

Breaking the Code: An Investigation on The Vocal Registers of Malaysia's National Songstress Puan Sri Saloma

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ABSTRACT

Investigations on vocal registers have been a great subject of debate. Early vocal pedagogues and scholars like Bacilly (1668–1690) and Behnke (1836–1892) paved the way for the modern-day investigation to take place through the categorisation of vocal registers across various music genres such as classical, jazz, and popular. However, an investigation on the vocal registers of Puan Sri Saloma (1935–1983) as a popular music icon of Malaysia has yet to be done. This paper intends to examine Saloma's vocal registers through vocal analysis of five selected songs using case study as its research design. These songs are transcribed using music notation software (Sibelius) and analytical diagrams using similar software are produced to show the use of chest, middle, and head registers in each song. The finding shows the usage of the said registers and a diagram of Saloma's vocal range is then produced, proving that Saloma was an alto. This study does not intend to limit Saloma's vocal capability, but rather to celebrate her vocal prowess and encourage other scholars to conduct further investigations concerning Saloma as Malaysia's national songstress.

Keywords: music analysis, case study, Saloma, vocal registers, voice categorisation

INTRODUCTION

This section consists of an overview of investigations on vocal registers through time, female vocal registers, and a brief background of the national songstress, Puan Sri Saloma. The mentioned subsections would help to provide a summary of the past and current views surrounding the understanding of female vocal registers and Puan Sri Saloma's biography to provide a clear direction to the readers to comprehend the context of this investigation.

Brief Background of Investigations on Vocal Registers through Time

“There is perhaps more controversy and disagreement about the registers of the human voice than about any other part of the art of teaching technique” (Larkcom 1919, 211).

Vocal registers are controversial in the pedagogical, clinical, and scientific domains of vocology. A well-known general definition of vocal registers is “perceptually distinct regions of vocal quality that can be maintained over some ranges of pitch and loudness” (Titze 2000, 282). Investigations on vocal registers have been conducted for centuries. Though this area of interest started to gain the interest of scholars and vocal pedagogues from the 19th century onwards, Bénigne de Bacilly, a 17th century French composer and scholar,

had written a lengthy remark on the art of singing. Bacilly (quoted in Honea 2018) claims that some people take pride in their high voices, and others in their low tone, later stating there are two vocal registers; high and low. Behnke (1886, 1) defines a register consists of a series of tones produced by the same mechanism, improving Bacilly's division of vocal registers by subdividing vocal register into two main categories: (1) lower and upper thick, and (2) lower and upper thin. Larkcom (1919, 5–6) states that Manual Garcia (1805–1906), a renowned Spanish singer, music educator, and vocal pedagogue, defines vocal register as “a series of homogenous sounds produced by one mechanism” and has divided women's voice into three registers; high, medium, and low. This phenomenon is consistent with Giles (1994) that the development in the investigation of vocal registers by vocal experts evolved in explaining vocal registers from two parts before the mid-19th century, to three parts from the mid-19th century forward.

Donington (1970) claims that the most important element in vocal technique is the production of sound and strength in the use of registers from the lower register to the high register. However, he also argues that only some vocal teachers are still practising Western classical vocal techniques, but it is starting to show improvement over time. Brown and Sadie (1990) emphasise that the correct use of registers is determined by the range of a singer's voice, briefly mentioning the falsetto register is used for the male voice and the female voice has a larger middle register where it will be separated between the chest and head register.

Female Vocal Registers

Henrich (2006) found that the categorisations of male and female vocal registers have evolved through time. She made a comparison of the difference in the categorisation by four prominent vocal pedagogues—Garcia (1840), Behnke (1880), Hollien (1974), and Miller (2000), as shown in Figure 1.

Beginning from the mid-19th century until recent times, experts began to divide these registers into three parts; high (head), medium (middle), and low (chest), as opposed to early vocal experts that only divided the vocal registers into two parts—high and low register. Larkcom (1919), Brown and Sadie (1990), Giles (1994), and Nur Fardilla Nadia (2018) agreed that: (1) head register is a result of the highest vocal register which consists of a bright tone that can be felt when the echo or resonance is produced around the cheek or mask area of the face; (2) middle register is the combination between chest register and head register (other terms commonly associated with this register are mix or blend register); and (3) chest register is the result of the voice register in the chest or simply described as the most closely related to the speaking voice.

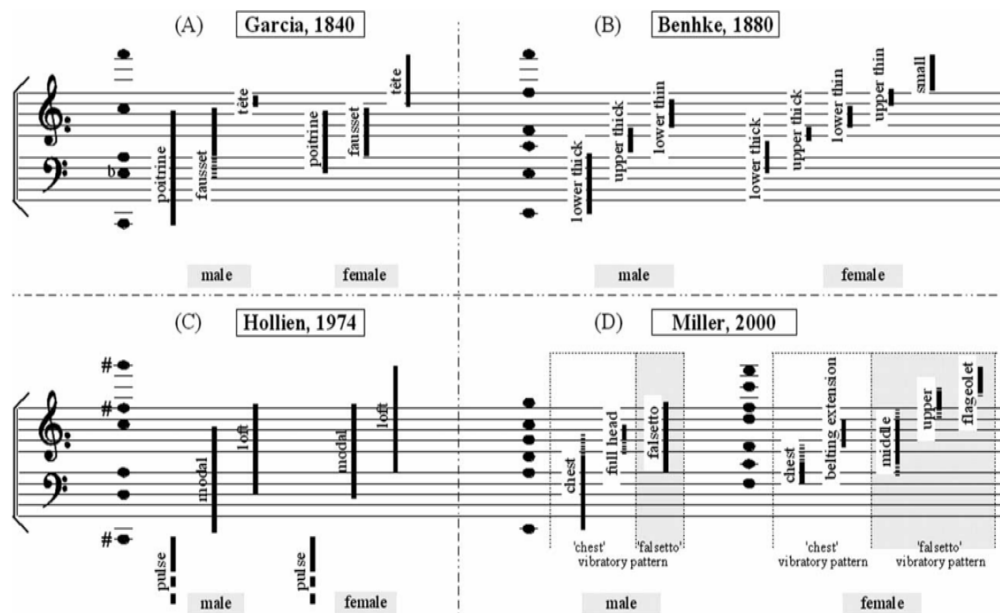


Figure 1 The frequency range of human voice and vocal registers, as defined by Garcia, Behnke, Hollien, and Miller.

