DOI: https://doi.org/10.4038/jrm.v3i2.46

A Recommended Approach to Violin Educational Repertoire in Iran: A Composition Analysis Based on Western Techniques

Soroush Shoja Talab Kouchesfahani[1]

JRM JOURNAL OF RESEARCH IN MUSIC
VOLUME 03 | ISSUE 02 | 2025

Abstract

This study examines seven pieces from Abolhasan Saba's Chapkuk Radif for Violin, analyzing their technical, rhythmic, melodic, and structural characteristics. The analysis focuses on bowing techniques, ornamentation, harmonic structures, rhythmic patterns, phrase structures, and modal elements. Based on these findings, a new Chehārmezrāb was composed in the Esfahan dastgāh, following the stylistic principles of Saba's work. This research highlights the defining features of Saba's compositional approach and provides a framework for creating new works within the Persian classical tradition.

Keywords

Abolhasan Saba, Composition, Improvisation, Iranian Music, Violin

[1] Graduate Assistant, Department of Curriculum & Teaching, Auburn University, Alabama. Email: szs0357@auburn.edu

Introduction

Although the violin originates from Western music, it has long been adopted into Persian classical performance practice, most notably by pioneers such as Abolhasan Saba. Since it arrived in Iran in the late 19th century, the violin has been one of the influential instruments in Iran due to its appearance, sound, range, and technical potential (Keshmiri 2024). After a general study of Abolhasan Saba's radif (also known as Saba's Chapkuk violin course), I could see that most of the pieces in this book have many points in common, except for three Chehārmezrābs out of a total of 10 in Shur, Esfahan, and Chahargah, which have differences in terms of performance techniques.

The seven pieces of Saba's Chapkuk Book in Dashti, Abu Ata, Afshari, Bayat Zand, Homayoun, Segah, and Mahour - which we will introduce hereafter as the seven dastgāhs and their Chehārmezrābs as the seven pieces- use similar bowing techniques. Also, technical, rhythmic, and melodic patterns are repeated meaningfully in these pieces. The question raised here is that if Saba intended to make a Chehārmezrāb for the same collection in Esfahan, but with the same form and technique as he used in the seven dastgāhs, how could the piece be?

In this article, a general analysis of the seven pieces will be discussed to identify their common points in terms of technique, rhythm, and the shape of the melodic movement. Then, based on that, I will present a piece in the style of Saba's seven fragments in the dastgāh of Esfahan.

While this study is grounded in the context of Iranian classical music, it also draws on techniques traditionally associated with Western violin pedagogy. By "Western techniques," I refer specifically to structured bowing patterns, harmonic layering through double-stops, metrically consistent phrasing, and systematic compositional analysis, elements commonly emphasized in Western classical violin training (Ehle 2007). These techniques are not foreign to Iranian music but have been adapted and integrated into the performance and teaching practices of musicians like Abolhasan Saba. This blending of approaches provides a valuable framework for both analyzing existing repertoire and composing new pieces in a stylistically faithful manner.

Although all analyzed pieces are from Saba's existing repertoire, this study offers a novel contribution by reconstructing a Chehārmezrāb in the dastgāh of Esfahan, based entirely on analytical patterns derived from Saba's work. This is not a new style, but a historically faithful extension based on his documented compositional features.

Terminology

The pieces that constitute the repertoire of Persian traditional music are collectively referred to as the Radif (Ghavidel Aghdam, 2025). To be sure, these are not clearly defined pieces but rather melody models upon which extemporization takes place (Ghavidel Aghdam, 2025). As mentioned in "Global music streaming providers offering Hossein Alizadeh's Radif Navazi" (2025) in everyday Persian usage, radif means row, order, or series. However, in Persian classical music, the word denotes a specific arrangement of melodic structures that exert a special priority, a kind of logic and aesthetics, declaring a cultivated vision towards music. The foundation of Persian art music is a vast collection of tunes known as the Radif (Rasouli and Bastanfard, 2023). Radif is the official collection of modes in Persian traditional music (Miller 1993).[2]

A Dastgāh has been considered the counterpart of the Indian raga and the maqām in the Turko-Arabian musical traditions. It has also been translated as a mode in Western musical terminology. None of these adequately describes a Dastgāh (Ghavidel Aghdam, 2025). The dastgāhs are composed of many melodic sequences of various lengths, which are referred to as gushe (Miller, 1993). A Dastgāh is a melodic system that shares a modal foundation, with microtonal intervals and ornamentation techniques (Ghavidel Aghdam 2025). Based on Farhat (2009), the names of 12 dastgāhs in Iranian music are: 1- Shur, 2- Abu Ata, 3- Dashti, 4- Bayat Zand[3], 5- Afshari, 6- Homayoun, 7- Esfahan, 8- Mahur, 9- Segah, 10- Chahargah, 11- Nava, and 12- Rast-Panjgah.

