
The musical language

Elements of Persian musical language: modes, rhythm and syntax

Dariusz Talai*

- *Dastgâh* as the macro-system
- Intervals in theory and practice
- Rhythm
- Melody
- The anatomy of *gushe*
- The *dastgâh* in performanc

In treating the subject of musical language, a Persian musician would be intrinsically drawn to the structural similarities between the Persian music and language. Indeed Persian music and language are extremely related in their metrics, intonations and structural phrases (syntax). Although we will draw upon this relationship, our aim in this article is to present “music as a language,” consisting of acoustic, melodic, and rhythmic, elements, which together create a musical expression or a “musical language.”

Persian music is a modal music. It applies a multi-modal system called the *dastgâh* which presents a macro form for a performance. This form refers to melodic models, each called a *gushe*, along with rhythmic compositions, including *pishdarâmad*, *charmezhâb*, *tasnif*, and *reng*. Basically Persian music has been preserved and transmitted through a collection of melodies. These canonical melodies, which serve as models for all compositions and improvisations are organized into a body of music referred to as the *radif*, including seven *dastgâhs* and their derivatives.

*. Assistant professor University of Tehran dtalaei@ut.ac.ir

***Dastgâh* as the macro-system**

Dastgâh is a multi-modal system. This system is complete in a sense that it utilizes the whole vocal range of the singer¹, which in Persian music is two octaves. It consists in a modal achievement of several levels (*tabaqât*) beginning from the lowest register and rising to the highest. Each level corresponds to a mode (*shâh-gushe* or *maqâm*), which uses about two *dang-s* (tetrachords) and has a “central note” (*shâhed*). In addition to the scale and the *shâhed* note certain other elements such as the “stop note” (*ist*) and the “variable note” (*moteghaiier*) function to create other modes than those who share the same scale and *shâhed* (example: *Dashti* with *Bayât-e Kord* or *Segâh* with *Afshâri*). In addition to these theoretical and structural elements there are other elements, which may occur to characterize a specific *shâh-gushe* from another having the same theoretical elements. These are the melodico-rythmic elements.

In the following we give a description of these elements, which find their place in the complex structure of the *dastgâh* as a system. In the subsequent section we will discuss the realization of this system in performance of the *dastgâh*.

6

Theoretical elements

The creation of Persian music is from minimal to maximal. Few notes make up a figure and several figures form a phrase. The phrase is the most significant movement in the achievement of modes in Persian music. Several phrases combined together make up a *gushe* and several *gushes* make up a *dastgâh*. The notes in the phrase are meticulously ornamented and the figures ascend and descend in a stepwise manner within a closed framework, which often has a condensed range. In rare instances a wide range of notes can appear in a phrase, which most often occur in the case of descent to the basic mode (*forud*). This takes place after the gradual and stepwise modal achievement of a large scale through smaller scales in various sections, or modal levels. Small scales have a predominant role in the basic repertory of modes. Therefore, we should have a solid grasp of the small scales in order to have a better understanding of the sense and function of large scales.²

Forth and tetracord: In Persian music the forth is a particularly important interval. Due to the fact that it is a fixed interval it acts as a frame. The melodic strings of a Persian instrument are generally tuned on the forth. A tetrachord is generated by the placement of two variable notes within this fixed frame. Variations in the placement of these two notes lead to different genres of the tetrachords. Tetrachords are units that are identified by their proportional intervals, which can

be placed in different locations. What is relevant to the creation of Persian modes is the interval between notes and the hierarchy of sounds. In the course of the *dastgâh*, large and complex scales are constructed by varying the location of similar or different tetrachords.

Based on my analysis of the Persian music repertory, I have come to the conclusion that even the most complex modal structures in the *radif* are generated from four fundamental tetrachords (or *dângs*). I have designated each of these tetrachords in relation to their most relevant mode and labeled them accordingly: S for *Shur*, C for *Chahârgâh*, M for *Mâhur* and N for *Navâ*. The following are examples of the fundamental tetrachords located between the open strings G and C.

G	<i>Ap</i> ³	<i>Bb</i>	C	<i>Shur</i> (S)
G	<i>Ap</i>	<i>B</i>	C	<i>Chahârgâh</i> (C)
G	<i>A</i>	<i>B</i>	C	<i>Mâhur</i> (M)
G	<i>A</i>	<i>Bb</i>	C	<i>Navâ</i> (N)

Although these are the fundamental tetrachords, we can designate more genres of tetrachords such as: C, D, Ep, F in the mode of *Segâh*. This tetrachord is not considered to be fundamental because it is a derived section of two sequential tetrachords of *Shur*:

A, Bp, C, **D**, Ep, F, G.