Source: Henrich (2006)

Table 1 Female voice types and ranges according to Randel (2003), Mann (2022), and Matthew (2018).

Female voice types	Range (Randel 2003)	Range (Mann 2022)	Range (Matthew 2018)
Soprano	C ₄ -A ₅	C ₄ -C ₆	A ₃ -F ₆
Mezzo-soprano	A ₃ -F ₅	A ₃ -A ₅	G ₃ -C ₆
Alto	F ₃ -D ₅	F ₃ -F ₅	E ₃ -G ₅

Pinksterboer (2008) mentioned the female singer's vocal range can be categorised into three main voice types: (1) soprano, (2) mezzo-soprano, and (3) alto. According to Randel (2003), the female vocal range could be categorised and approximated as soprano (C₄-A₅), mezzo-soprano (A₃-F₅), and alto (F₃-D₅). This categorisation is somehow consistent with Mann (2022), which categorises and approximates the female vocal range as soprano (C₄-C₆), mezzo-soprano (A₃-A₅), and alto (F₃-F₅). However, Matthew (2018) shows some degree of disagreement with Randel (2003) and Mann (2022), stating that the categorisation and approximation are as soprano (A₃-F₆), mezzo-soprano (G₃-C₆), and alto (E₃-G₅).

It is apparent that Randel (2003), Mann (2002), and Matthew (2018) disagree on the upper limit of these voice types. This is understandable as the upper limits of the said voice types are arbitrary and depend on the capability of the singers. However, they are somehow consistent in determining the lower limit, especially for mezzo-soprano and alto voice types. This is vital because as we shall see later, the investigation of Saloma's vocal register is consistent with the proposed lower limit.

Brief Background of Saloma

Nur Fardilla Nadia (2018) mentioned that national songstress Puan Sri Datin Amar Salmah Binti Ismail or famously known as Saloma (will be referred using this name from this point onward) was born on 22 January 1935 at Pasir Panjang, Singapore, and passed away on 25 April 1983 at the age of 48 at Assunta Hospital, Petaling Jaya. She was the second child of three siblings. Being the sister to actresses Mariani and Mimi Loma, Saloma followed in their footsteps in becoming an actress but held on to her passion for becoming a singer. She started singing at the tender age of seven and soon became a professional singer in her teens. Saloma's voice aired on local radio for the first time by accident. This happened when her stepfather took her to see an orchestra performance for a broadcast on Radio Malaya. Saloma had replaced the singer Rokiah Hanafi, also known as Rokiah Wandah who did not turn up and was scheduled to sing with the orchestra. Since that event, Saloma continued to hone her talent with the Fajar Murni Orchestra led by Yusof Osman and received many offers from orchestras across Singapore to be their lead singer. Apart from performing in Singapore, Saloma also ventured internationally, when she received a singing contract in Perth, Australia and was the first Malaysian female singer during her time to get a singing contract abroad and was later invited by an Australian television station for the programme *In Australian Tonight* in 1959.

Early in her career, Saloma became famous for singing through films published in the 50s. Her first acting film was *Azimat* (1958) followed by *Kaki Kuda* (1958). Since then, Saloma started acting in various films such as *Seniman Bujang Lapok* (1961), *Ragam P. Ramlee* (1964) and *Ahmad Albab* (1968). After her success as a singer as well as an actress, the Shaw Brothers' filmmaking and production company decided to give her a more commercial name which was known today as Saloma. She got her stage name based on a film titled *Salome* starred by Rita Hayworth. During the 60s, Saloma was also part of the singing group Panca Sitara, which one of the members was the late Tan Sri P. Ramlee. In 1978, Saloma was awarded the title *Biduanita Pertama Negara* (First National Songstress) and conferred the posthumous award *Panglima Mangku Negara* (P.M.N) which carries the title "Puan Sri" in 1990 alongside her husband, Tan Sri P. Ramlee. Although Saloma did not star in most of P. Ramlee's movies, the uniqueness and soulfulness of her voice were used in many of P. Ramlee's song compositions mainly in films acted and directed by P. Ramlee. Throughout Saloma's career, she has recorded over 200 songs covering a variety of genres and singing styles such as jazz, cha-cha, twist, pop ballads, and original motion picture soundtrack (Ahmad Kamal Basyah, Abdul Walid, and Muhammad Qawiem 2021).

We would now be looking into the review of existing academic and non-academic studies on Saloma and an overview of the use of Western classical vocal techniques over non-classical singers. This is vital to further examine how this study is significant in contributing towards enriching the academic literature on Saloma and vocal registers.

REVIEW

This review focuses on two main categories to be studied: (1) existing studies, mentions of Saloma in academia and appreciation in local culture; and (2) a brief overview of the investigations of vocal registers in non-classical singers. This section would end with the justification of the need for this study and state the relevance of the investigation in this article.

Existing Studies of Saloma in Academia and Appreciation in Local Culture

Nur Fardilla Nadia (2018) discusses in her Master's thesis on Saloma's singing using the Western classical singing approach by analysing six selected songs. She dissected Saloma's voice through vocal analysis and subdivided the voice into chest, middle, and head registers. Through this investigation, Nur Fardilla Nadia concluded that Saloma was subconsciously using the Western classical singing technique during her career as a singer and recording artist hence claiming that Saloma possesses a mezzo-soprano vocal range. She also conducted interviews with local prominent vocal pedagogues and singers such as Datuk Syafinaz Selamat, Liza Hanim, Misha Omar, and Asmidar Ahmad to get their professional opinions on Saloma's singing.

