



การสร้างสรรค์ผลงานทางดุริยางคศิลป์ ชุด ตาลเมืองเพชร

Music Composition :

“Toddy Palm of Phetchburi” Suite

ปราชญา สายสุข¹

Prachya Siauxk

บุษกร บินทสันต์²

Bussakorn Binson

¹ นักศึกษาหลักสูตรศิลปกรรมศาสตรดุษฎีบัณฑิต
สาขาวิชาดุริยางคศิลป์ไทย

คณะศิลปกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

² ศาสตราจารย์ ดร., สาขาวิชาดุริยางคศิลป์ไทย

ศูนย์เชี่ยวชาญเฉพาะทางวัฒนธรรมดนตรีไทย

คณะศิลปกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษากระบวนการผลิตน้ำตาลโตนด อันเป็นแนวคิดเพื่อสร้างสรรค์ผลงานทางดุริยางคศิลป์ ชุด ตาลเมืองเพชร ผู้วิจัยได้ทำการศึกษากระบวนการผลิตน้ำตาลโตนดจากสวนตาลลุงณอม ภูเงิน ซึ่งนับว่าเป็นแหล่งเรียนรู้ภูมิปัญญาตาลโตนดแหล่งสำคัญของจังหวัดเพชรบุรี ทั้งนี้ ผู้วิจัยได้ใช้วิธีการดำเนินการวิจัยเชิงคุณภาพและการวิจัยเชิงสร้างสรรค์ในการสร้างสรรค์ผลงานในครั้งนี้

การสร้างสรรค์ผลงานทางดุริยางคศิลป์ ชุด ตาลเมืองเพชร ได้แนวคิดจากกระบวนการผลิต น้ำตาลโตนด 5 ขั้นตอนหลัก คือ 1) การพาดตาล 2) การรวนตาล 3) การปาดตาล 4) การรองตาล 5) การเคี่ยวตาล รูปแบบของการจัดแสดงผลงานสร้างสรรค์ทางด้านดุริยางคศิลป์ เป็นการบรรเลงดนตรีไทยโดยใช้วงปี่พาทย์ไม้นวมและใช้สไลด์ฉายประกอบการบรรเลง ในส่วนของบทเพลงนั้นเป็นการประพันธ์เพลงขึ้นใหม่ โดยมีได้อาศัยเค้าโครงจากเพลงอื่นใดที่มีในขนบประเพณีของดนตรีไทย

งานวิจัยนี้เป็นการรวบรวมองค์ความรู้เพื่อสร้างสรรค์ผลงานทางด้านดุริยางคศิลป์ ผสมกับองค์ความรู้ในศาสตร์แขนงต่าง ๆ เพื่อพัฒนาต่อยอดและเป็นแนวทางสำคัญในการสร้างสรรค์ผลงานทาง ดุริยางคศิลป์ ตลอดจนสืบทอดมรดกทางวัฒนธรรมและสะท้อนภูมิปัญญาท้องถิ่นของชาวเพชรบุรีสืบต่อไป

คำสำคัญ : ตาลเมืองเพชร, ตาลโตนด, ผลงานประพันธ์ดนตรีไทย

Abstract

The aim of this research is to study toddy palm jaggery making process which is the inspiration of *Tan Mueang Phetch*, the musical composition created in this research project. The researcher has conducted a fieldwork studying toddy palm jaggery making methods at Uncle Thanom Phu-ngoen's toddy palm plantation, an important center of Phetchburi province in promoting local wisdom on toddy palm production. From this, it has been carried out both qualitative

and creative research.

Tan Mueang Phetch is inspired by the five steps to producing toddy palm jaggery: *phat tan* (climbing to the top), *nuat tan* (tapping inflorescence), *pat tan* (slicing off inflorescence), *rong tan* (collecting oozing out sap) and *khiao tan* (simmering the palm sap)

Without having as a reference any Thai traditional song structure, the musical work, accompanied by a slide presentation of visual images, is performed by *Piphat Mai Nuam* ensemble, Thai classical music ensemble in which percussion mallets are wrapped in soft material giving the instruments a warmer sound.

