Chapter 9 - Conclusions

Conclusions in brief:

1. Understanding Raga and Gamaka analyses, techniques and levels of perfection.
2. Using computer tools to formulate methodology.
3. Creating and understanding samples in the voice, the violin, and the veena.
4. Selecting the musicians and music samples to be analysed.
5. Subjecting the audio samples to the methodology.
6. Drawing inferences and conclusions on individual samples.
7. Comparative analyses.
8. Establishing the contributions of the master performers in terms of the styles and their specialities.

The styles of various artistes have been attempted to be analysed to understand their common points:

The factors that have been closely looked at are:

- Understanding of Raga

This thesis has tried to look at the understanding of Raga with respect to theoretical perspectives of Swarasthana and their graphical representation and identification. It is found that by and large, the master musicians adhere to arohana, avarohana and the prescribed shuddha swarasthanas and the anuswaras as per the commonly accepted raga phrasings.

- Understanding of Gamaka

Gamakas are the main vehicle of expression of the Raga bhava, the emotion of the Raga. The absolute necessity of proper understanding of Gamaka and the various graphical representations are seen to enhance understanding, especially in the context of looking clearly at the phenomena and having the ability to compare and contrast.
• Techniques used and the ease of execution.

It is of importance to note that the abhyasa gana – or the initial exercises are meant to improve the abilities as well as the swara gnana (knowledge – recognition – reproduction of the swaras).

Usually the Arohana and Avarohanas, the Murchanas and Alankaras (ornamentation by patterns) can be used to form and practice raga phrases. Simple Alankara patterns (Chaturasra Eka / Chaturasra Rupaka / Tisra Triputa) can be found in many alapana stages in the analysis of the various recordings.

Some other patterns that can be found to be used in raga alapana (or in other manodharma) are the Janta patterns (different varieties of double / triple or multiple occurrences of the same swara). Dhatu patterns, where there are jumps in the sanchara – one or more notes are skipped in ascent or descent modes – are also found to be used.

Notation is used as means of verifying whether a particular pattern has been employed in a raga.

• Understanding of the requirements for any manodharma aspect by the concerned artiste.

Different ragas show different murchanas and kramas (ascent and descent patterns) and these indicate the use of the above mentioned Alankara / Janta / Dhatu patterns. So proficiency of any musician in any of these patterns will indicate that there will be an ease and a measure of perfection in rendering these ragas. And as many artistes choose to perform according to their strengths, primarily, it can be seen that those matching these requirements by the artiste will result in a better manodharma, thus enhancing the style.

• Levels of perfection.

In general, good artistes focus only on aspects and skills where they are able to achieve very high levels of perfection. This leads to the formation of the style.

This has been the main object of study in this thesis.
**Styles and technique**

Good technique shows the way to perfection. This is equally true in the case of music too.

Good technique has also been shown to reduce the strain on the artiste at the time of performance, thus leaving him or her with the necessary physical and mental energy to concentrate on the other performance parameters for better manodharma. But is technique (Vocal or Instrumental) alone enough to form a style? Common sense and experience (as seen in the various case studies) show that good technique is only a basic requirement, or is just a means towards the end.

Good technique gives mental freedom, and subsequently the artistes get the freedom to explore new areas in manodharma, which otherwise would be just theorized in paper.

**Validation of the hypotheses**

a. Definition of “Established Performing Styles” and their aspects, aesthetics and the “Manodharma” behind them. This is the main theme of this dissertation, and it is looked at closely.

b. Focus on a particular aspect of music leads to the formation of styles.

c. The performing style of an artiste indicates his or her potential.

d. It can be safely concluded that it is a happy blend of the technical knowledge of Raga Lakshana and that of the inner urges (rasikathva) that contributes to the development of a good style.

**Validation of the need for computer analysis and its advantages**

The following reasons have been elucidated:

1. Tonal characteristics can be analysed for both instruments and voice. As good technique and good tone is the vehicle of expression of creativity, the audio characteristics like Formants and spectral nature and the other attributes like sound intensity and sustenance, response between phrases, tempo of the
phrasings and the average general length are thus found to be basic descriptors of a style.

2. Large volume of data. A typical alapana, written down, takes many lines and can be separated into paragraphs, individual sentences and phrases that make up sentences.

3. Computer analysis helps in identifying all of the above phrases and goes further, in the following ways:

   i. Every sentence or phrase can be marked using a marker
   ii. The timings of each sentence or phrase can be easily calculated by looking at the markers.
   iii. Phrases can be easily taken out and compared graphically and easily, even from several alapanas. Swara shuddha or swara purity can be verified.
   iv. Frequency analysis can be done to verify the swara sthanas and compare it against the results obtained by mere audio listening.
   v. Frequency analyses using Praat program show the actual “shapes” of the various gamakas, and can be compared to the shapes inferred from the theoretical understanding of the gamakas.
   vi. This is potentially a very good tool to identify the gamakas and calibrate them across various performers, or compare the performance of a student to the excellence of the master musician.

In conclusion, this study has proved that styles are clearly identifiable and can be approached scientifically.

As seen earlier, in the words of the Nadaswaram maestro, T.N. Rajarathinam Pillai,

- Bani is a creation by the listeners and analysts. According to the circumstances in time and location or the artistes themselves, the styles change.
- Carnatic music is inclusive in that traditions like Harikatha, Dindi, and Abhangs, Javalis (dance music), Hindustani music, even Western music and instruments have been incorporated.
• As long as the methodology and the purity of notes was maintained. The refined sum total of all this has been commonly accepted as Carnatic Bani.

Summing up, the following 5 statements can be validated by this thesis.

1. It can be stated that the **elements of a style can be clearly enunciated** by the computer analyses as well as by applying musical expertise in identifying and studying the results of the computer and notation analysis.

2. A good illustration has been taken up – the production of tone in the violin using different bowing methods. The in-depth analyses (based on various technical aspects such as bowing pressure, volume, sound intensity, sound spectrum and formants) have clearly and graphically shown up the differences, thus highlighting the importance of using proper bowing technique to produce rich and powerful tone.

3. The recordings, when analysed thus and compared with other recordings of the same artiste, **show the salient features of one particular style and can be used to compare and contrast with other styles**, by pointing out the statistical inequalities.

4. **Distinct styles can also be made out.** By similar comparison with other artiste recordings, the **influence of one artiste over the playing of another can also be easily quantified** and thus the contribution of the earlier artistes can be viewed in correct perspective.

5. The individual **development by subsequent artistes either independently or over the previous styles** can also be seen. Music legends are known as legends because of the original, yet rule following changes they effected in the way of looking at the rendition of various Manodharma aspects like Raga Alapana. The absence of recordings makes it difficult to say with exactness that their style was such and such. But the availability of recordings of other contemporary artistes and the subsequent artistes makes for good comparative study.