Ahmad Kamal Basyah, Abdul Walid, and Muhammad Qawiem (2021) mention that Saloma's niece, Melissa Saila, produced a two-part biopic called *Saloma: Mencari Guruh* and *Saloma: Pandang Kaseh*, which was aired exclusively on Astro television channels. Another project was completed by retro singer Ahmad Fauzee with his book entitled *Saloma* which covered Saloma's career from the beginning until 1959. Ahmad Kamal Basyah, Abdul Walid, and Muhammad Qawiem (2021) also documented briefly on Saloma as a singer during her years as a recording artist under EMI Singapore and Indra Rekod recording label, her singing career under Radio dan Televisyen Malaysia, and how Saloma was also regarded as a fashion icon, mentioning her couture collection.

Malaysian local culture has also shown appreciation towards Saloma's contribution. Among notable mentions is the Pintasan Saloma (Saloma Link). Veritas (2020) mentioned that Pintasan Saloma was inspired by the *sirih junjung* (an offering that consists of betel leaves) that is traditionally served in ceremonies and is a symbol of unity. The pedestrian bridge that is situated at the heart of Kuala Lumpur spans 69-metres across Sungai Klang and Ampang–Kuala Lumpur Elevated Highway. Since this bridge is situated near where Saloma was laid to rest, it felt natural to name the bridge Pintasan Saloma, showing appreciation and commemorating her for her contribution to the music and performing arts industries.

Appreciation towards Saloma was also commemorated in art festivals such as *Pekan Seni Ipoh*. Piyadasa (1996) mentioned that the festival's highlight was *P. Ramlee–Saloma Singing Competition*, commemorating the dynamic duo's partnership during their music career. Over 100 couples participated in the competition, making it the largest event in the festival.

Saloma was also given appreciation for her contribution as a fashion icon. Norhafzan (2017) recorded that The National Museum of Malaysia had taken an initiative to showcase Saloma's fashion collection in an exhibition from 1 August 2017 to 31 October 2017. Her collection is said to represent the unity between two different cultures—the East and the West. Although Saloma was known for her *kebaya* style, she also had a collection of peplum designs, which is not common among the locals during her lifetime, giving her the name "Marilyn Monroe of the East."

A Brief Overview on The Investigation of Vocal Registers among Non-Classical Singers

In general, the investigation of the vocal register is not only limited to Western classical art but also to all genres. Archambeault (2006) stated that there are three important elements in jazz singing, namely, (1) breathing, (2) the use of registers, and (3) vibrato. Archambeault further compares the terminology between classical and jazz singing. He found that different terms are used for similar associations in techniques between classical and jazz singing. The said comparison of similarity is shown in the following Table 2.

Table 2 Different terms with similar associations between classical and jazz singing.

Classical Singing Term	Jazz Singing Term
Rubato	Rhythmic alterations of the beats
Portamento	Slide and fall offs
Colloquial diction	Colloquial diction

Pencak (1999) found that singer Paul Robeson who has a formal education in Western classical singing techniques uses this technique in his folk ballad and spiritual singing genres. He noted that Robeson was more interested in singing songs of these genres than the classical genre because he thought the folk ballad and spiritual genres were closer to society in conveying certain messages. Hence, when Robeson performed classical music, he presented it as folksong. He sang it in the common language of his audience or alternated in the original language with a translation so they would understand. He knows how to use his lyrical tone and used it naturally and effortlessly.

LoVetri through Woodruff (2011) stated that classical singers should identify the use of proper voice quality or timbre. It is also necessary to know the differences in singing styles from each era (e.g., Mozart versus Puccini, or *bel canto* versus *verismo*). Singers must ensure their voices match the character and/or the song with the appropriate voice range as Western classical songs cannot be adjusted and modified to meet the capability of a singer but the singer him/herself must meet the criteria of a song performed, unlike in its counterpart (modern singing) where a singer can change the key, tempo, and even the singing style of a song to accommodate their vocal limitations. This is further supported by Edwin (2003), stating that a singer needs to possess adequate knowledge of singing techniques as it contributes significantly to helping a singer to produce a better voice and singing quality.

There are also non-academic write-ups on non-classical singers, mentioning vocal registers and capability. Pareles and Nagourney (2012) mentioned that Whitney Houston's vocal range "spanned three octaves and her voice was vibrant, plush, and often spectacular." Mariah Carey has a five-octave vocal range, a melismatic style in singing and a whistle register. Mariah Carey, who started her singing career in 1990 through her first album *Vision of Love*, has a voice range from F_2 to G_7 (Pareles 1993). Abad-Santos (2015) and Asprou (2020) stated that Beyoncé has a vocal range of a mezzo-soprano when investigating her vocal register, claiming that her register spans from A_2 to E_6 .

This review has shown that academic studies on Saloma are extremely scarce. Only two studies of this nature exist in the literature (Nur Fardilla Nadia 2018; Ahmad Kamal Basyah, Abdul Walid, and Muhammad Qawiem 2021). Nur Fardilla Nadia (2018) investigates the singing technique used by Saloma during her career and argues that Saloma uses the classical singing technique without realising (possibly oblivious) the application in her singing. Nur Fardilla Nadia further explains this argument by stating the use of three vocal registers that are used in classical singing: chest, middle, and head registers, in Saloma's singing by observing her selected discographies. Ahmad Kamal Basyah, Abdul Walid, and Muhammad Qawiem (2021) focus on Saloma's career as a singer, actress, and fashion icon. Ahmad Kamal Basyah, Abdul Walid, and Muhammad Qawiem argue that Saloma is comparable to her Western contemporaries such as Ella Fitzgerald, Peggy Lee, and Doris Day. However, Ahmad Kamal Basyah, Abdul Walid, and Muhammad Qawiem also lament that Saloma's contribution towards the music and performing arts industry has been nothing but properly documented and appreciated. Summarising the overview on the investigation of vocal registers among non-classical singers, it is a common practice to investigate one's singing and vocal registers regardless of the genre using the Western classical approach, as done by Archambeault (2006), Pencak (1999), LoVetri through Woodruff (2011), and Edwin (2003), as "technique is technique, no matter what the styles" (Archambeault 2006, 71). Hence, upon concluding the summaries of the discussed categories, this paper intends to investigate Saloma's vocal register using the said Western classical singing technique, identifying the use of the three vocal registers in her singing through observation of selected discographies. As the selected subject matter has yet to be investigated systematically, this article fits into academia by contributing towards understanding and systematising the singing of Saloma and enriching the field of academia, specifically on vocal investigations.

