers
- Make robbery slaves or repay money when they hope to forgive their guilty.

There was strong and stern laws to murderers, we could know farming society and took place commerce through money without or with barter. Specially, there should be classed society to see word of “slave” in the third character and private property must apply in their society. I describe it like textbooks.

But, if we reverse it, we could understand differently. Of course, the interpretations should be explained in various depending on interpreters. Laws written by letters or unwritten rules mean social enforcement and social agreements.

There was no regulation to punish that people did not guilt in 8th character laws and did not make any slaves without guilty. It proofs to the contrary that private life and property could be protected by social system when they keep social agreements for social proposal and stability. Even textbooks tell like this. But, we did look the Old Joseon dynasty in fragments as followed word such as slave in its law!

There are big different meaning that we see people's social class of economic conditions in Capitalism and persons' social positions in ancient times when seeing from sociology. We should know that meaning of social class is heterogeneous among ages. Capitalism, democracy, nationalism, pluralism and professionals are based upon acting as spokesman of current modernization. Considering that sociologists should agree there are equals or inequality in political depending on nations and standing on economic class become serious. I mean there is no difference among the ages except political system. All the worse, the gaps are bigger than any ages by products means

changing that a person has possessed

Let us see two of tribes do farm in natural system that they have sweat potato and yam of main foods recently, not related with dolmens society directly.

Masters of stories are Trobriand tribe in Trobriand Islands and: Tsembaga Maring of Bushman tribe. I need your consent to using abbreviated words of tribes' name that I am not used.

Two tribes consist of concentration on blood or family lined with organized group. They have possessed the right of ownership to lands like corporation with gathering. T tribe consists of maternal line. M tribe is made of paternal side.

T tribe harvesting yam, which have long time of storage, do work as a unit of family and work in cooperation with a few villages when they have an agreement to do it each other. But, M tribe farmed sweat potato, which has got short storage terms, do harvest in unit family. Both of tribes are producing surplus food that they need quantity in a day. Foods remained after eating usually gives to relations or rotten with T tribe. But, it is not stored and supplied to the other. It provides to the pig that they raise one.

Specially, Both tribes are preparing foods for the young and the old including sick persons through the surplus labor to be farmed. M tribe do work to pave road and to construct place of dancing by community necessity. T tribe builds an altar that used in courtesy as provided them.

Two of societies are similar that they are simply divided into their works based on gender and ages. Men do logging or build fences that must be committed to labor power off and on. Women do housework in daily such as preparing foods and carrying water that take quite times continuously. Technology of utility goods made in daily is separately distributed considering objects of craftwork aspect with T tribe.

Furthermore, producers of applying arts are also doing harvest on dry farmland. It is specialized in fishery and farming including applying arts that be beyond standard of utilitarian way quite in daily with T tribe. But, all of community members do farm sweat potato and raise pigs in M tribe depended on their surroundings not in various.

So they have similar skill to deal with craftwork. There are prevalent barter and trade of produces harvested in a group of T tribe. But, barter is most dominated in M tribe.

It is stipulated that both communities have a share of its products attained from nature following relationship by blood and marriage. But, there is no system like nationalism or colony to exploit and control their surplus products when they divide the products. Specially, the chief does harvest owns land and paddle a canoe even though he or she has got his or hers doings.

It is good example that we could apply concept of extracting in tribes' society and could see life of tribes' community.

I believe that dolmens society does not have same system. But, it was community society. Dolmens community should be wrapped in severe vortex through the next reasons.

Piled technology and improved productivity create new culture following it. They did create not only new culture but organize society complicatedly and divide into its class among the people. But, there should be a little bit differences in regions. They should build the frame of early nations to increase in force through wars that we see it at Songguk-ri in Buyeo and Nam River in Jinju.

Those processes had a little bit difference in regions that we see materialistic periods of remains in North Korea, Yodong including Manju and South Korea below Han River. But, Old Joseon located at North Korea and Yodong including Manju should organize a little bit earlier than small old nations placed at South Korea. But, there had been a group of people who shared the burial customs. They should build dolmens in late periods remained long with community system. If there were adopted or created about new culture, it could be caused by changing burial customs. Wooden coffin and ground coffin without huge and heavy capstones located at Nakrang Unification Streets enter on the stage as a good example, which are data back around B.C 2.

A range that a person walking distance a day is about 30~40km in common. We could have accepted, developing of carrying tools and means in these days such as spreads culture and information. But, accepting speed and spreading culture were relatively slower comparing with today. So, transition of dolmens society took place deliberately and gradually.

We have done time traveling of dolmens in a few second. There should be different of a few hundreds periods in regions that show us various data.

Dolmens were tombs that built by people, who had settled around watercourse to harvest and gain all of materials from nature in prehistoric ages. People of dolmens community took part in voluntarily to build it. It is concluded that tombs were buried with chiefs of families and commoners of communities.

C. Facing the science technology

We could see life of people in prehistoric times that they embodied their clothes and technology through spinning and weaving machinery called Garackbaqui (Bangchuecha). But, a few stories are beyond our imagination. How many people could build house that seemed never to be demolished for a few thousand years?

Let us see apartments built from late 1970s as representative of dwellings in Korea. We know well that we rebuild houses after breaking down on its original sites reasons to reinvest and danger of collapse or to improve living space passed through 30~60 years. But, dolmens constructors had got their technology to build dead men' house as applied architecture and engineering never demolished without caring for a few thousand years. Even though I could not introduce all of issues contained a lot of science technology that originate current technology until now. They must know to use wedge theory, lever principle and theory related with leading to low fractions of using logs. People of dolmens times created the foundation of today's technology.

