

# Savithri Scale for New Malay Gamelan

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**Abstract:-** An experimental research meant to explore Malaysian gamelan to another level. By implementing purposive sampling in methodology, researcher chose Savithri scale to apply in ethnomusicology studies and producing three sets of new Malay gamelan piece way different than the original pentatonic scale of traditional Malay gamelan.

**Keywords:-** Malay Gamelan; New Gamelan; Pentatonic Scale; Savithri Scale; Variation.

## I. INTRODUCTION

### ➤ Malay Gamelan

Malay gamelan, also known as Terengganu gamelan is the most common gamelan ensemble in Malaysia consists of seven main instruments, namely, *saron peking*, *saron baron*, *saron demung*, *bonang*, *gambang*, *kenong* and *gong* (Matusky, 2008). Traditionally, gamelan is only played on certain occasions such as ritual ceremonies, puppet shows, royal celebrations and cultural dance. Today, gamelan is also successfully expanded in music concert as well as social gathering to welcome guests. Gamelan also penetrates various art disciplines including traditional and modern dance, as well as drama and theatre (Wong, 2016).

### ➤ Savithri Scale

The notation of Raga is referred to as Swar. Swar consists of seven notations from the scale of Indian music. Basically, Swar is similar to solfege in Western music theory. The seven Swars are referred to as, Shadaj (Sa), Rishabh (Re), Gandhara (Ga), Madhyam (Ma), Pancham (Pa), Dhaivat (Da) and Nishad (Ni). However, (Sa, Re, Ga, Ma, Pa, Da, Ni) acronym is the most commonly used. It is called Sargam (Courtney, 1995).

Raga also has a mode structure (Bose, 1960). It is referred to as *Thaat* in Northern Indian music and *Mela* in Southern India music. Among the *Thaat* identified are;

Thaat	Equivalent	Interval
Bilawal	Ionian	1, 2, 3, 4, 5, 6, 7
Kafi	Dorian	1, 2, 3b, 4, 5, 6, 7b
Asawari	Aeolian	1, 2, 3b, 4, 5, 6b, 7b
Bhairavi	Phrygian	1, 2b, 3b, 4, 5, 6b, 7b
Kalyan	Lydian	1, 2, 3, 4#, 5, 6, 7
Savithri	Mixolydian	1, 2, 3, 4, 5, 6, 7b
Bhairav		1, 2b, 3, 4, 5, 6b, 7
Marwa		1, 2b, 3, 4#, 5, 6, 7
Purvi		1, 2b, 3, 4#, 5, 6b, 7
Todi		1, 2b, 3b, 4#, 5, 6b, 7

Table 1:- Mode Structure in Raga

## II. BACKGROUND

There are lack of variation in Malaysian gamelan scale. So far, Malaysia has just two types of gamelan, namely, Terengganu gamelan scale (1, 2, 3, 5, 6) and Javanese gamelan scale (1, 3, 4, 5, 7). Thus, the objective of this study is to produce three sets of new Malay gamelan piece in the scale of Savithri (1, 2, 3, 4, 5, 6, 7b) to add variety in the Malaysian gamelan scale.

The importance of this study is closely related to researcher’s idealistic vision for diversifying gamelan variation in Malaysia. In addition, this study can show the community about Indian Raga and its close association with Malay music.

## III. METHODOLOGY

Savithri scale was chose out of ten *Thaat* in Raga mode structure (Bose, 1960) through purposive sampling.

Researcher also used purposive sampling in determining data that later to be analyzed as a guide to produce new Malay gamelan piece in Savithri scale. Data were taken from ‘Malaysia Merdu’ (1993) album and ‘Senandung Warisan’ music book (Arkib Negara Malaysia, 2004).

The objectives of the data are to prove that classic Malay songs were already formed by Savithri scale and to justify the usage of Savithri scale in new Malay gamelan creation.

**IV. RESULTS AND FINDING**

Researcher found frequent use of flat-seventh (bVII) chord and notation in classic Malay songs. It is equivalent to Mixolydian mode and truly fits Savithri scale. Every flat-seventh notation in the diagram are notated in red.

1. Ala Canggung ♩=100 
2. Nenek Si Bongkok Tiga 
3. Jangan Adik Angan-Angan ♩=95 
4. Ketipang Payung ♩=90 
5. Senandung Kaseh ♩=85 
6. Seri Bunian ♩=80 

Table 2:- Data Analysis

These data analysis were used as a guide to compose three set of new Malay gamelan motives in Savithri scale. Every flat-seventh notation in the diagram are notated in red.

1. Merah ♩=160 Saron Peking Saron Baron 
2. Puteh ♩=80 Saron Peking Saron Baron 
3. Nila ♩=100 Saron Peking Saron Baron 

Table 3:- New Malay Gamelan Motives

**V. DISCUSSION AND CONCLUSION**

Researcher had interviewed Mr. Thomas Lamada; a gamelan expert from Universiti Malaysia Sarawak Cultural Association (BAYU) on the effectiveness and appropriateness of Savithri scale application for new Malay gamelan.

He said that this research is a great innovation to spark interest and increase the variation of gamelan music in Malaysia. He also added, the suitability of Savithri scale depends on the type of song and its use. Researcher agreed with his opinion.

Mr. Thomas Lamada recommended; if new Malay gamelan in Savithri scale is successfully invented, the traditional music practitioner can already play existing Savithri scale Malay songs on it. Both traditional and contemporary music composers can also begin to create songs for this new Malay gamelan.

To conclude, researcher suggested that this idea to be welcomed by government agencies with funds allocation to produce physical set of new Malay gamelan in Savithri scale as it will be a game-changer and varies gamelan music in Malaysia.

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