METHODOLOGY

This study uses the qualitative method as its research methodology and chooses case study as its research design—a research methodology that helps in the exploration of a phenomenon within some context through various data sources, and it undertakes the exploration through a variety of lenses to reveal multiple facets of the phenomenon (Baxter and Jack 2008)—focusing on analysing the vocal range of selected songs sung by the late Saloma. Adapting the case study to this research, the researchers investigate the vocal capability of Saloma inductively through a selection of songs she had sung throughout her singing career and deductively theorise her vocal range through the analysis of the vocal register in each song.

Patton (1990) states that all types of sampling in qualitative research may be encompassed under the broad term of purposeful sampling, claiming that "qualitative inquiry typically focuses in depth on relatively small samples, even single cases, selected purposefully" (169). Hence, with the case study as the research

design, it only makes sense to use purposeful sampling as its sampling method, where the researchers look at certain subjects that can give more precise data. The sampling (selection of songs) for this study is extracted from the vast collection of songs that Saloma had recorded during her lifetime. The actual number of songs recorded is undetermined (Ahmad Kamal Basyah, Abdul Walid, and Muhammad Qawiem 2021, 96). However, according to *New Straits Times*, it is estimated that she had recorded over 500 songs during her entire singing career. This was stated during Google's commemoration day on 26 November 2020 celebrating her legacy as one of (if not, the most) the prominent Malaysian songstress(es) in history (Google 2020). Out of over 500 songs, the researchers selected five songs for purposeful sampling. Two criteria were set in selecting the sample: (1) the song must have used all three vocal registers and been clearly heard; and (2) the songs must have been popular during her lifetime. The songs are (in alphabetical order): (1) *Bila Larut Malam*, (2) *Bossanova*, (3) *Istana Cinta*, (4) *Perwira*, and (5) *Tunggu Sekejap*. Although there were other songs that fulfil these criteria, the researchers concluded from our observations on the vastness of songs Saloma had recorded that the selected songs would give enough representation of the vocal prowess of Saloma and adequate for deciphering her vocal register, without compromising and jeopardising the research outcome.

The selected songs were obtained from the filmography collection, as these songs were part of the original soundtrack (OST) of films such as *Do Re Mi*, *Anak-ku Sazali*, and *Sarjan Hassan* (details on this would be explained further in this writing). The researchers chose to observe the recordings of the selected songs from their respective films as the song albums of Saloma are difficult to obtain as they are no longer in production. Though a few recent singers sang these songs in their song albums, the researchers reckon that this would not be a satisfactory representation, as these singers may sing them in different keys, styles, and vocal approaches.

Melodic transcriptions of the selected songs in their respective keys would then be made by the researchers, transcribing them using the standard musical notation in music software (*Sibelius*). Vocal analysis using aural mean is then performed, where the researchers would point out the exact spot in the score where each register is being used. To obtain the optimal result of the analysis, each song would be transcribed into its original key as sung by Saloma. This is to rationalise the fact that the use of vocal register could be different in different keys and ranges.

Performing vocal analysis using aural mean is chosen as it is practical and applied by most vocal instructors in real-life situations when determining the vocal type of a singer. However, this method could be seen as arbitrary as it relies on one's experience, factoring in the singing school one subscribes to, which may differ from others. Hence, the researchers applied Randel (2003), Matthew (2018), and Mann (2022) as the main references in our methodology as the researchers believe these references give a good and adequate representation of the existing singing schools in general.

The researchers chose not to analyse using scientific vocal analysis like Elbarougy (2019) and Wei Shean Ter and Kwan Yie Wong (2022) did. This is because it is not used as widely in vocal pedagogy as the method proposed in this study as a scientific vocal analysis requires various recording devices such as microphones, speakers, and amplifiers, which could only be found in a recording studio. As most vocal instructors do not have access to this facility, it makes this method impractical and hardly available.

ANALYSIS

Before going deeper with the investigation, the researchers need to briefly explain the common structures used in songs. It is important for the readers to have adequate comprehension of the basic music forms in songs to ensure common understanding when reading this article further.

A typical song structure includes a verse, chorus, and bridge (MasterClass 2021). The arrangement of these structures may vary from song to song. According to Bell (2019), there are three most common song forms: (1) verse-chorus form, (2) refrain form, and (3) AABA form. Verse-chorus form refers to the alternation between verse and chorus (e.g., verse-chorus-verse-chorus). This is probably the most common form in popular contemporary music. Refrain form is generally constructed with one melodic material that is used throughout the song in exact repetition or with some degree of variations. This form is also called the strophic form. AABA form is almost self-explanatory; verse 1 (half cadence)-verse 2 (perfect cadence)-chorus-verse 3 (perfect cadence). The schematic of the AABA form could be extended, depending on the lyrics and need of the music.

The five chosen songs obeyed the convention of forms in popular music, with some variations to a certain extent (this would be elaborated further in the songs concerned). Though the focus of the analysis is to point out the use of various vocal registers of Saloma (chest, middle, and head) in each song and to explain the use of the said registers, it is also vital to know the forms as this would assist in directing the readers to the exact spot in question.

Bila Larut Malam

Bila Larut Malam is part of the OST for *Labu dan Labi* directed by P. Ramlee (1962). This song is sung as an intermezzo during a beauty pageant, studio recorded and performed in the movie by Saloma, accompanied by the band Panca Sitara lead by P. Ramlee. The song talks about the joy of the night, where the working class takes a break from their day job and could enjoy little things in life such as watching performances and hanging out in bars that could make them happy and replenish their spirit for the next day. A joyful and upbeat song, this song is written in the key of B \flat minor and in common time (Figure 2). On closer observation, the vocal range for this song is from B \flat ₃—lowest, to C₅—highest (Figure 3).