The researcher has gathered knowledge including those in other disciplines, intending to advance understanding on music performance as well as to preserve cultural heritage and local wisdom of Phetchburi province.

Keywords: Phetchburi's toddy palm, toddy palm, Thai music composition

Introduction

Phetchburi is a province with a long history. According to important archaeological sites and antiques that were discovered, the city was established during Funan Kingdom and continues until today in the present period of Rattanakosin. Its geography consists of coastal plain, plateau adjacent to mountain range and lowland river where important rivers pass through and which makes Phetchburi perfect for agriculture and fishery. The province is a popular tourist attraction of Thailand thanks to the diverse topography and its various cultural forms of architecture, those regarding the famous painting style known as

Mueang Phetch style, music, traditional recreations (Thai performing arts called *Lakhon chattri*, *Phranakhornkhiri* celebration, Ox racing called *Wua lan*, etc.) and practices among ethnic groups.

Toddy palm is Phetchburi's characteristic that appears in the provincial seal bordering the rice fields in the center. The image represents the fertility of the province, according to which most people in Phetchburi is able to make a living by growing rice as their principal occupation and planting toddy palm, the official provincial tree, as their second career. In Phetchburi's nirat poems written by Sunthorn Phu, famous poet of Thailand in early Rattanakosin, there's a part in which the abundance of toddy palms in Phetchburi is affirmed: "Chill out in lovely crisp air, Admire the view along the way, Wander throughout the land of Phetchburi, All that be are endless lines of toddy palms...". (Phetchburi's Teacher College, 1982) The poem portrays the great number of toddy palms and the expansion of them throughout the province. Furthermore, there are also parts of the poems where Phetchburi's way of life in producing toddy palm jaggery is mentioned.

Although toddy palm jaggery is highly demanded, traditional processes of making it are still well-reserved, namely *phat tan* (climbing to the top), *nuat tan* (tapping inflorescence), *pat tan* (slicing off inflorescence), *rong tan* (collecting oozing out sap) and *khiao tan* (simmering the palm sap). Some procedures require several days such as *nuat tan* that requires approximately 5 to 6 days. Each procedure tells a story of how local wisdom on toddy palm jaggery is passed on within the community, from harvesting to processing the collected palm sap into good-quality palm jaggery.

It is found that nowadays collecting palm sap from palms grown on paddy-field ridge has become less popular. This is because many toddy palms have died, since 2011, from the changed ecosystem due to in-season and out-season rice fields operated throughout the year, which caused paddies to remain flooded all year round. (MGR Online, 2011) The only place where toddy palm manages to maintain its number is Uncle Thanom Phu-ngoen's plantation, a center whose aim is to promote local wisdom on toddy palm production. With hundreds of toddy palms, Uncle Thanom's plantation has become a learning center for young people and others who are interested to come and explore this traditional practice, especially skills on gathering palm sap and knowledge on processing it into palm jaggery. However, due to environmental and socio-cultural change, this local knowledge has become less well-known among new generations.

Passing on the value of traditional ways of life is what should therefore be concerned about. And traditional Thai songs are another way through which the value of traditional ways of life is conveyed. *Khamen Sai Yok* is a classic example of Thai song that represents the beauty of nature. The song, written by Prince Narisara Nuwattiwong, is about Sai Yok waterfall in Kanchanaburi province and the natural beauty of its surrounding such as tress, birds, fish etc. Having an opportunity to study the local knowledge of the making of toddy palm and its importance to Phetchburi's way of life, as well as realizing the significance of passing its almost forgotten traditional knowledge onto future generations, the researcher was inspired to combine knowledge and experience obtained from field research conducted at Uncle

Thanom Phu-ngoen's toddy palm plantation with Thai music theories and principles of creativity. The intention was to present five procedures of toddy palm jaggery making in five pieces of music: *phat tan*, *nuat tan*, *pat tan*, *rong tan* and *khiao tan*, together in a musical performance named *Tan Mueang Phetch*. The aim of composing this musical work was to create a music performance that is based on Thai music composition theory and from which knowledge on musical form is contributed, and also to preserve intangible cultural heritage of Phetchburi's local wisdom.

