Arabic and Carnatic Violin Styles – A Comparison

Ambi Subramaniam

PhD Researcher, Jain University, India (Under the guidance of DrMeeraRajaramPranesh)

Abstract: India had one style of classical music up and till the 12th century. During the 12th century, the Persians invaded the Northern part of India, leading to the Mughal rule. As a result, music, amongst other things, also took influences. The music in the North of India took Persian influences, and presumably the reverse happened as well. As a result, there are a few similarities with the Arabic style of music and the Indian styles of music, especially the Hindustani style, which reflect in the playing style as well - especially the long, unaccompanied violin solos, which are quite similar to aalaps. This comparitive study specifically focuses on violin styles in Arabic and Carnatic music.

Date of Submission: 08-06-2019

Date of acceptance: 25-06-2019

I. Introduction

Indian classical music is one of the most complex systems of music in the world, with a very highly developed melodic and rhythmic structure. It does not owe its origins to folk music, although it may have some point been influenced by it. Indian music has Vedic origins. The four vedas are also known as sruti or revealed divine truth, and contain thousands of Sanskrit hymns. (Brown, 2013) They were passed down through the oral tradition, and committed to writing much later. Vedic texts and traditions remain unchanged to this day. (Vijaykrishnan, 2008) Carnatic music is a living style of music and continues to develop, adapt and evolve. In addition to examining the development and history of Carnatic music, it is useful to understand its current structure.

The Arabic style of violin playing is perhaps one of the most distinguishable styles of violin playing. The Arabic style of violin spans a number of countries - from several countries in North Africa to several countries in the Middle East. Very different from the other styles of violin playing, the style is generally somber and morose, especially when compared to some of the more upbeat and virtuosic styles of violin playing - such as the Gypsy or Irish style of violin playing. During the 12th century, the Persians invaded the Northern part of India, leading to the Mughal rule. (Halim, 1956) As a result, music, amongst other things, also took influences. The music in the North of India took Persian influences, and presumably the reverse happened as well. (Hutchinson, 2014)

II. Methodology

This study was conducted through qualitative research, interviews with musicians, and analysing available reports on the evolution of both styles of music. In addition, comparisons were made between Carnatic and Arabic violin playing styles via analysis of postures as well as by reviewing musicians from both styles.

III. Findings

Comparisons can be made on the basis of scale (raga), characteristics of style, technique, microtones, playing posture, as well as adaptability.

Scales used

In the Arabic tradition, they have a different way of conceptualizing scales and scale patterns. Like the raga system in India, in the Arabic system, they have a corresponding system of maqams. (Yöre, 2012) Within the system of maqam, there is another system, which classifies notes into tetrachords or four note groups. One of the most popular and distinguishable tetrachords is called hijaz. (Rasmussen & Touma, 2003)

The Hijaz tetrachord comprises of four notes – tonic, minor second, major third and perfect fourth (S $R_1 G_3 M_1$ – which corresponds to the third chakra in the system of 72 melakarta ragas in Carnatic music) Some commonly used scales are

- 1. Tonic, minor second, major third, perfect fourth, perfect fifth, minor sixth and major seventh (corresponding to Raga Mayamalava Gowla in the Carnatic tradition),
- 2. Tonic, minor second, major third, perfect fourth, perfect fifth, minor sixth and minor seventh (corresponding to Raga Vakulabharanam in the Carnatic tradition), (Sriram, 2004)

3. Tonic, minor second, minor third, perfect fourth, perfect fifth, minor sixth and major seventh (corresponding to Raga Dhenuka in the Carnatic tradition). (Bhat, 2007)

There is no definitive list of Magams, but about forty magams are commonly used. (Muallem, 2010)

Characteristics of the style

The Arabic style uses a number of slides that are similar to the Indian gamakas. However, like the slides used in Flamenco music, they are often not as refined as the Indian gamakas. Often the intonation of the slides are not as accurate as the Indian system - possibly because the slides itself are the main focus in these styles of music - unlike the Indian styles of music, where the slides are lesser important than the notes itself and are mainly used to ornament the note. (Darling, 2004)