P. Ramlee

Bila Larut Malam

Verse 1
Verse 2 *head register* *head register*

Bi - la la-rut ma - la - m su - a - sa-na se - pi
nga - pa ha - ti - ku me - ra - sa ter-ha - ru

8 *middle register* *middle register* 1.

ti - a - da pun in - san yang ku li-hat la - gi
di ma - lam i - ni te - ra - sa su -

16 2. *chest register* **Chorus** *head register*

Me nyi I - ngin ku-ka-ta - kan

23 *head register* *head register*

Ta - pi pa-da sia - pa Pur - na - ma mem-bi - su

31 *middle register* **Verse 3** *head register*

em-bun pun mem-be - ku Ji - wa tak ter-ta -

38 *head register*

ha - n Da - lam a - pi cin - ta Bi -

45 *middle register* *middle register* *chest register* 1.

la - kah ge-ra - ngan Pa - dam - nya as-ma - ra.

53 2. **Coda** *middle register*

I - De - ngar - lah i - ra - ma la -

57 *head register*

rut, La - rut ma - lam.

Figure 2 Melodic transcription of and the use of vocal registers in *Bila Larut Malam*.



Figure 3 The vocal range of *Bila Larut Malam*.

The form of this song is AABA form. Throughout verse 1 and verse 2, the researchers found that the use of head and middle registers are prominent. However, there is a passage where it was observed that Saloma used the chest register, which is at the end of verse 2 (Figure 4).



Figure 4 The use of the chest register at the end of verse 2.

As is common for popular music, chorus portrays more intensity and would be the climax of the song. To emulate this, the melodic movement tends to be more focused on the higher range of the song. Hence, Saloma chose to sing this section using only the head and middle registers. Although there is pitch C_3 found (at syllable em- from the word *embun* and syllable -be- from the word *membeku*), it is only for a short value and in ascending form, hence the need to change to chest register is not necessary (Figure 5).

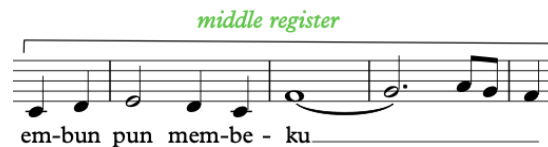


Figure 5 Staying on the middle register on pitch C_3 on syllables em- and -be-.

Verse 3 is melodically identical to verse 2. Hence the use of the vocal register in this section is similar to the said verse. Coda (beginning from bar 54 till the end) is observed to be in an ascending pattern, rising in an almost scale-wise pattern of B_b harmonic minor, finishing on B_b_4 . Though the somewhat-scale-wise pattern begins on a low pitch (B_b_3), it is easier on the voice to sing this passage with the middle and head registers (as illustrated in Figure 6) as it would be impractical and unmusical to begin this passage with the chest register.

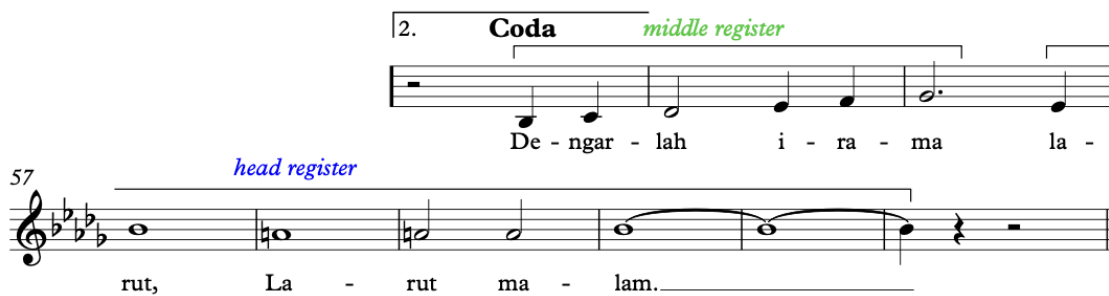


Figure 6 Somewhat-scale-wise pattern at the end of verse 3.

Bossanova

Bossanova is a song written by Ahmad Nawab from OST of *Do Re Mi* directed by P. Ramlee (1966). This song is sung in a nightclub as part of the entertainment programme, encouraging the audience to dance along to the song that was set in bossa nova rhythm. Probably one of the most memorable songs from this film, this song describes the scenery that surrounds a dancefloor of audience dancing to *Bossanova* rhythm. Joyful and danceable, the song is set to the key of $G\sharp$ minor and in common time (Figure 7). On closer inspection, the vocal range for this song is from $G\sharp_3$ —lowest, to B_4 —highest (Figure 8).

Bossanova

Ahmad Nawab

Verse 1
Verse 2 *head register*

Hai cik a-bang me-na-ri bos-sa-no-va a-was leng gang
wa-hai ka-wan de-ngar-lah ren-tak-bong-go lang-kah ka nan

6 *head register* *head register*

ber-be-za da-ri sam-ba wa-hai sa yang ma-ri-lah i-kut
se-per-ti ju-ga mam-bo a-was tu an de-ngar-lah i-ni

11 *chest register* *head register*

ser-ta la-gu ri-ang bos-sa-no-va
tem-po bos-sa-no-va

17 *middle register chest register* **Chorus** *head register*

bu-kan lim-bo Pa-bi la ma-lam men-jel-ma

24 *head register* *head register*

rem-bu lan me-nyi-na-ri cah-ya pe-mu di ser-ta pe-

30 *head register*

mu-da ber-me-na-ri bo-sa-no-va

36 *head register*

bos-sa-no-va i-ra-ma sung-guh mer-du men-de-ngar nya

41 *head register* *head register*

hi-lang-lah ra-sa pi-lu oh ma-ri lah ja-ngan ra-gu dan

46 *chest register* *head register* *middle register chest register*

ma-lu me-na-ri-lah ber-sa-ma-ku

Figure 7 Melodic transcription of and the use of vocal registers in *Bossanova*.

Voice

#G#3 B4

Figure 8 The vocal range of *Bossanova*.

Bossanova is written in AABA form. Verse 1 and verse 2 were sung almost exclusively using the head register. Saloma, however, did sing a short passage using chest register—at pitch G \sharp and A \sharp from syllable –ta to the word *lagu* in verse 1 and from syllable –po from the word *tempo* till the end of verse 2 (with a touch of head and middle registers).