Objectives

To study toddy palm jaggery making process, with a case study at Uncle Thanom Phu-ngoen's toddy palm plantation

To create musical composition *Tan Mueang Phetch*

Research instruments and procedures

The researcher collected data from texts and documents, conducted interviews with experts and carried out field research with the purpose to observe and participate in local sites. The obtained data was analyzed and then synthesized into a form of musical work, in the course of which problem solving methods and process of drawing conclusion were applied.

1. **Gathering data from written documents** – studying texts, books and academic papers that are related to musical performance.
2. **Conducting interview to experts** – interviewees were village scholars, professors and experts on creativity

3. **Information media** – Online database, video clips, tape cassettes, etc.

4. **Conducting field research** – fieldworks were carried out at Uncle Thanom Phu-ngoen's toddy palm plantation and in several *Tao Tan* where palm sap is processed into palm jaggery

Research tools that were used during the field research are as follows:

- a notebook and a pen
- a recording device
- a camera
- a video camera
- an interview form and an observation form

Data analysis

Composing the music performance *Tan Mueang Phetch*, the researcher applied the following concepts and music theories:

1. Concepts

1.1 Concept on local wisdom

The researcher studied local wisdoms and traditional ways of life that were passed on from generation to generation, which, in this case, is about the making process of Phetchburi's toddy palm jaggery. The researcher has conducted fieldwork at Uncle Thanom Phu-ngoen's toddy palm plantation which is an important center of Phetchburi province in promoting local wisdom on toddy palm production.

1.2 Concept on creativity

With the aim to create a musical performance that shares social values and of which unique creativity is acknowledged

by public, the researcher applied concepts on creativity that include phases of selecting a concept, organizing thoughts and realizing the ideas.

2. Music theories

2.1 Thai music composition theory

In terms of Thai music composition theory that was applied in the project, the researcher studied fundamentals of musical composition and explored how Thai traditional songs were composed. For the musical work in this project, it is created in a completely new way without having any Thai traditional song structure as a reference, neither in terms of concept nor in terms of sound pattern. Instead, the researcher applied the Thai music composition theory of Phichit Chaiseri so called “Buk Phrai Boek Thang” (penetrate into the forest and clear the way). It refers to the creation of a creative work by searching for new things without being limited by conventional ways of thinking, as like adventurers that penetrate into the wild to find a way out from the besieging forest and which some of them have managed to find a way out and cleared the path for next generations to follow.

2.2 Thai music performance theory

Regarding Thai music composition theory, the researcher studied the components of musical performance and those of musical composition including rhythm, melody, harmonization, music form, etc.

2.3 *Piphat* ensembles combination theory

Concerning *Piphat* ensembles combination theory, the researcher studied principles of *Piphat* ensembles combination,

criteria in selecting musical instruments that are suitable for the composed melodies, and how to position each musical instrument in the band.

Tan Mueang Phetch consists of five pieces of music, as follow:

1. *Phat tan*
2. *Nuat tan*
3. *Pat tan*
4. *Rong tan*
5. *Khiao tan*

The case study of toddy palm jaggery making process in this project was conducted at Uncle Thanom Phu-ngoen's toddy palm plantation; from which it is found that the whole process can be divided into 5 phases: *phat tan* (climbing to the top), *nuat tan* (tapping inflorescence), *pat tan* (slicing off inflorescence), *rong tan* (collecting oozing out sap) and *khiao tan* (simmering the palm sap). In creating the musical performance, the researcher was inspired by main movements of the palm jaggery maker in each making process as well as the natural sounds that are produced in each phase. And from this, five pieces of music were composed, as follows:

1. *Phat tan* piece was inspired by the climbing palm process which starts with tying *Pha-ong* pole, a wild bamboo pole of 3 to 4 meters long, to the side of the palm trunk. Before climbing, the tapper will tie some ropes to his waist, and while stepping on branch nodes of the bamboo pole to get to the summit of the palm, he will secure the bamboo pole to the palm trunk with these ropes.



Image no. 1 – Wild bamboo pole used as *Pha-ong* pole for climbing up toddy palm

Source: photo taken by researcher

The moment in which the tapper steps firmly on each branch node and moves rhythmatically to tie up the rope has inspired the researcher to interpret these movements and synthesize them into a piece of music.