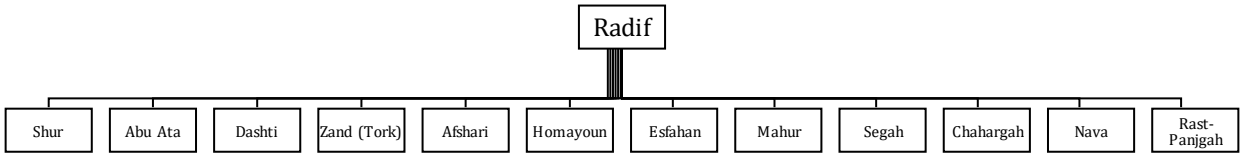


Figure 1: Conceptual visualization created according to Farhat (2009) by the author based on the data synthesized from the given literature review

[2] Some references, such as Farhat (1990) or Miller (1993), are cited as historical sources due to their foundational role in Persian music studies.
[3] Called as Bayat Tork in most radif books.

Dastgāhs and āvāzes have significant similarities, as both are composed of a collection of different gushes (melodic units). In this respect, some musicians do not differentiate between āvāz and dastgāh and consider āvāzes as dastgāhs as well (Farhat, 1990). In this article, I have often used the word dastgāh instead of both the words "mode" and "āvāz" (which are common) to avoid creating complexity and crowding in the text. In addition, the difference in the definition of the concepts of mode, dastgāh, and āvāz in this article and the mentioned book will not significantly affect the result of the work.

The generic term for individual pieces, other than the darāmad, which make up the repertoire of a Dastgāh, is “gushe” (Ghavidel Aghdam, 2025). Gushe is the generic term for individual pieces that make up the repertoire of dastgāh. Some fragmentary smaller gushes (tekke) can occur in more than one dastgāh. These types of gushes can vary in modal structure, while they are similar in rhythm, melodic patterns, and movements. The piece, or the group of pieces in a standard mode, which begins a dastgāh, is called darāmad. They are the most representative portion of the dastgāh (Shafiei 2021; Farhat, 1990).

The term “Chehārmezrāb” originates from a type of metric-rhythmic piece traditionally played by master musicians of Iranian classical music, especially on the tar. These pieces would typically begin with four distinct strokes of the plectrum (mezrāb); hence the name, which means "four strokes" (Hashemi & Zabihifar, 2024) Chehārmezrāb is a format in Iranian classical music that typically begins with a pāye or ostinato and serves to express various melodic phrases from the radif. It is expected that the performer not only showcases the melodic richness of the dastgāh but also demonstrates proper and refined instrumental technique (Hashemi & Zabihifar 2024). Farhat (1990) believes that Chehārmezrāb is a solo instrumental piece in a fast tempo and in compound or straightforward duple meters (it is not a type of gushe or tekke). While Miller (1993) thinks differently: “Chehārmezrāb (which means four-beat) is an important type of metric gushe and defines the four beats in a 6/8 measure counted (long, long, short, short, or 2, 2, 1, 1”. In most of the Persian modes, one tone assumes a conspicuously prominent role. It may or may not be the tonic. It is called the shāhed. I could not find an English equivalent term for shāhed. dominant should not be used, as that word has harmonic implications; furthermore, the shāhed is not necessarily the 5th degree of the scale (Shafiei, 2021).

The sound of the violin is mainly produced by the vibration of the right hand holding the bow and rubbing it against the strings. This action of rubbing the bow against the strings is called

"bowing", and the vibration of the strings determines the sound, that is to say, it is determined by the technique of bowing (Hanruo and Sondhiratna 2024). Bowing is the fundamental motor action responsible for sound production in violin playing. (Provenzale et al. 2021)

Methodology

This study employs a qualitative and analytical approach to examine the seven pieces from Abolhasan Saba's Chapkuk Radif for Violin. The methodology consists of three main phases: (1) selection and analysis of the existing pieces, (2) identification of common technical and structural elements, and (3) composition of a new Chehārmezrāb in the Esfahan dastgāh based on the extracted principles.