Figure 9 The use of chest register in verses 1 and 2



Figure 10 The use of the head, middle, and chest registers in verse 2

From the melodic transcription (Figure 7), it could be observed that Saloma had used head and middle registers between the syllable –po until the end of verse 2. The researchers believe that she executed this to smoothen the passage, as the pitches used are “friendlier” to the head and middle registers. Should she have chosen to sing the said passage using only the chest register, it would have sounded fraught and undesirable.

The chorus was sung exclusively with the head register, though pitch D \sharp_3 could be sung using the middle register. It is due to the nature of the melody (melodic movement and note value) that does not require the said pitch to be sung using the middle register. Plus, the tessitura of the entire section revolves around the head register.

Verse 3 is melodically identical to verse 2. Hence the use of the vocal register in this section is similar to the said verse. The “touch of head and middle registers” happened at syllables ri–lah from the word *menarilah* (head register) and at ber–sa–ma from the word *bersamaku* (middle register).

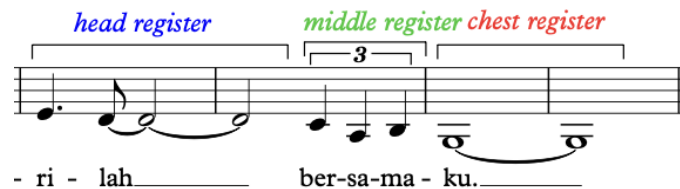


Figure 11 The “touch of head and middle registers” at the end of *Bossanova*.

Istana Cinta

Istana Cinta is a song composed by P. Ramlee and lyrics written by S. Sudarmaji from OST of *Anak-ku Sazali*, directed by Phani Majumdar (1956). This song is sung in a scene where the character Hassan (adult self) requested the character Rokiah to sing for him during a music lesson, as Rokiah was a student of the adult Hassan. Saloma contributed her voice in all singing parts for females in this film. The song talks about the sadness of a woman who had given her all to build a relationship with her man (a figurative “palace”), only to be destroyed by the man by taking her for granted. Set to a moderate pace, the song (Figure 12) begins in C \sharp minor and modulates to parallel major (D \flat major enharmonic). It could be observed that the vocal range for this song is from G \flat_3 —lowest, to E \flat_5 —highest; arguably the widest vocal range Saloma had recorded for a song (Figure 13).

Istana Cinta

P. Ramlee

Verse 1

head register middle register head register

De - ngan cin - ta ku bi - na is - ta - na kau sen - tuh run - tuk ja - di pu - sa -

8 head register

ra - cah - ya hi - dup - ku ja - di ger - ha - na bi - sa ji - wa me - nang

15 Verse 2 head register middle register head register middle register

gung de - ri - ta. Ku se - mai be - nih ka - sih se - ja - ti Ku pu - puk

22 head register middle register head register middle register chest register chest register

de - ngan ba - ja nan as - li nga - pa kau si - ram ra - cun yang pe - dih ku ta -

29 head register Verse 3 head register

hu ki - ni ha - nya ra - sa nan se - dih. Ku im - pi - kan is - ta - na jan - ji -

36 middle register head register middle register head register middle register head register middle register chest register chest register

mu Ku hi - as can - tik da - lam a - ngan a - ngan se - bab ben

42 chest register head register

ca - na da - tang men - gang - gu ki - ni han - cur mus - nah is - ta - na im - pi -

48 1. 2.

an an ki - ni han - cur mus - nah is - ta - na im - pi - an.

Figure 12 Melodic transcription of and the use of vocal registers in *Istana Cinta*.

Voice

Gb3 Eb5

Figure 13 The vocal range of *Istana Cinta*.

Istana Cinta is written in strophic form with three verses. Verse 1 is in the key of C# minor and generally sung using the head register. There is one exception; the use of the middle register at the third note of the melismatic syllable –na from the word *istana*. This exception was executed as the said note is required to be sung with long note value, hence sustaining it with the middle register would give depth to the voice (Figure 14). Verses 2 and 3 are in the key of D major, with Verse 3 having an extension at the repetition. Due to the melodic movements of these verses, Saloma had to change her vocal register between the head and middle

registers successively (Figure 15). There is also a noticeable intervallic leap that requires an instant change of register, from the chest to head register, without passing through the middle register (Figure 16). The last occurrence of the verse has an extension. It is in this extension that Saloma probably had sung the highest pitch in her singing career; E_b_5 . Naturally, she used the head register to sing this pitch, using the vowel /i/ to keep the vocal placement and executing it without vocal abuse (Figure 17).



Figure 14 The use of the middle register in verse 1.



Figure 15 The successive change between the head, middle, and chest registers.



Figure 16 The transition between the chest and head register.



Figure 17 The extended bars of the final verse.

Perwira

Perwira is a song composed by Ainul Jamal from OST *Masam Masam Manis* (P. Ramlee 1965). This song was also originally intended for the visit of the Royal Malay Regiment to the production studio in Hulu Klang during the film shooting and song recording processes (Siti Fatimah 2015). Just like in *Anak-ku Sazali*, Saloma contributed her voice by singing all the female songs in the film. This song took place in a nightclub, where the character Norkiah was entertaining the crowd with her performance of this song. Although, in the film, the song was performed in a casual setting, *Perwira* (literal meaning: warrior) has become a national staple as it has been deemed as a patriotic song that is regularly performed, especially during August every year, when Malays National Day is being celebrated. Set in a moderate cha-cha beat, the song is in the key of $G\#$ minor (Figure 18). It could be observed that the vocal range for this song is from $G\#_3$ —lowest, to $C\#_5$ —highest (Figure 19).