- One typical phrase used is one where an artist slides down a scale like S, NSN, DND, PDP, MPM, and so
 on
- Use a lot of sequential pattern of notes while improvising. This is quite similar to the Indian classical systems
- Violin imitates the voice, so there are lots of spaces while playing, possibly to mimic breathing. The spaces are more visible and accented than in Indian classical music due to the absence of the tambura
- Like in Indian music, in Arabic music, a song is normally in a particular scale (maqam). Majority of improvisation is based on a particular scale (modal improvisation)
- There are passage which include plenty of trills (Juma, 2002)
- There is plenty of slides and ornamentation, and the heaviest ornamentation is usually at the ends of the phrase
- Phrases (especially in the free improvisation) generally fade out towards the end of the phrase. The ending note is not heard on many occasions. (Zable, 2011)
- Like Indian music, the concept of harmony is not as developed as in western style of music, so even when there are several melodic instruments playing together, they typically play in unison (or octaves apart).
- Long initial stretches of the composition with free-rhythm improvisation similar to raga alaap
- Although they play their improvisations with a tonic in mind, they might suddenly play a few phrases shifting the tonic (normally to the fourth or Ma in Indian music) to give a different color and come back to the tonic. While the concept is similar to shruthi bedam in Carnatic music, what makes this slightly different is the fact that when they change the scale, it is not necessary to play the same notes of the original scale. For e.g., when a Carnatic musician improvises in Shankarabharanam, and suddenly shifts the Sa, he still has to use the notes of the Shankarabharanam. It is not necessary to do that in the Arabic system.
- Dynamics and style of improvisation are sometimes used to make the musician deliberately sound a bit out of control, (even when they aren't) possibly to give an extra sense of emotion.

Technique

- Hand position due to the way they hold the instrument makes it difficult to use the fourth finger on the left hand (the little finger)
- The left hand position also makes it a challenge to comfortably slide accurately. Violinists are forced to kind of throw their hand up the fingerboard, without much of a reference point.
- Plenty of vibrato used
- Arabic violinists with the traditional Arabic violin hold don't use the full bow normally, because the bow hold and hand position makes it difficult to do so. Almost use only two-thirds of the bow is used as a result.
- There are two main types of bowing sounds one clear sound, where the bow is firmly on the string and one wispy bow sound, where the bow floats on the string, without a firm grip.

Microtones

Similar to Indian music, Arabic music also uses microtones, although there is a key difference. In Carnatic music, the frequencies of the microtones are specified for each raga.

For example, if Sa or the tonic is D, according to the twenty-two sruti concept, the octave can be divided into twenty-two microtones.

DOI: 10.9790/1959-0903030813 www.iosrjournals.org 9 | Page

The corresponding frequencies are

Sruti Number	D as tonic (Sa)
1	293.66
2	309.37
3	313.24
4	326.29
5	330.37
6	348.08
7	352.4
8	367.08
9	371.67
10	391.55
11	396.45
12	412.97
13	418.13
14	440.5
15	464.06
16	469.86
17	489.44
18	495.56
19	522.07
20	528.6
21	550.62
22	557.5

Thus, all musicians playing a raga with the ekasruti rishabha (the minor second closer to the tonic) have to play that minor second with the same exact frequency because it is specified as such.

However, in the Arabic tradition, the microtones are not exactly specified. In different regions, they play the microtones with slightly different intonations, which is similar to the Norwegian folk styles. For example, the Arabic maqam has regional variations that make up a lot of its color. For example, the E microtone in maqam Rast has a higher tuning in Aleppo than in Cairo.

In the hijaz maqams, the minor second is slightly higher than in the tempered scale and the major third is slightly lower than in the tempered scale. While these scales are common, there are a number of other scales as well. Higher notes are usually lower than the tempered scale

In addition, the use of quartertones is extremely distinctive to the Arabic tradition. There are plenty of quartertones used. One of the most common quartertones used in the Arabic style is the quartertone between the minor and major seventh.

However, over the last half of the twentieth century, many even-tempered western instruments have been incorporated into Arabic music, such as the guitar, piano, and bass. While this has resulted in expansion of the harmonic concept in Arabic music, this has also resulted in led to a loss (to a large extent) of the traditional intonation of microtones in this tradition, and has led to more tempered intonation.

Playing Posture - Arabic Violin

In the traditional Arabic violin posture, the violin is played sitting on a chair, with the scroll of the violin facing up, and the violin resting on the left thigh. This creates a few important differences. (Nelson, 2003: 45)

- a) In order to shift between strings, one has to turn the violin not the bow.
- b) While playing in this position, you need grip the violin with your left hand in order to keep it steady while playing. This constricts your hand movement, as your hand is not as free to move freely as it is while playing in the western classical position. (Atlas &Erzincan, 2005)
- c) Due to the left-hand position, it is much harder to do shifts. It is comparatively harder to move up and down. Compared to standing up, this position is harder when it comes to playing in higher positions, as the hand position is not comfortable. It causes strain to the hand.

The position that they use to play is very similar to the way the Viola da Gamba is played. The bow hold is quite similar also to the cello, with the middle and ring finger on the hair. The more you pull the hair towards you, the more the volume/power. This is unlike the regular violin bow hold, where you do not touch the bow hair.

The tuning used is the standard western violin tuning – GDAE.