Selection and Analysis of the Existing Pieces

The research began with a thorough study of the seven Chehārmezrāb pieces in the dastgāhs of Dashti, Abu Ata, Afshari, Bayat Zand, Homayoun, Segah, and Mahour. Each piece was transcribed and analyzed to identify significant elements related to:

- Technique: Bowing styles, ornamentation (such as mordents), and the use of double-stops.
- Timing: Meter, rhythmic patterns, and phrase lengths.
- Melodic Movement: Common motifs, pitch relationships, and the role of the shāhed note.
- Form: Structural elements such as opening themes, expansion and contraction techniques, and finale phrases.
- Modality: The modal characteristics of each dastgāh and the presence of modulations.

Data collection involved measuring the frequency and recurrence of rhythmic and melodic patterns, examining harmonic structures, and identifying patterns in the implementation of pāye. This process enabled the identification of distinct musical traits that define Saba's composition style in these pieces.

This methodology is grounded in a systematic framework that identifies stylistic consistencies across Saba's Chehārmezrāb compositions. The analytical phase categorized recurring patterns in bowing technique, rhythm, melodic structure, phrase construction, and modality. These categories formed a blueprint for reconstructing a hypothetical Chehārmezrāb in Esfahan, applying the same compositional logic that Saba used in the other seven dastgāhs. Rather than

creating a new style, the goal was to extend Saba's existing compositional style over Esfahan dastgāh, preserving both musical integrity and historical continuity.

Identification of Common Technical and Structural Elements

From the analysis, a set of key characteristics was derived to serve as the compositional framework. These included:

- Bowing technique: Each measure is performed in a single bow stroke.
- Length: The piece should range between 70 and 100 measures.
- Pāye: A foundation in two dotted quarter notes.
- Rhythmic Structure: Emphasis on figures 3 and 6 from the identified rhythmic patterns. (Table 2)
- Melodic Patterns: Primary use of patterns 1, 2, 4, 5, and 7 from the analysis. (Table 4)
- Structural Techniques: Application of contraction and expansion within phrases.
- Modulation: Inclusion of a secondary gushe (Bayat Rajeh) in addition to the darāmad.

Composition of Esfahan Chehārmezrāb

Using the findings from the previous steps, I composed a new Chehārmezrāb in the Esfahan dastgāh. This composition was structured to align with Saba's established style by incorporating the extracted technical and structural elements. I then reviewed the piece against the characteristics identified in the original seven pieces to ensure stylistic consistency. The composition process involved iterative revisions to maintain authenticity and coherence with Saba's Chapkuk Radif. This methodology ensures that the new Chehārmezrāb is not only theoretically grounded but also a practical extension of Saba's stylistic approach to Persian violin music.

Analysis of parts

As mentioned earlier, there are similarities in terms of technique, rhythm, and melodic movement among most of the pieces in the radif Chapkuk by Saba. Here we introduce some of these similarities:

Analysis of Techniques

The pieces of the radif in terms of bowing, harmony, ornamentation, and Chehārmezrāb pāye are examined.

Bowing

The bowing style in all seven pieces is the same and even unchanged. In this way, every measure of the piece, regardless of what rhythmic or melodic movement it has, is performed in one bow movement, and there is no exception in this case. Meanwhile, the other three pieces each have their specific bowing technique and mostly a percussive style (more Martelé and Détaché). It can be stated that this form of bowing (each measure in one movement of the bow), due to the emphasis or accent that it creates at the beginning of each measure, induces the meter of the song for the player and listener.

Double-stops

In the seven pieces of Saba, as far as possible (almost everywhere), double-stops are used. Double-stop is an important part of the character of Chehārmezrāb in Saba's works. It can be seen that harmony is used in two common ways in Saba's book: The vertical harmony that is performed simultaneously and pedal-like, which creates a kind of double-stop; and the horizontal harmony that is written along the length and as a part of the melody. The harmony in the seven pieces is performed vertically, meaning we always hear two different voices at the same time. In contrast, the three pieces feature harmony tones and melody played separately, with each tone coming in length one after the other.

