

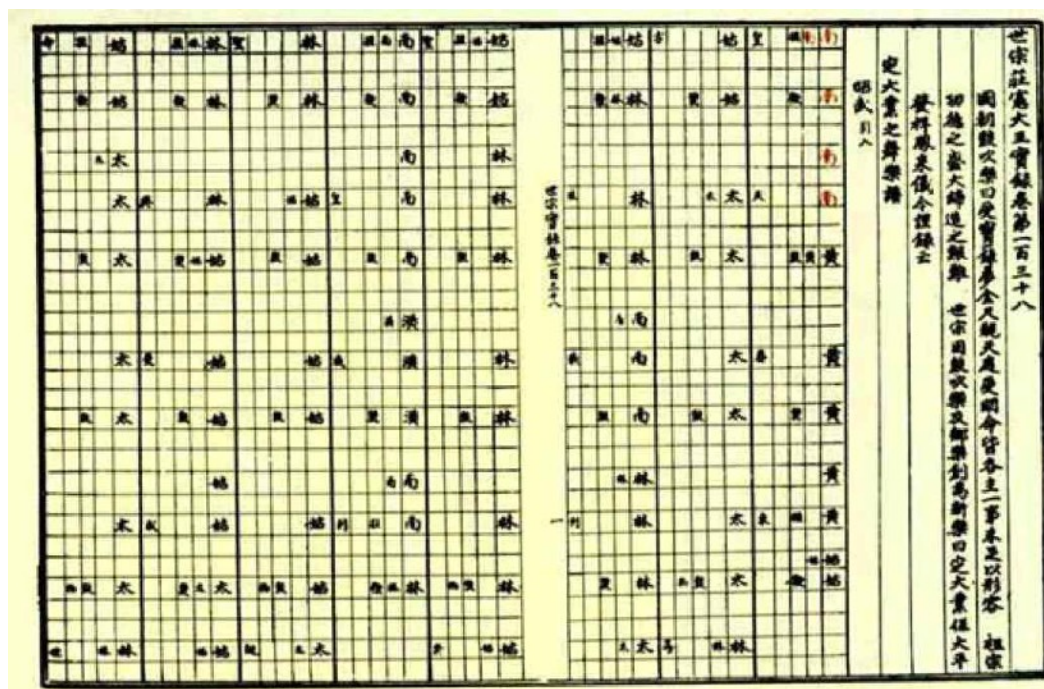
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## JEONGGANBO (TRADITIONAL KOREAN MUSIC NOTATION)

Time Unit Box System, TUBS is a simple notation system that is mostly used to notate rhythmic patterns. The term was coined in the early 1960s by musicologists Philip Harland and Jame Koetting. It makes use of one or more rows of boxes that each reflect a particular unit of time. TUBS is especially useful for notating and displaying relationships between complex rhythms, such as polyrhythms. It also has the advantage that, due to its simplicity, non-musicians can read it more easily than the Western notation system. Below image is a sample of TUBS.

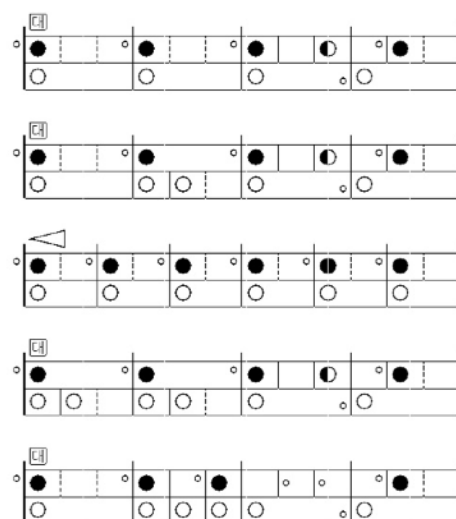
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
●		●	●	●		●				●		●			
●			●	●		●			●	●		●			

Korea has a similar but unrelated notation system known as jeongganbo developed in the middle of the 15th century. Jeongganbo, which was invented during the reign of King Sejong of the Joseon dynasty, is the most widely used traditional notation system. It consists of jeonggan or kan, which means a box, and yulmyeong, which is Sino-Korean for the pitches or notes. Each kan, box represents the unit of the beat and corresponds to one beat, while yulmyeong in the box represents the pitch. Despite the fact that jeongganbo was a brilliant method for musicians to use in notating and visualizing music, it was mostly used for court music, not for folk or pungmul tradition. The image below shows a part of traditional jeongganbo.