We also could meet technology of science during prehistoric ages through tools such as stone or bronze swords, bronze balls and mirrors. There were a lot of technologies such as alchemy of high heat to deal with raw materials stones in skills. They must extract copper and zinc out of it when they put into bronze tools.

We also observe skills of harvesting related with carbonized rice seeds in dolmens ages. Maybe, the young do not know how many times of hands care to have steamed rice on your table. It is often said that they need to 99 hands care to have steamed rice. It is still difficult to harvest rice. Do you believe it is possible to farm without weather forecast? But, they did harvest without calendars and forecasting of weather. They should know the times when they plant seeds, weeding and irrigation including harvesting with coming to maturity. They must know nature and the time. Otherwise, they could spoil the harvest.

It means that they had accumulated quite well with great skills such as store and

polished rice to have food after farming.

People of dolmens ages were pioneers who took the world without named of early genesis.

The community size and life style should be generally changed from ending of last ice ages well known to us before 10 thousand years ago. The 4th civilizations in the world come to pass based upon this. It is the 5th civilization of dolmens distributed around world that we did not recognize all dolmens means. Questions related with dolmens do not shares among real anthropologists, historians and anthropologists. Let us be amateur professionals to be shared culture in common of the world.

Epilogue

We understand burial owners through a tooth found in the burial chamber in the modern times. We also draw deduction foods that she or he had. Furthermore, we restore their society that they had lived.

Dolmens tell hopes

I let the stories out.



Dolmens issues covered with veil make people feel excited. Beauties of dolmens let people be interested in spirits and mind of prehistoric people. The eyes of people can see colors through light, but there are spirit and mind of prehistoric people beyond our sphere in the long times ago. Dolmens are there or not to be cognized of its existence. They have got hopes to cherish bright future. And, dolmens also provide historians with the next anecdote with historical issues that they keep in their mind of recognizing as proofs. Historic culture is under attack at North East Asia in today. No matter how distorts and makes up history, it must end in trying to hide the sky to use the palm of the hand

A lot of people ask what dolmens are and the values of dolmens. I answer it with easy

or difficult. Dolmens value is that we must have a correct understanding of culture. It is not far from us. Dolmens had got its days long time ago. But, dolmens never lose its value. I do explain what we can see dolmens until now.

We have lived in the heart of culture in 21st century. We make new and cheerful culture but a lot of culture has gone. People get together where there are “delighted playgrounds or attractive things.” They also go together with positive participants by its pleasure beyond looker’s level.

Every culture given people passion and devotion has magical powers that attract public attention. Dolmens are the culture that our ancestors sincerely worked with their passion. Dolmens culture is not the lost world. It is alive next to us. I believe dolmens should be moving stars that people share.

A lot of dolmens tell us its stories like that “Rosetta stone” provides key to understand a hieroglyphic character. Dolmens figures give light that everyone should see it if they have got interest. Dolmens have gotten most Korean things and global things what human could be shared. There is another meaning that the Great Pyramids of Giza in Egypt, Parthenon shrine in Greece, Coliseum in Rome, and Stonehenge in England and stone circles in Carnac do not have as Korean things. Dolmens give you great gladness that nobody ever has. The dolmen is also treasure case and presents for descendants, which our ancestors bequeathed a few thousand years ago. Dolmens would give you happy.

Written by Young Suk, Lee 09. 19. 2006

ⁱG(K)oguryeo

ⁱⁱG(K)oryeo;

ⁱⁱⁱBaekje

^{iv}Ondol

^vJoseon dynasty

^{vi}Dangun Wanggeom

ⁱ G(K)oguryeo (traditional founding date 37 BC; probably 2nd century BC – AD 668) was an empire in the northern Korean Peninsula and the northeast part of today's China. It was one of the Three Kingdoms of Korea, along with Baekje and Silla.

The modern English name "Korea" derives from the Goryeo Dynasty (935–1392), which in turn took its name from "Goguryeo"

ⁱⁱ G(K)oryeo; an ancient Korean state (918–1392) The Goryeo Dynasty established in 918 ruled Korea from the fall of the Unified Silla in 935 until replaced by the Joseon dynasty in 1392.

The name "Goryeo" is a shortened form of "Goguryeo," one of the Three Kingdoms of Korea that were united by Silla in 668. The English name "Korea" derives from "Goryeo." See Names of Korea.

ⁱⁱⁱ Baekje (18 BC (legendary) – AD 660) was one of the Three Kingdoms of Korea, together with Goguryeo and Silla.

It was founded by Onjo, said to be the son of Goguryeo's founder, around present-day Seoul. It began as a chiefdom in the Mahan confederacy during the Samhan period. At its peak in the 4th century, Baekje controlled most of western Korean Peninsula, as far north as Pyongyang. It was defeated by an alliance of Silla and the Tang Dynasty in 660, becoming a part of Unified Silla.

^{iv} Ondol is a traditional Korean underfloor heating system, similar in principle to a Roman hypocaust. The main components are a fireplace or stove (also used for cooking) located below floor level, a heated floor underlaid by horizontal smoke passages, and a vertical chimney to provide a draft. The heated floor is supported by stone piers, covered by stone slabs, clay and an impervious layer such as oiled paper. The latter gave the floor a warm yellow color that is still popular in modern homes.

^v One of recent name of Korea before being modernizations

^{vi} Dangun Wanggeom is the legendary founder of Gojoseon, the first kingdom of Korea, in present-day Pyongyang in 2333 BC. He is said to be the grandson of the god of heaven. Although the founder is commonly called Dangun, some believe that Dangun was a title or position, and Wanggeom was the proper name