Mordents

The most important role of the mordent in the seven pieces is to separate two adjacent notes of the same name. In this way, if we remove the mordent from these pieces, every two adjacent notes inside a measure will become one larger note. The reason for this is due to the way of bowing that was mentioned earlier. Because all the notes in each measure are placed in one bow movement, two adjacent notes of the same name need a separating factor, which is the mordent here in the seven pieces.

The Pāye of Chehārmezrāb

The pāye of the seven pieces of Chapkuk radif generally follows two written patterns, which, considering that the meter of all these pieces is 6/8, one of them is in the form of a dotted whole note (pattern 1, table number 2). The other is written as two dotted quarter notes (pattern 2 in Table 2). In addition, the second type (two dotted quarter notes) appeared much more frequently (121 rates compared to 16 rates of the dotted whole note pāye). The only exception in this case is the Segah dastgāh, which has a two-measure pāye and consists of a dotted quarter note and nine eighth notes.

Time

The parts in terms of meter and rhythm are compared in this section.

Meter and Time Signature

All seven pieces are written in 6/8 meter. This is while out of the other three pieces, two are written in 3/8 and one in 6/16. On the one hand, it can be observed that, in terms of meter, there is a significant similarity among the seven pieces. On the other hand, roughly all the examined pieces are between 70 and 100 measures, except for Dashti, which consists of 49 measures, and Abu Ata, which consists of 139.

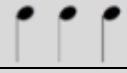
Rhythmic Patterns

Upon reviewing the seven pieces as a whole, with a total of 582 measures, some significant findings can be observed. Below is a table that shows the density of different rhythmic patterns used in these pieces.

Table 1

The Frequency of Rhythmic Patterns Used in the Seven Pieces of Saba's Violin Course, Book One

Pattern Number	Pattern	Dashti	Abu Ata	Afshari	Bayat Zand	Homayoun	Segah	Mahour	Total
1					15	16			31

2		21	48	22	8			30	121
3		18	60	27	37	23	28	23	216
4		8							8
5		1	5		10	9	4	3	32
6			25	20	8	13	14	11	91
7					2	3			5
8				8	3	4	11		26
9					4				4
10					2				2

From studying the table above, a few things attract attention:

1. It can be seen that the most used pattern in the seven pieces is pattern number 3 (six eighths in the measure), which makes up more than half of the melodic phrases (216 measures out of the total of 384 melodic phrase measures) and constitutes the main body of the Saba pieces in this book. Also, this figure is used in all the examined pieces. For a more accurate study, this figure will be divided into smaller types of melodic movement in the following sections.

2. Pattern 6 also seems to be very important, with more than 90 repetitions. This pattern is present in almost all pieces. Pattern 10, of which there are only 2 repetitions in the whole book, can be considered a variation of pattern 6.

3. It can be said that patterns 4 and 7, of which a small number of them - and in only three pieces - can be seen, are variations of pattern 5. This is why 45 repetitions can be counted as part of pattern 5.

4. Pattern 8 with 26 repetitions is considered a less frequent pattern that should not be ignored.

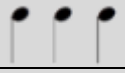
5. Pattern 9 is considered rare, and it is used only in a short part of the Bayat Turk piece (a piece that is very diverse in rhythm compared to other pieces).

6. As was mentioned in the chapter "The Pāye of Chehārmezrāb", it can be seen that figures 1 and 2 are used only as the pāye.

Based on the findings, a table of pattern groups in which similar patterns are counted together can be designed as follows:

Table 2

Groups of Similar Rhythmic Patterns

Pattern Number	Pattern	Dashti	Abu Ata	Afshari	Bayat Zand	Homayoun	Segah	Mahour	Total
½		21	48	22	23	16		30	137
3		18	60	27	37	23	28	23	216
4/5/7		9	5		12	12	4	3	45
6/10			25	20	10	13	14	11	93
8				8	3	4	11		26

Melodic Pattern

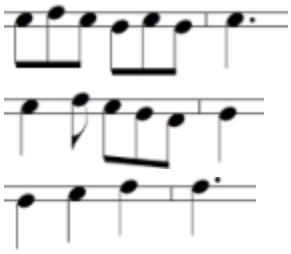
Beginning Theme

The rhythmic and melodic patterns at the beginning of the studied works have similarities. Out of the total of 7 examined pieces, 6 pieces have the same beginning two at a time.