However, this traditional violin hold is fast disappearing. (Keogh, 2014) This way of holding the violin is now mainly used in only Algeria and Morocco. Majority of the other regions now play the traditional style of Arabic violin standing up, with the standard left hand and right position used in western styles of violin playing.

Playing posture - Carnatic Violin

The playing posture of the violin is different from the playing posture of the other styles of violin – particularly the western styles of playing the violin, as well as the traditional Arabic posture.

In the Carnatic style, the violinist sits cross-legged with the right leg extended, in line with the left knee.

When playing in the Carnatic violin, often it is harder to project with the same volume as when playing standing up.

This is because of the following reasons:

- The bow is a little more side on when it meets the violin compared to the western classical approach, where the bow is more or less parallel to the ground. Due to this, the amount of power generated is lesser.
- Typically Carnatic violinists between D and F (although they do sometimes play higher or lower if they are accompanying different artists). As a result, the string tension is much lower compared to the western violin, where they tune the violin to a standard G-D-A-E, regardless of what tonic the piece is in. Lower tension on the string leads to lesser projection
- The scroll of the violin rest on the right foot. Due to this, a portion of the vibrations from the violin get absorbed by the foot before it travels out. As a result, the projection reduces.

While this is a potential issue for projection, there are several advantages of playing in this posture. In many ways, this is a more comfortable posture of playing the violin for long hours, as the violinist does not need to hold the violin – either with the shoulder or neck. In fact, one of the greatest western classical violinists of the late twentieth century Ruggiero Ricci often advocated the benefits of the Carnatic posture, stating that many western classical violinists were susceptible to neck problem and spondylitis, due to incorrect holding of the violin. In addition to this, it can be argued that many violinists find it easier to slide in the Carnatic posture.

Carnatic Violin - Adaptability

Over the last few hundred years, the violin and violin techniques have developed tremendously in South India, partly due to the fact that like most things in India, knowledge was passed on by oral tradition. (Swift, 1990) As a result, each school of violin playing developed almost independently of one another. While this has its limitations, it also resulted in the development of many different ways of playing and thus many new techniques, as there was no established 'right' or 'wrong' technique of playing the violin. These techniques developed over the years can be adapted to different styles of violin as well.

Some of them are given below:

- Left hand plucking techniques using the little finger and the ring finger can be used in other styles of music. This can help violinists play polyrhythms and play syncopated patterns, by which they sound much richer than before. (Jansson, 1990)
- Right hand plucking techniques can be incorporated into different styles, where the right index finger can pluck strings while playing with the bow. The combination of the two techniques makes the solo violin almost sound like a string quartet.
- The unique method of sliding between two to four fingers help enormously with clarity and speed. This can help any violinist with a system of music that uses slides as a part of ornamentation, whether it be Jazz, Country or Algerian music.
- Some of the right hand techniques, such as the tanam bowing, can be adapted to other styles of music.
- Some of the left hand techniques, such as repeating a note once or several times, by pressing and releasing a finger on the left hand, without any accent on the right, bowing hand. This technique is called janti.

Arabic Violin – Adaptability

The adaptability of the Arabic violin is discussed in this interview with KhereddineM'Kachiche. Born in Algiers, KhereddineM'Kachiche is a very well-known violinist, playing different styles of the violin from traditional music from Algiers to classical music and jazz music. He is known for his fusion of elements of traditional music into jazz ensembles.

1. You hold the violin in the traditional Arabic way. What are the technical differences and/or challenges when compared to playing it standing up?

I have been playing the violin in this traditional, vertical position for the past thirty-three years. There are a few key differences, which make this style of holding the violin harder to play:

- You need to turn the violin, not the bow to change the string. This makes it harder to play quickly between strings, as your entire left hand and elbow has to keep moving in order to play between strings.
- While playing in this position, you need grip the violin with your left hand in order to keep it steady while playing. This constricts your hand movement, as your hand is not as free to move freely as it is while playing in the western classical position.
- Due to the left-hand position, it is much harder to do shifts. It is comparatively harder to move up and down. Compared to standing up, this position is harder when it comes to playing in higher positions, as the hand position is not comfortable. It causes strain to the hand.

This way of holding the violin is still used only in Algeria and Morocco. In other places, traditional violinists play the violin standing up, with the western classical style of holding the violin.

2. Please talk a little bit about the modes and the use of microtones in Arabic music

There are a number of modes that we use in Arabic music. We have the major and minor scales, as well as a few other modes. The use of Hijaz is very common in my music. (Hijaz is a tetrachord consisting of tonic, minor second, major third and perfect fourth – which correspond to $SR_1G_3M_1$.).

The music that I play typically doesn't use microtones, although microtones are used in music from Turkey, Iraq and Syria.