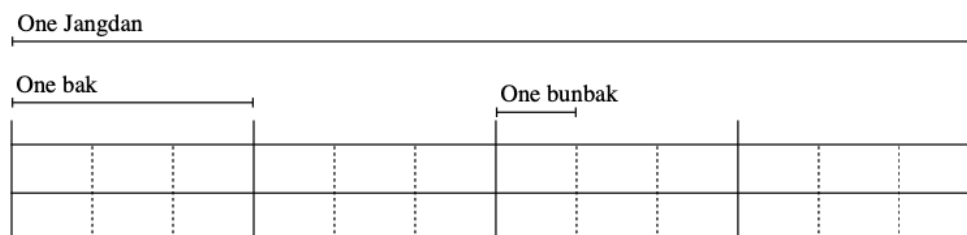
Owing to the fact the pungmul tradition did not take advantage of jeongganbo, the great masters and practitioners of pungmul faced the biggest challenge in writing down the significant re-arrangement of pungmul, samulnori. Kim Deok Su, one of the “first and original” members of samulnori, began a project to renovate traditional jeongganbo in

order to render samulnori scores in the late 1990s. To transcribe the rhythms of samulnori and create the typing software to run it on a computer, he teamed up with a pianist, Lim Dong Chang, a pungmul professor, Kim Dong Won, and computer programmers. The goal of the project was to analyze the merits of both the jeongganbo and Western notation systems; pianists assisted in transcribing the rhythms of samulnori in the Western notation system based on a pre-transcript written by Kim Deok Su and the pungmul educator and combining the two types of notations in a jeongganbo format. While traditional jeongganbo only displays the unit of time, beat, and pitches to convey the general definition of music, the modernized samulnori jeongganbo indicates each rhythm in greater detail; each row includes the grouped division of a measure, subdivision units of the division, sound symbols, dynamic marks, and onomatopoeia in Korean. The photo below shows a part of the modernized samulnori jeongganbo.



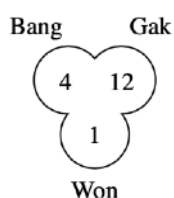
## JANGDAN

The jangdan, a form of a rhythmic pattern repeated over a set unit of time, is the most important musical characteristic of traditional Korean music. In addition, jangdan is the arrangement that covers the rhythmic pattern as well as the total amount of the meter. As a result, although the definition of jangdan in traditional music is difficult to identify, it can be defined as a rhythmic pattern of a certain length that is performed over a specific period of time. Certain elements such as meter, tempo, accent, and pattern are the key to determine jangdan. Also, jangdan is a collection of bak which means a unit of time. In other words, bak can mean “beat” or “count.” Bak can be divided into bunbak, which means a subdivision of bak. The example below shows how to read the structure.