Dashti and Bayat Zand:

Afshari and Homayoun:

Abu Ata and Segah:

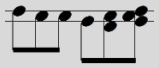
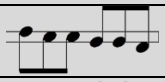
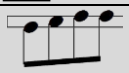
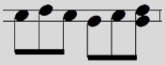
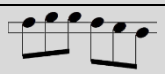
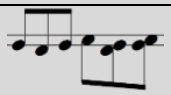
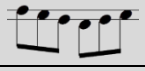
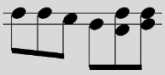
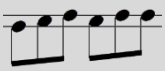
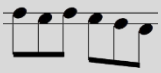


Melodic Patterns

By examining the melodic pattern in these works of Saba, it can be seen that some patterns are used more than others, with a significant difference. Below, the frequency of different patterns consisting of six eighths are examined.

Table 3

Melodic Patterns

Number	Pattern	Dashti	Abu Ata	Afshari	Bayat Zand	Homayoun	Segah	Mahour	Total
1		4	8		3	10		3	28
2		8	13	15	9	3	4	3	55
3		4	4	6	6				20
4		5	10	7	2		7	5	36
5		2	2				2	3	9
6			3					2	5
7			5		4	1	4		14
8						5			5
9						3			3
10							4		4
11							4		4

There are two points to note regarding the compilation of the above table. One is that the criterion of similarity, above all, is the first four notes of each pattern. Because the last two eighths are used in different ways under the influence of the composer's need to reach the desired tone. Second, despite the similarity between patterns 1 and 2, these two cases are separated. Because pattern 2 is so frequent that it can be mentioned independently.

The points obtained from the review of the above table are as follows:

1. Pattern number 2 is, by far, the most frequent and also the most widespread melody pattern in this book. It means that not only is it used more than any other pattern, but it is present in all pieces. This pattern, which continues until the descending fourth of the first tone, is not used as an opening phrase in any of the pieces.

2. All melodic movements - without exception - consist of steps, and no two consecutive eighths can be found that form a skip. Of course, this point does not apply to the pāye of the Chehārmezrābs and is specific to melodies.

3. Patterns 6, 8, 9, 10, and 11 are very rare and dense (exceptional). Therefore, they cannot be introduced as common melodic patterns in these pieces.

4. Patterns 1, 3, 4, 5, and 7 are repeated not as much as pattern 2, but in most pieces and frequently.

5. There is a kind of syncopation in pattern number 3. In this way, instead of 3-beat pulses (that can be seen everywhere in the pieces), in this pattern, 4-beat pulses are formed, and each of the three groups of 4-beat pulses forms two measures.

Explaining that here, by beat in the 6/8 measure, eighth is meant; and by pulse, I mean a group of notes that have a rhythmic connection; and here are repeated in a sequence.

Form

In examining the form of the parts of this book, some points were noticed, which are mentioned here:

Opening Sentence

The opening sentences of the pieces are important in several ways. One is that it shows the main body of the piece. Additionally, other melodious preparations will follow. Here we see the form of the opening sentence of the seven parts in a simplified way:

A, A′, A′-1, B, A″ ..... Dashti
A, A′, B, B-1, B-2 ..... Abu Ata
A, A-1, A-2, B, B+1, B+2 ..... Afshari
A, A, A-1, B, A′+1, A′+2 ..... Bayat Zand
A, A-1, B, B+1, A′ ..... Homayoun
A, A, A′, B, B-1 ..... Segah
A, A-1, B, B+1, C ..... Mahour

As can be seen, in most pieces after presenting the first motif (A) and after its possible repetition, the same motif is repeated a second time. If the sequences of the first motif (A) are descending, the sequences of the second motif (B) are ascending. On the contrary, if the sequences of the first motif (A) are ascending, the sequences of the second motif (B) will be descending. The sequences of the second motif (B) continue until the note stop can be taken at the base of the fourth beat.

Contraction

A special form of contraction can be seen in some of Master Saba's pieces, which are mentioned here. Contraction refers to the process of making a phrase shorter than expected. In this method, a part of the song in which there is the pāye of the Chehārmezrāb is repeated, but with the difference that the pāye between the phrases is removed. This technique has been used in Dashti, Abu Ata, and Afshari Chehārmezrābs.

As can be seen in Dashti Chehārmezrāb, from measure 17 to 28, we have a 12-measure phrase (X), which is presented in the form of a shorter, 8-measure phrase (W) after a digression (Y). A similar thing happens in the first phrase of Abu Ata (X), where we see that this 15-measure phrase is reduced to 7 measures (Y). Also, in measure 13 of Afshari Chehārmezrāb, a phrase (X) starts and continues for 16 measures. In the following, this sentence (Y) is summarized in 10 measures, with the difference that here, Saba also removed the two melodic measures that revolved around the shāhed note in addition to the four measures of pāye.