3. Is technique more or less standardized? Or is it individualistic?

In the past, technique was standardized, with different violinists playing the same notes. The last few decades has seen a big change in playing thanks to the great violinist Abd el Ghani Belkayed. His knowledge of both Arabic and western classical violin helped him makes many innovations. He started playing in higher positions. His student, Kamelbelkhoudja (and my teacher) continued the wonderful innovations that he did.

4. Can any techniques or have any been adapted from cello playing, as both are played with the scroll pointing upwards?

The technique that we use to play is very similar to the way the Viola da Gamba is played. The bow hold is quite similar also to the cello, with the middle and ring finger on the hair. The more you pull the hair towards you, the more the volume/power. This is unlike the regular violin bow hold, where you do not touch the bow hair.

The tuning that we use is the standard violin tuning used in western classical music – the lowest string is tuned to G, followed by the D string, A string and E string at the top.

5. Traditionally, was the violin used primarily as an accompanying instrument or a solo instrument? Is the playing of the violin influenced by the voice or any other instrument?

In earlier times, the Rebec was used to accompany the voice. (Algerian rebec was different – it had two strings) That was the principal accompanying instrument. Over time, the violin was introduced. It started off as an accompanying instrument. Although it is still sometimes used as an accompanying instrument, there are a number of solo violinists today.

6. Where do you see Middle Eastern violin headed?

I have always tried to marry the old with the new. It's important to add without losing the old, and I think that's very important when we talk about the future. The Algerian government has recently allocated a sizeable budget to conserve old music, and I think that is a great step. Middle Eastern music is quite popular in Europe and the US, and in a way it is a bit sad that the state of the music is much better in western countries than in its own country of origin, but hopefully this will change.

IV. Conclusion

The violin is undoubtedly one of the most versatile instruments in the world. Every major style of music from around the world uses the violin or a violin-like instrument. In the two centuries since it has been introduced in India, the violin has become an important part of the landscape of Carnatic music, both as an accompanying instrument and a solo instrument. Many great violinists have made definite and specific contributions to both the style and technique, making Carnatic a very important style of violin playing recognized around the world. Carnatic violin playing can be compared to Arabic violin styles in many ways—

ornamentation, style, posture, and technique. It is to be noted, however, that presentation styles can vary to quite a large extent.

References

- [1]. (ATLAS, N., & ERZINCAN, K. K. E. (2005). ARAB ROOTS TO WORLD SOUNDS. Sufi: The Magazine of KhaniqahiNimatullahi, (68-77).
- [2]. Bhat, R. (2007). VikruthaPanchama scales in carnatic music (containing both perfect fourth and diminished fifth).
- [3]. Brown, F. (2013). The Oxford handbook of religion and the arts. New York: Oxford University Press.
- [4]. Darling, L. (2004). From West to East: An Introduction to Arabic String Playing!. American String Teacher, 54(2), 78-83. doi: 10.1177/000313130405400211
- [5]. Halim, A. (1956). History of the growth and development of North Indian music during the Sayyid-Lodi period. Journal of the Asiatic Society of Pakistan, 1, 46.
- [6]. Hutchison, C. (2014). An Introduction to Hindustani Violin Technique.
- [7]. Jansson, E. (1990). Experiments with the violin string and bridge. Applied Acoustics, 30(2-3), 133-146. doi: 10.1016/0003-682x(90)90042-s
- [8]. Juma, Rashed, "A guide to Arabic violin technique for the classical violinist" (2002). Dissertations from ProQuest. 1887.
- [9]. Keogh, B. (2014). Between Theory, Representation and Practice of Maqām: Rethinking the Representation of the Arabic Maqāmāt. Analytic Approaches to World Music, 3(2).
- [10]. Muallem, D. (2010). The maqam book. Kfar Sava, Israel: Or-Tav Music Publications.
- [11]. Nelson, S. (2003). The violin and viola. New York: Dover Publications.
- [12]. Rasmussen, A., &Touma, H. (2003). The Music of the Arabs. Yearbook For Traditional Music, 35, 212. doi: 10.2307/4149342
- [13]. Sriram, V. (2004). Carnatic summer. Chennai: EastWest Books (Madras).
- [14]. Swift, G. N. (1990). South Indian" gamaka" and the violin. Asian music, 21(2), 71-89.
- [15]. Vijayakrishnan, K. G. (2008). The grammar of Carnatic music(Vol. 8). Walter de Gruyter.
- [16]. Yöre, S. (2012). Maqam in music as a concept, scale and phenomenon.
- [17]. Zable, A. (2011). Violin lessons.

Ambi Subramaniam" Arabic and Carnatic Violin Styles – A Comparison" IOSR Journal of Research & Method in Education (IOSR-JRME), vol. 9, no. 3, 2019, pp. 08-13.