Stepping firmly and continuously

--- 1	- 1 1 1	- 2 3	- 5 - 2	--- 3	- 3 3 3	- 5 - 6	- 1 - 5
-------	---------	-------	---------	-------	---------	---------	---------

Tossing the rope and tying it

----	1 1 - 6	----	1 1 - 6	----	5 5 - 3	----	5 5 - 3
------	---------	------	---------	------	---------	------	---------

glissando

glissando

glissando

glissando

Climbing the toddy palm process known as *Phat tan* (literally refers to the action of leaning bamboo pole against the palm trunk)

is usually done in the morning from 6 to 7 a.m. onwards. The early morning atmosphere with the rising sun and the crowing of rooster near the palm plantation was the inspiration of the following melody:

Melody of the rising sun

----	--- 1	--- 2	--- 3	--- 5	--- 5	- 1 - 2	- 3 - 1
------	-------	-------	-------	-------	-------	---------	---------

Melody of the crowing rooster

--- 5	6 1 -1	--- 5	6 1 -1	--- 1	2 3 - 4	--- 1	2 3 - 4
-------	--------	-------	--------	-------	---------	-------	---------

--- 5	6 1 -1	--- 1	2 3 - 4	--- 2	- 3 --	- 1 - 6	1 2 6 1
-------	--------	-------	---------	-------	--------	---------	---------

2. *Nuat tan* piece was inspired by the process of tapping inflorescence with rods that were specifically made for this purpose, and which have two types: one with flat shape for kneading male inflorescence and another with rounder shape for female inflorescence. The kneading process takes approximately 5 to 6 days, from gentle tapping that increases gradually as days pass until it reaches the heaviest kneading on the last day.



Image no. 2 – Rods used for tapping male inflorescence

Source: photo taken by researcher

The researcher was inspired by the using of rods for crushing inflorescence in each day with soft and hard tapplings, and from which he composed *Nuat tan* melody:

Melody 1

- - 1 1	- 6 - -	1 1 - 6	- - - 1	- - 1 1	- 6 - -	1 1 - 6	- - - 1
- - 3 3	- 2 - -	3 3 - 2	- - - 3	- - 5 5	- 2 - -	5 5 - 2	- - - 3
- - - 3	- 5 5 5	- - - 6	- 5 5 5	- - - 3	- 5 5 5	- 5 - 6	- 1 1 1

Melody 2

- 1 1 6	- 1 1 6	- 1 1 6	- 1 - -	- 1 1 6	- 1 1 6	- 1 1 6	- 1 - -
- 3 3 2	- 3 3 2	- 3 3 2	- 3 - -	- 5 5 2	- 5 5 2	- 5 5 2	- 3 - -
- 2 - 3	- 5 5 5	- 1 - 6	- 5 5 5	- 2 - 3	- 5 5 5	- 5 - 6	- 1 1 1

3. *Pat tan* piece was inspired by the process of slicing off thin layers of inflorescence for 2 to 3 millimeters with a knife to let the palm sap ooze out.



Image no. 3 – Knife for slicing off inflorescence in its sheath

Source: photo taken by researcher

Being inspired by the action of drawing knife out of the sheath and slicing off layers of inflorescence, the researcher composed *Pat tan* melody.

Pat tan melody

----	- 3 - 3	-- 6 5	6 3 5 2	----	- 3 - 3	6 5 6 5	6 3 5 2
------	---------	--------	---------	------	---------	---------	---------

glissando

glissando

----	- 1 - 1	-- 6 1	2 1 3 2	-- 3 2	3 1 --	5 3 6 5	1 6 2 1
------	---------	--------	---------	--------	--------	---------	---------

glissando

4. *Rong tan* piece was inspired by the process of collecting oozing out palm sap in a bamboo tube after slicing off thin layers of inflorescence. At the bottom of the container, wood scraps of Resak tembaga or Shorea are placed to prevent the palm sap from growing rancid.