Perwira

P. Ramlee
middle register

Verse 1
Verse 2 *head register*

Per - wi - ra di - kau - lah ha - ra - pan ha - ti peng - hi - bur ka - la su - nyi
wi - ra ja - ngan - lah ke - kan - da bim - bang un - tuk per - gi ber - jua - ang

5 *head register* 1. *middle register* *head register*

per - gi lah ber - bak - ti mem - be - la per - ti - wi. Per
an - dai - nya kau - gu - gur

10 2. *middle register* *chest register* **Pre-Chorus 1** *head register*
Pre-Chorus 2

ja - sa - mu di - ke nang. De - ngar - lah la - gu - ku cip - ta gu - ba - han mes - ra nan
ke - kan - da di - me - dan pe - rang a - din - da di - me - dan

15 *middle register*

man - ja se - ba - gai gan - ti di - ri ber - sa - ma kau ber - bak - ti un - tuk i - bu per - ti -
se - ni sa - ma - sa - ma ber - ju - ang sa - ma - sa - ma ber - bak - ti se - mo - ga ta - bah ha

Chorus

19 *head register* *head register* *middle register* *head register* *middle register*

wi ma - ju - lah ke - kan - da ma - ju ja - ngan un - dur din - da mo - hon do - a res - tu
ti

24 *middle register* *head register* *middle register* *chest register* 1. *rit.* 2. *head register*

re - la se - hi - dup se - ma - ti ber - sa - ma mu per - wi - ra - ku. per - wi - ra ku.

Figure 18 Melodic transcription of and the use of vocal registers in *Perwira*.

Voice

G#3 C#5

Figure 19 The vocal range of *Perwira*.

Perwira is written using a variation of the verse–chorus form. The exact schematic of this song is verse 1–verse 2–pre-chorus 1–pre-chorus 2–chorus–music bridge–pre-chorus 1–pre-chorus 2–chorus. Verse 1 is sung using only the head and middle registers as the tessitura of this verse revolves around the said registers. However, in verse 2, Saloma used all three vocal registers (head, middle, and chest). The usage of the chest register happened at the end of this verse when the melody descends to $G\sharp_3$ (Figure 20).

Melodies in pre-chorus 1 and 2 are exact repetitions (although the latter ended in perfect cadence). As these passages were mostly within the head and middle registers, Saloma did not have to use the chest register to execute them, even though there was a pitch that could have been sung using the chest register, B_3 . The researchers believe that Saloma chose not to sing this note using the chest register as it was more practical for her to sing the group of notes in such contour using the prominent register of the said group—the middle register (Figure 21). The chorus section was sung using all three vocal registers. As the range of this section is almost similar to verse 2, Saloma’s vocal approach was practically similar to the said verse (Figure 22 and 23).



Figure 20 The use of all three vocal registers in verse 2.

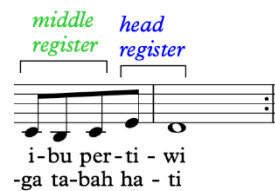


Figure 21 The use of the middle register instead of the chest register.



Figure 22 The vocal range of verse 2.



Figure 23 The vocal range of chorus.

Tunggu Sekejap

Tunggu Sekejap is a song composed by P. Ramlee from OST *Sarjan Hassan* (Avellana and P. Ramlee 1958). Just like in *Anak-ku Sazali* and *Masam Masam Manis*, Saloma contributed her voice by singing all the adult female songs in the film. This song took place at night when the character Salmah as a child (singing verse 1) was doing the laundry and instantly transported to her adult self doing similar activity. This song was sung again later in the film by the character Hassan at the military camp. For this study, the researchers are only interested in the part sung by Saloma (sung for the character adult Salmah). The said part is a ballad set in the key of B major (Figure 24). On closer inspection, the vocal range for this song is from $F\sharp_3$ —lowest, to B_4 —highest (Figure 25). The form used in this song is verse–chorus form (verse 1–pre-chorus–verse 2–chorus–post-verse [coda]). As the researchers are only interested in Saloma’s singing, verse 1 would not be a part of this discussion as was sung by a different person.

Tunggu Sekejap

P. Ramlee

Pre-Chorus

head register middle register head register middle register head register

La la la la la la la la la la Ma-lam i - ni be-lum pu

Verse 2

chest register head register middle register

7 as ku ber-cum-bu de-ngan kan - da sa - yang Tung-gu se-ke - jap wa-hai ka-

11 head register chest register head register middle register head register chest register head register

sih tung-gu lah sam-pai hu-jan te - duh. Ma - ri ku den dang ja-ngan me

Chorus

head register

15 nge-nang o-rang ja - uh. Ja-ngan bim lang ja - ngan ting-gal-kan a -

Post-verse

chest register head register middle register chest register middle register

20 ku so-rang Tung-gu se-ke-jap ka-sih Tung - gu

Figure 24 Melodic transcription of and the use of vocal registers in *Tunggu Sekejap*.

Voice

F#3 C#5

Figure 25 The vocal range of *Tunggu Sekejap*.

Pre-chorus begins with Saloma singing the section as a vocalise on syllable La, before singing with words (Figure 26). This section was sung using the head and middle registers only as the tessitura of the section did not require Saloma to utilise her chest register, though there was a pitch ($B\sharp_3$) that could be sung with the said register. The researchers believed she sang this pitch with the middle register for practicality, as it is easier for the vocal *passaggio*—switching from middle register to head register than switching from chest register to head register (O'Connor 2020). Verse 2 begins with pitch $F\sharp_3$. This is possibly the lowest pitch ever recorded by Saloma during her singing career (similar to the lowest pitch in *Istana Cinta*). Naturally, she had to sing this with the chest register. However, the immediate octave leap made her switch instantly to the head register. This was no easy task, as a certain degree of voice control was needed to execute this smoothly without resulting in an undesirable break in the voice and singing (O'Connor 2020). The range and melodic contour of this section resulted in Saloma executing the passage in all three vocal registers, alternately (Figure 27).

The chorus used in this song is relatively short (around four bars in total). Saloma sang this section using only head voice, as it was impractical to switch between registers in executing the brief section that has the lower range of the melody overlapping between the high middle register and low head register. Post-verse is the shortened version of the verses. Similar to the verses, it begins with pitch $F\sharp_3$ (lowest) and does not go beyond an octave in range. Despite the relatively narrow compass, Saloma executed this with an alternation of the three vocal registers as the melodic contour required her to do so (Figure 28).



Figure 26 Vocalising on syllable La.