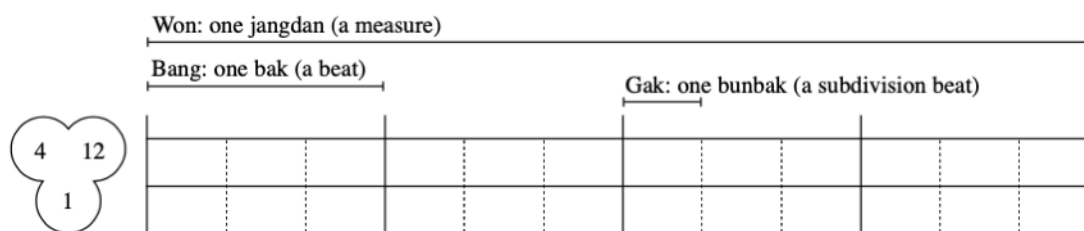


## WON-BANG-GAK

Won-bang-gak literally means “circle, square, [and] triangle,” which is the fundamental concept of samulnori pedagogy development based on philosophy and cosmology of Pan-East Asia. Although the origins of won-pang-gak theory can be definitively traced back to Shang dynasty China, it was eventually absorbed and internalized by all of East Asia over the years. The musical idea of won-bang-gak, on the other hand, is only encouraged in this curriculum book for the purpose of improving musical skills. During the development of samulnori pedagogy, it is thought that jangdan ultimately performs in spatial perception regardless of how small or large it is because the sound of jangdan performed is embodied in the space. In the music aspect, each principle represents each specific unit of time: won represents jangdan (a measure), bang represents bak (beats), and gak represents bunbak (subdivision bak). The example below shows how to read won-bang-gak.



The example below shows how to read one jangdan with won-bang-gak.



Hence, the structure above can be comprehended as: one jangdan has four bak, and four bak can be divided into twelve bunbak.

## SYMBOLS

### Kkwaenggwari

Symbol	Onomatopoeia	Explanation
○	gaeng, gaen, gae	Strike the surface with the mallet firmly with a dampening and let it ring.
●	ggaek, gaek	Strike the surface with the mallet while being hold it to make a closed sound.
◐	gae-t, gae-p	Strike the surface with the mallet firmly with a dampening and cut the resonance with a extra dampening.
○ ○	ji-gaeng, ji-gaen	Tap the surface and strike gaeng successively
○ . . .	gae r r . . .	Perform a roll sound on the surface.

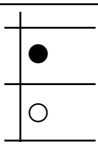
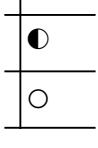
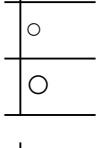
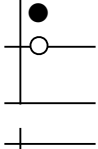
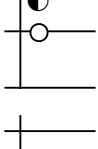
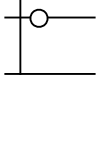
### Jing

Symbol	Onomatopoeia	Explanation
○	jing	Strike the center and let it ring.

## Janggu

Symbol	Onomatopoeia	Explanation
○	gung	Strike gungpyeon with gungchae firmly.
○	gu	Strike gungpyeon with gungchae softly.
○ ○	gu gung	Perform gu and gung with gungchae successively.
—○—	gung	Strike yeolpyeon with gungchae.
—○ ○—	gu gung	Perform gu and gung with gungchae on yeolpyeon successively.
○ . . .	gu r r . . .	Perform a roll sound on gungpyeon.

Symbol	Onomatopoeia	Explanation
●	ddak	Strike yeolpyeon with yeolchae firmly.
◐	dda	Strike yeolpyeon with yeolchae naturally.
○	da, ki	Tap yeolpyeon with yeolchae softly.
○ ●	ki dak	Perform ki and ddak successively.
○ . . .	da r r . . .	Perform a roll sound on yeolpyeon.

Symbols	Onomatopoeia	Explanation
	deong (gung + ddak)	Strike both sides firmly.
	deong (gung + dda)	Strike both sides naturally.
	deong (gung + da)	Strike both sides softly.
	deong (gung + ddak)	Cross gungchae over to yeolpyeon, perform deong firmly.
	deong (gung + dda)	Cross gungchae over to yeolpyeon, perform deong naturally.
	deong (gung + da)	Cross gungchae over to yeolpyeon, perform deong softly.

## Buk

Symbol	Onomatopoeia	Explanation
○	dung	Strike the skinhead with the stick firmly.
○	du	Strike the skinhead with the stick softly.
○ ○	du_dung	Perform du and dung with the stick successively.
○ . . .	du r r . . .	Perform a roll sound on the skinhead.

