Pi Nai

The only reed instrument that most Thai people would at least have heard of.

Capt. Somnuek Saeng-arun Bangkok, Thailand

A bit of History

Pi is an ancient Thai instrument that is believed to originate from the reed pipes called re-rai or pi re-rai played by folk people. Another ancient form of this instrument is the pi nam-tao, constructed by means of inserting a bamboo tube called pai-sang (Dendrocalamus strictus) into a calabash gourd. At some time, hardwood was adapted for the body of the instrument and the dried leaves of the Asian palmyra palm (Borassus flabellifer) came to be used for the reed. This newer kind of pi is used in many forms of ceremonial music. It is the only wind instrument in the Wong Piphat ensemble which is named after it. The Wong (or band) comprises pi, ranad thum (xylophones), gongs, and drums. This is mostly how the pi is heard today.

Originally, there was only one kind of pi, then pi in different pitches were produced for use in different occasions: 1) Higher-pitched ones made for khon and other kind of plays outside the palace, this pi is called pi nog; 2) Middle-pitched ones made for nung yai, the Thai shadow puppet shows, are called pi glang; and 3) Lower-pitched ones called pi nai were made for court music (see fig. 1). The most versatile and popular kind of pi used in many kinds of ensembles, and for many different occasions is the pi nai.



Figure 1. Three sizes of pi.



Figure 2. How to perform with pi nai.

What Makes the Pi Nai

The body of the instrument is made from hardwood such as Dalbergia oliveri or Dalbergia cochinchinensis (two rosewoods indigenous to Southeast Asia) cut into a cylinder approximately 42 cm long and 4 cm wide. While both ends are flared a bit, the middle is made into a convex shape (like the shape of a German bassoon bell) with noticeable rings to locate the tone-holes that are drilled after rings numbers 1, 3, 5, 7, 11, and 13 from the top (fig. 3). In the past, the top and bottom flares, called *tuan-bon* and *tuan-lang*, were decorated with ivory, very much in the fashion of a bassoon bell, but nowadays the decoration is made of wood, lead, or even wax.

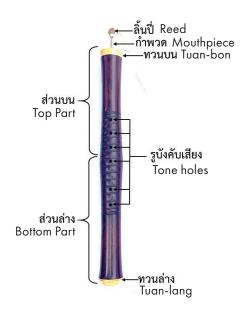


Figure 3. Physical components of the pi.



Figure 4. A pi reed.

Reed and Mouthpiece

This whole mechanism has two parts (see fig. 4). The direct translation of the first part would be "mouthpiece," but it is technically more like a bocal. Made from gold, brass, silver, or copper alloy it is conical in shape, approximately 5 cm long, with a top diameter of about 3 mm and bottom diameter about 5 mm. The part where it attaches to the body is wrapped with thread like a bassoon or cor anglais bocal.

The second part is the reed itself. Despite the fact that pi is considered a double-reed instrument, its reed is not exactly "double." It is made from four dried palmyra palm leaves shaped, and tied at the end with thread onto the mouthpiece. While the sound is created by the inner blades of the reed, the outer pair is used to hold the structure in place.

Fun fact: unlike like bassoon, oboe, or cor anglais reeds that are played horizontally, the *pi* reed is played vertically in the player's mouth. This means the player has to place his/her lips on the mouthpiece in order for the reed to vibrate freely.

The Sound of the Pi Nai

The sound of the *pi nai*, like that of any other reed instrument, is generated by the transmission of the reed's vibrations as sound waves into the body of the instrument by the player's air pressure. While you can finger the tone-holes to change pitch, you can also change pitch by placing your tongue on the reed. That is why *pi* is such a unique instrument and, of all Thai musical instruments, it is considered closest to the human voice.

The *pi nai* has twenty-four notes spanning three octaves which can be divided into three registers: low register (*siang-toh*), middle register (*siang-glang*), and high register (*siand-haeb*). The highest register is played by placing the tongue on the lower part of the reed while blowing and fingering the notes. Traditionally, each of the *pi nai*'s twenty-four notes has a specific name, but over time solfège notation has gained more popularity, eventually replacing the old notation system (see fig. 5).

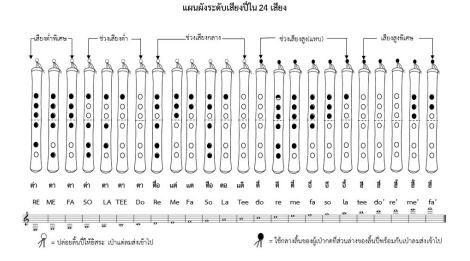


Figure 5. Basic fingering chart.

Alternate Fingerings. Like many wind instruments, alternate fingerings are used quite often. With a combination of finger and tongue placement it is possible to create many more different sounds than suggested by the basic fingering chart.