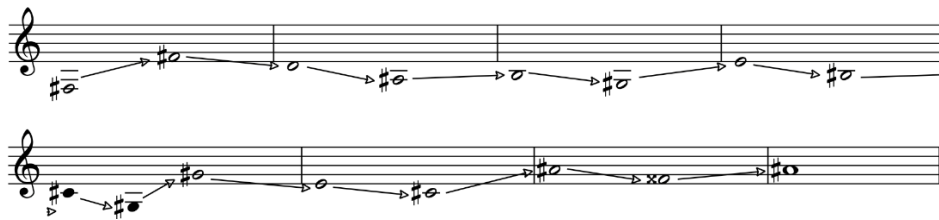


Figure 27 Melodic contour of verse 2.

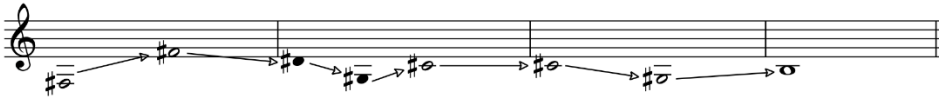


Figure 28 Melodic contour of post-verse.

RESULT

After thorough observation and vocal analysis of the selected songs, these are the findings on Saloma’s vocal approach and register in each song (see Figure 29–33). Deducing on the findings, Figure 34 shows the result for Saloma’s vocal registers.

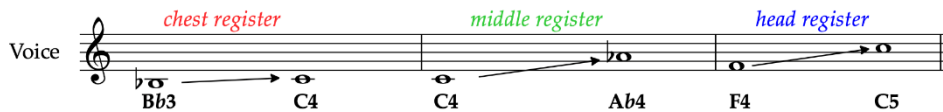


Figure 29 Saloma’s vocal approach in *Bila Larut Malam*.

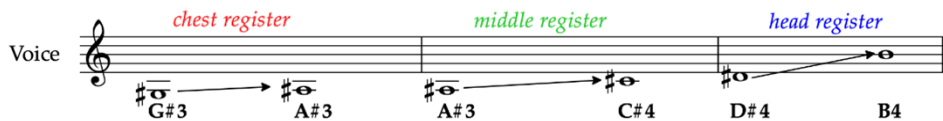


Figure 30 Saloma’s vocal approach in *Bossanova*.

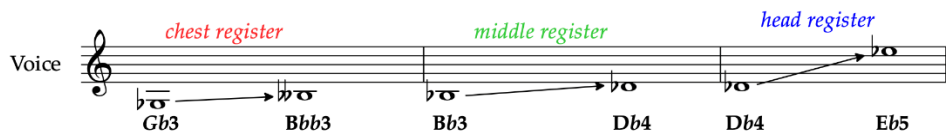


Figure 31 Saloma's vocal approach in *Istana Cinta*.

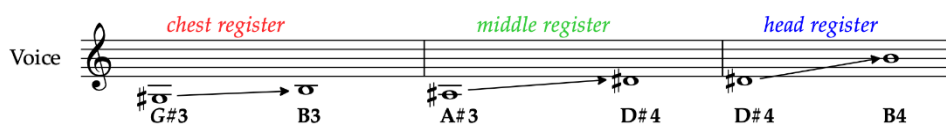


Figure 32 Saloma's vocal approach in *Perwira*.



Figure 33 Saloma's vocal approach in *Tunggu Sekejap*.



Figure 34 Saloma's chest, middle, and head registers,

Figure 34 shows Saloma's chest, middle, and head registers. These registers were determined by observing and combining the lowest and highest pitches of the five songs. For example, the lowest pitch for the chest register—F[♯]₃/G[♭]₃, could be found in *Istana Cinta* and *Tunggu Sekejap*, while the highest pitch for the same register—C₄, is found in *Bila Larut Malam*. Similar methods are used to determine the middle and head registers.

Hence, the result for Saloma's vocal range is as Figure 35. From the results, the researchers deduced that Saloma was an alto as her vocal range is consistent with the lower limit of the said voice type as proposed by Randel (2003), Matthew (2018), and Mann (2022). Though these experts are not in agreement with the upper limit of the alto voice, Saloma's vocal range (a major 13th) still falls within the range proposed by them.



Figure 35 Saloma's vocal range.

CONCLUSION

Existing studies on Saloma are extremely scarce in academia, as many scholars (Adil 2014, 2019; Clare 2012; Nurul Ezzati Aisyah and Wan Hartini 2020; Driskell 2019) were more interested in investigating matters relating to her spouse, P. Ramlee. The researchers could only find two scholarly studies relating to Saloma—one by Nur Fardilla Nadia (2018) and another by Ahmad Kamal Basyah, Abdul Walid, and Muhammad Qawiem (2021). Nur Fardilla Nadia (2018) argues that Saloma (unknowingly) used Western vocal techniques and approaches in her singing, having her argument supported by various prominent vocal instructors in Malaysia. Ahmad Kamal Basyah, Abdul Walid, and Muhammad Qawiem (2021) recorded Saloma's brief biography and career, categorising her as a recording artist, an actress, and a fashion icon. The finding in this study could contribute to the lack of academic investigation on the prima donna, as she has been recognised internationally as a songstress (Google 2020).

Categorising Saloma's voice type through academic investigation is indeed new in the field of music academia. Though the result of this research disagrees with Nur Fardilla Nadia (2018) that claimed Saloma had a vocal range of a mezzo-soprano, this demonstrates that healthy discussions can be made to achieve other avenues of the outcome, hence contributing to enhancing the number of studies on Saloma in academia. This could be controversial as some scholars and vocal pedagogues would have varying opinions towards the outcome of this study, possibly arguing that this study alleges limiting Saloma's vocal capability. Nevertheless, this vocal categorisation does not intend to set a boundary to Saloma's vocal ability, rather it explores the possibilities of future research on other songs recorded by the great songstress, enriching the data to further investigate her vocal register, which could either support or contradict the finding of this study.

The researchers intend to expand investigations such as this, either on Saloma or other national icons such as Orked Abdullah, Kamariah Noor, and Ahmad Jais (just to name a few) and beseech other researchers to join the effort. It is up to us to appreciate and exalt the national icons to the level they deserve, contributing to enriching the literature on local content and making this content visible on the international platform of academia.

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