Expansion

In Saba's works, you can find expansions with similar appearances; in all of them, something happens almost the opposite of what happens in the contraction of themes. That is, first, simple themes are introduced, and then the phrases within that theme are expanded one by one, so that phrases are performed in more developed sequences and with greater length. Examples of this form of expansion can be found in Abu Ata, Segah, and Mahour.

In Abu Ata at measure 54, we see a 9-measure theme (W), which consists of 3 sets of 3-measure phrases (one measure of melody and two measures of pāye). Next (Z) and in measure 63, there is an 18-measure theme, the first five measures of which (z1) are the extended form of the first phrase of the previous sentence. The second and third phrases have a similar story, with the difference that in the final part of the third phrase (z3), a three-measure repetition of the exact phrase is placed in the low register, which has caused further expansion of this phrase.

This happened twice in Segah. In measure 25 of the Segah Chehārmezrāb (X), a short phrase (4 measures) is presented in the form of a longer phrase (Y) with length expansion and an increase in the height of the peak of the phrase. Additionally, in measure 60, a 6-measure phrase (W) has evolved into a longer 14-measure phrase (Z). Also, in Mahour, the 6-measure phrase of measure 23 (X) is changed into a 10-measure phrase(Y).

"Zange Shotor" Expansion

What I have read here as "Zange Shotor" is a type of expansion that can be somehow similar to what is seen in the previous section (expansion); The difference is that here, although, individual phrases are not expanded, a new phrase similar to the last one and at a higher level is added to the previous phrases and the phrase again ends at the same ending note. (a state similar to the "Zange Shotor" in a radifs). "Zange Shotor" can be found in Abu Ata, Segah, and Mahour. In measure 41 of Abu Ata Chehārmezrāb (U), there is a 3-measure phrase with an upward arc, which rises to note B above the fifth staff line and ends on note F. After this sentence, a similar sentence (V) can be seen, with the same pattern of melodic motion and by adding a measure in a higher pitch which rises to note C and returns to note F again.

A similar case can be seen in the Homayoun Chehārmezrāb, measure 59 (X), which goes up to note A, and its "Zange Shotor" is presented two measures later (Y). The peak of which is note B. Also, in the 49th measure of the Mahour Chehārmezrāb (W), we have a phrase that rises to the note A above the staff lines and returns to the Shāhed note (here the note E) and in the following phrase (Z) with the same procedure, it goes up to note B and returns to the Shāhed.

Finale Phrase

At the end of most of this book's pieces, you can find a final phrase that has less of a melodic relationship with the previous themes. In the 42nd measure of Dashti Chehārmezrāb (F), a six-measure phrase reaches from note C (Shāhed of Dashti) to note E (tonic) in three sequences and ends the Chehārmezrāb with a jump to the fourth and back. In measure 142 of Abu Ata Chehārmezrāb (F), the same thing happens, but without the fourth jump. In the 91st measure of the Bayat Zand (F), we see the finale phrase, which spans nine measures and comprises four sequences. Also, in Mahour, such sentences are seen in 67 measures and three sequences.

Modulation

It seems that the Chehārmezrābs in the book of Radif Chapkuk by Saba are not very diverse in terms of modulation and changing gushes. According to this research, Saba used the least

number of modulations in the Chehārmezrābs of this book. So, except for the darāmads, he has modulated to only four other gushes (Hejaz in Abu Ata, Shekaste and Delkash in Bayat Zand, and Dād in Mahour), which seems very few compared to the total of seven dastgāhs.