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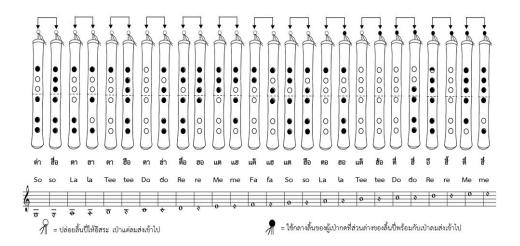


Figure 6. Pi nai alternate fingering chart

How to Perform on the Pi Nai

Prepare the reed by soaked it in water for 3–5 minutes and put the reed into the instrument perpendicular to the tone-holes. Some schools place the reed at 30–45 degrees to the tone-holes and let the thread point toward the body. (Note that the tone holes should point away from your body, or else your thumbs would not be enough to cover all six tone holes!)

Unlike western woodwind instruments, you can use either left or right hand on top, depending on your preference. The index, middle, and ring finger of both hands cover three tone-holes while the thumbs support from the back. The instrument will be at a 45 degree angle from the body, shoulders and arms relaxed. You can sit in traditional style (fig. 2) or on a chair.

The musical passages in Thai music are extremely long so circular breathing is required to play *pi nai*. This is accomplished by pushing air out through the mouth using air stored in the cheeks while breathing in at the same time. The process sounds simple but needs continuous practice to do effortlessly.

The playing style in Thai music is similar to jazz in the sense that the musician improvises on the main melody. The performance of Thai music is based specifically on melodic improvisation as there is very little harmonic aspect to it. A short and articulated style is called Tamnong-Geb; a slow and melancholy style is called Tamnong Hoy-Huan.

Ornamentation is another prominent aspect of Thai music. Trills, mordents, appoggiaturas, turns, and many other ornaments are used. Figures 7 and 8 give examples of solo melodies for *pi nai*.



Figure 7. Nok-ka-min for pi nai.

Pinai ปี่ใน เทาะ Hoh



Figure 8. Hoh f for pi nai.

Pi Nai Roles in Thai Music Ensemble

The *pi nai* is used in Wong Piphat. Traditionally the *pi nai* was the only melodic instrument, accompanied by percussion instruments, but as more instruments were added to the ensemble, the main melodic role was shifted to the *ranat ek*, or wooden xylophone, in conjunction with *pi*. But *pi nai* is still used to play solos on many occasions.

The *pi nai* is definitely one of the most interesting Thai musical instruments you can try. Despite being difficult to master due to its nature as a double-reed instrument, its sound is unlike any other—both aggressive and melancholic. If you happen to find yourself in a Thai musical performance and they have a *pi nai* player, be sure to ask to try the instrument. But be careful... players are as possessive of their reeds as any other double-reed player!

Translated by Saran Jirawichada:

Captain Somnuek Saeng-arun is renowned as a wind-instrument player in both Thai and international music. He graduated from the Royal Thai Army Band School, and also with both bachelor's and master's degrees in music education from Chulalongkorn University. He studied Thai and international music with many professional instructors, including the national artists LTC. Sanoh Luangsoontorn, Jamnian Srithaiphan, LTC. Wichit Ho-Thai, Asst. Prof. Col. Chuchart Pitaksakorn, and Ajarn Manrat Srikanon among others. In addition to being a famous performer, Somnuek Saeng-arun is known as a composer, music arranger, and conductor. He was a founder of the Sabai band, and also the Jongkraben band in the Kun Pra Chuay program, where he was an advisor from 2004 to 2008. He has worked with many artists and leading bands and orchestras such as Fong-Naam, Korphai, Boy Thai, Bangkok Xylophone, Suanplu Chorus, Maithai, the Bangkok Symphony Orchestra, and Siam Philharmonic. Some of his most distinguished work was his collaborations with Richard Harvey in The Legend of



Suriyothai: The Original Film Soundtrack, and Coronation Song. He participated in the musicals Eng-Chang, Four Reigns, MaeNak, the opera-ballet Mahajanaka, and he was music director of the musical Royduriyang. The greatest achievement of his career was to be honored as Music Director of the Wong Mahaduriyang (Great Musical Ensemble) in the Thai Arts Concert congratulating King Bhumibol. His own compositions include Vesak Day Song (for orchestra), PromMas Song (marching band), and Morn Doo Dao (2019), for big band. Capt. Somnuek Saeng-arun is recognized as one of the most experienced instructors for both Thai and international music, and has taught at many institutions such as the Royal Thai Army Band School, the support foundation of the Prasidh Silapabanleng, and Kasetsart University. Presently, he

works on the music staff in the support foundation of prem tinsulanonda at the Royal Thai Army Band Department, and he is a Music Director at the Satukan Music School, and the leader of the Jongkraben band.