Image no. 4 – Spiny bamboo flask for collecting palm sap

Source: photo taken by researcher

The researcher was inspired by the moment the palm sap drops into bamboo flask and when some of it splashes out of the container, and therefore composed this musical piece:

Rong tan melody (representing the downward sap flow)

6 5 4 5	4 3 2 4	3 2 1 3	2 1 6 1	6 5 4 5	4 3 2 4	3 2 1 3	2 1 6 1
---------	---------	---------	---------	---------	---------	---------	---------

Melody that represents the splashing out of palm sap from bamboo flask

-- 5	-- 1 5	-- 1 5	- 5 - 1	-- 5 1	- 5 - 5	-- 1 5	- 5 - 1
------	--------	--------	---------	--------	---------	--------	---------

5. *Khiao tan* piece was inspired by the process of simmering palm sap. The collected sap was poured into a pot through a filter cloth to sift all the dust and scraps. The sap is then poured into a big wok that is positioned on *Hang* stove, a 50 to 60 centimeter-tall clay stove that has an opening for placing fuel and another opening as a flue for letting out the smoke. On top of the stove there is a pit on which three woks can be placed at the same time.



Image no. 5 – Simmering palm sap with *Mai kha-nuan* spoon

Source: photo taken by researcher

The researcher was inspired by the moment the wok was lifted from the stove and placed on an old tire that functioned as wok support. The palm juice in the wok is stirred in one direction with *Mai kha-nuan*, a rectangular spoon made for this purpose, and is then pounded to scatter the sap in the center of the wok towards the edge

area. The sap is continuously whisked to make it viscous and changes color. These steps are repeated until all of the sap is done so thoroughly. From this inspiring detailed process, the researcher composed *Khiao tan* piece.

Khiao tan piece

--- 1	2 3 4 5	6 5 4 5	4 3 2 1	--- 1	2 3 4 5	6 5 4 5	4 3 2 1
--- 5	- 1 - 1	--- 5	- 1 - 1	--- 1	2 3 4 5	6 5 4 5	4 3 2 1
--- 5	6 7 1 2	1 2 3 2	1 6 - 1	----	- 1 --	- 1 - 5	- 6 - 1
----	--- 5	----	--- 6	----	----	- 1 - 5	- 6 - 1

Project summary and achievement

The musical composition *Tan Mueang Phetch* was inspired by five main steps to producing Phetchburi's toddy palm jaggery: *phat tan* (climbing to the top), *nuat tan* (tapping inflorescence), *pat tan* (slicing off inflorescence), *rong tan* (collecting oozing out sap) and *khiao tan* (simmering the palm sap). The case study of the project was conducted at Uncle Thanom Phu-ngoen's toddy palm plantation, an important center of Phetchburi province in promoting local wisdom on toddy palm production. With the purpose to create this musical work, the researcher applied concepts on local wisdom and those concerning creativity, which are then combined with three important music theories: Thai music composition theory, Thai music performance theory and *Piphat* ensembles combination theory.

Tan Mueang Phetch is performed by *Piphat* ensemble and is accompanied by a slide presentation of visual images that tells a story of how to make toddy palm jaggery, from *phat tan* to *khiao tan*. It illustrates the local knowledge of people in Phetchburi province in making toddy palm jaggery, a traditional practice from the past that has been passed on to new generations in the present day. This music performance represents the significance of toddy palm, Phetchburi's key natural resource, and has been introduced to public in important province events such as *Phranakhornkhiri* celebration, Phetchburi *Dee Jang* event and so on.

Recommendations

General recommendations

The local wisdom on toddy palm jaggery that has inspired the musical performance *Tan Mueang Phetch* in this research can be an inspiration for other types of traditional Thai songs such as *Phleng rueang* and *Phleng tap*.

Recommendations for future research

Coconut jaggery is another important agricultural product of which making process is a precious local wisdom that should be studied and preserved. As toddy palm jaggery has inspired the creating of the musical composition in this research, coconut jaggery is another traditional practice that can be an inspiration for any creative performance.

Reference

- Phetchburi's Teacher College. (1982). **Phetchburi's Nirat Poems Compilation**. Bangkok: Krung Siam Press.
- MGR Online. (2011). **The future of Phetchburi's toddy palm, is it dying or will it survive?**. [Online]. Retrieved September 9, 2017, from <http://www.manager.co.th/Local/ViewNews.aspx?NewsID=9540000031163>.