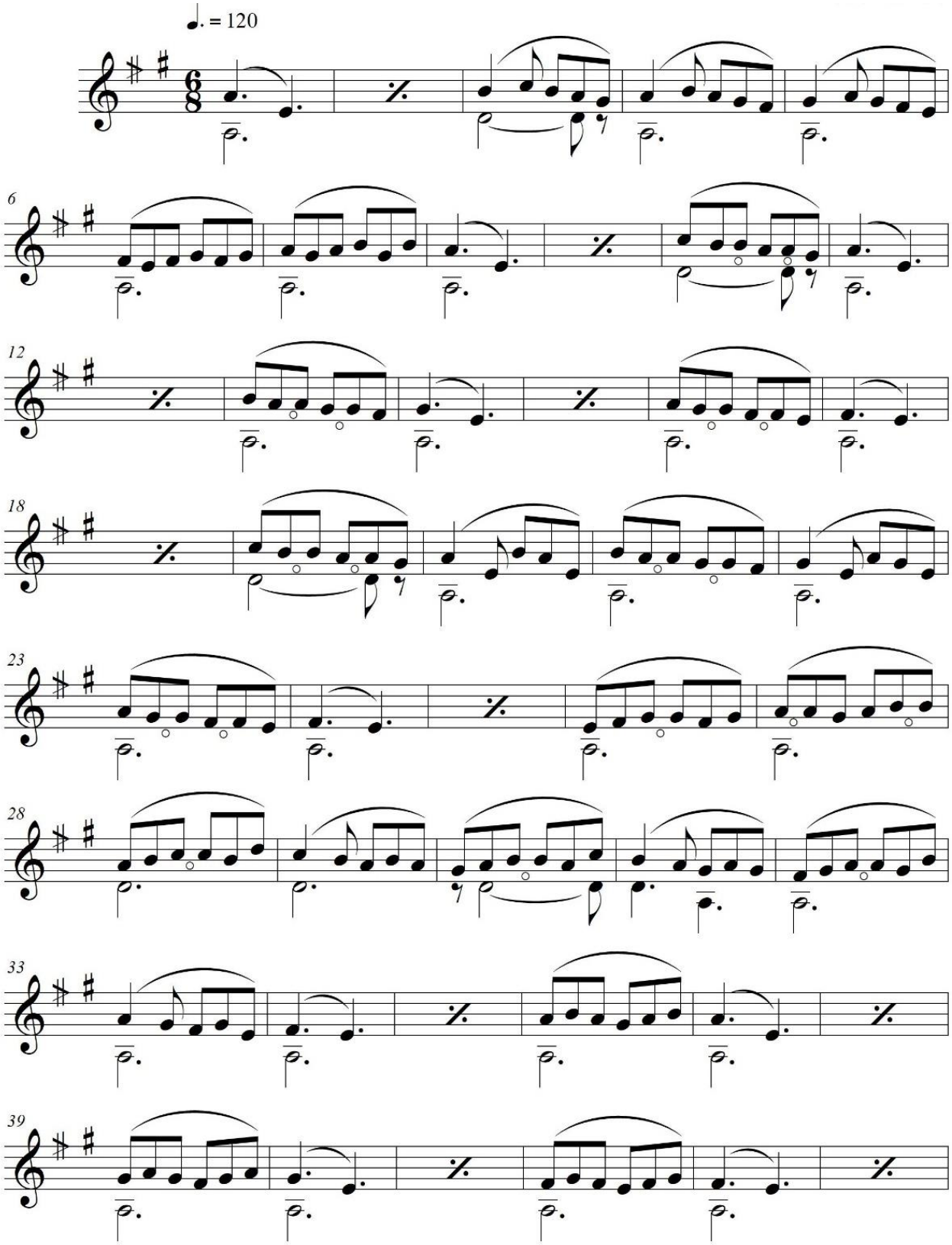
Results

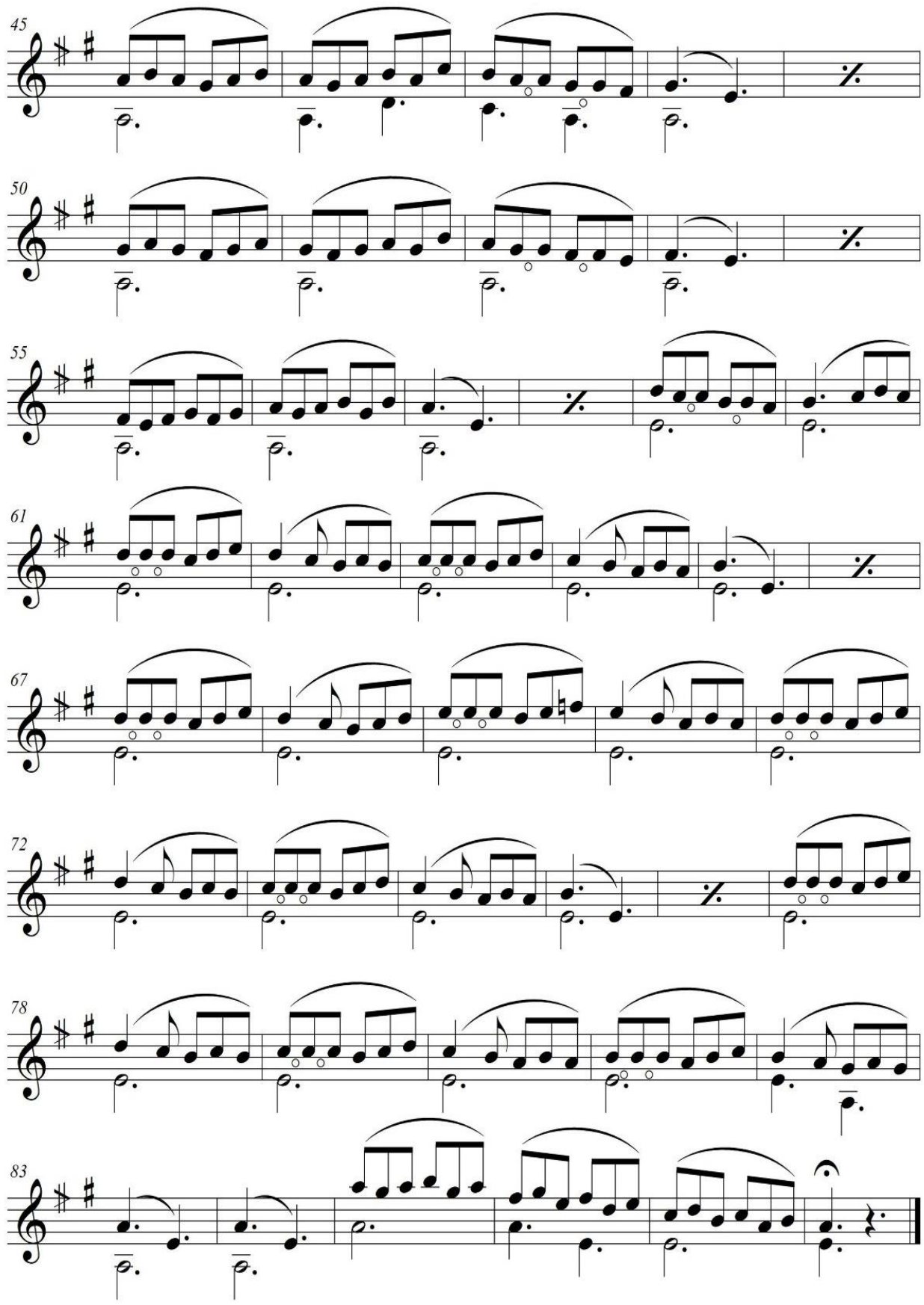
The analysis of the seven Chehārmezrāb pieces from Saba's Chapkuk Radif for Violin revealed a set of defining technical and structural characteristics. These include a consistent bowing technique where each measure is played in a single bow stroke, a preferred length of 70 to 100 measures, and a foundational pāye structure using two dotted quarter notes. The rhythmic framework prominently features figures 3 and 6 from the identified rhythmic patterns, while the primary melodic patterns align with patterns 1, 2, 4, 5, and 7.

Structural techniques such as phrase contraction and expansion were observed across multiple pieces, reinforcing a dynamic yet cohesive form. The use of modulation was minimal, with only four gushes outside the darāmad appearing in the studied pieces. These findings provided a clear framework for composing a new Chehārmezrāb in the Esfahan dastgāh, ensuring alignment with Saba's stylistic conventions. The resulting composition successfully integrates the identified elements, demonstrating how Saba's principles can be systematically applied to create new works in the Persian classical tradition.

Additionally, it is worth noting that some of these features can also be found in the works of other Iranian musicians. However, if we collect all of them in one place, the result is likely to be very similar to the works of Chapkuk radif for the violin book by Abolhasan Saba. Probably, the Chehārmezrāb that Saba could have made in the manner of the seven pieces and the dastgāh of Esfahan had the above characteristics. The piece that I must compose in the seven pieces style must also have such characteristics. Apart from the pedagogical use, this method supports repertoire development, music preservation, and stylistic composition training. It provides a structured model for extending the traditional repertoire in a historically informed and culturally respectful manner.

Esfahan Chehārmezrāb in the style of Abolhasan Saba (Composed by the Author):





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