Two adjacent tetrachords (*do-dângi*): Although the voice has a predominant role in the repertory of Persian music it is evident that the formation of modes is related to the physical characteristics of string instruments. In fact the reason for this may be historical in that musicians were above all poets and singers. They would often accompany the singing of their poetry with a string instrument.⁴ The instrument serves as a fixed modal framework upon which the singer lets flying their skillful singing. The first open string serves as the central (*shâhed*) note. This is the simplest and most natural way of treating modes. Since the most common tuning of two melodic strings is in the forth, the basic modes are those that are made up of two adjacent tetrachords – having one tetrachord in each string. In such instances the first open string serves as the central (*shâhed*), the last note of the second string tetrachord and the first note of the first string tetrachord. In the following example C is the *shâhed*:

Second string:	G	A	B	C
First string:	C	D	E	F

These two strings together offer a variety of “two adjacent tetrachords” (*do-dangi*) by using one type of tetrachord on each string and combining them together. The two tetrachords may be of similar or different types. This method of utilizing two adjacent tetrachords on the first position

of the neck of string instruments is the most practical way of making basic modes, specially for a singer who is accompanying himself. Prior to the use of musical notation a musician or theorist would refer to each note by the name of the finger used in playing that note, and *motlaq*(absolute) was the name for the open string.

The following *do-dângis* may be identified as basic scales:

G	Ap	Bb	C	Dp	Eb	F	<i>Shur+Shur (S+S)</i>
G	Ap	Bb	C	D	Eb	F	<i>Shur+Navâ (S+N)</i>
G	A	Bb	C	D	Eb	F	<i>Navâ+Navâ(N+N)</i>
G	Ap	B	C	D	Eb	F	<i>Chahârgâh+Navâ (C+N)</i>
G	Ap	Bb	C	Dp	E	F	<i>Suhr+Chahârgâh (S+C)</i>
G	Ap	B	C	Dp	E	F	<i>Chahârgâh+Chahârgâh (C+C)</i>
G	A	B	C	D	E	F	<i>Mâhur+Mâhur (M+M)</i>
G	A	B	C	D	Eb	F	<i>Mâhur+Navâ (M+N)</i>
G	A	B	C	Dp	Eb	F	<i>Mâhur+Mâhur (M+M)</i>
G	A	B	C	Dp	E	F	<i>Mâhur+Chahârgâh (M+C)</i>

Fifth and pentachord: The fifth is the next fixed interval following the forth. Therefore it has a significant function in the modal structure of Persian music. In practice a pentachord is in fact a tetrachord augmented with a preceding or succeeding note. This augmentation could offer a fifth range to some limited *gushes*⁵ and also to a larger extent could help *do-dangis* to reach an octave.

In certain tunings of *târ* and *setâr* the third string is tuned a tone lower than the second string (as a result in three open strings we have a fifth and a forth). This method is used in *Shur*, *Bayât-e Tork*, *Afshâri*, and is particularly important in *Segâh*. However, in many cases the fifth as a dominant interval appears especially in secondary modes in which the *shâhed* is the second note of the second dang (index finger on the first string). Therefore, the open second string (G) with the *shâhed* on the index finger (D) make a fifth.

It is important to note that in Persian music when the melody is played in the melodic string the neighboring string is touched constantly and this open string works as a pedal note. So in the above case the emphasis on D (*shâhed*) consistently makes a fifth accord with the open string G. These fixed intervals of the forth, the fifth, and the octave, which are harmonic intervals serve as references for musicians to adjust the moveable frets of *târ* and *setâr*.

Octave: The octave is prominent as a fixed interval but not as a scale. It is common to play a melody in different octaves, considered as a type of dialogue or “question and answer” phrasing (*so'al o javâb*). In a melodic line an octave is considered almost as unison and it seems that it is perceived as the same sound with a different timber (*zir o bam*). This is the reason why sometimes a melody within a phrase is switched to another octave. This is commonly practiced in playing *ney* and *santur* where the range or tuning does not allow playing a phrase in the same octave. As a result octaves appear to have a circular pattern. However for a singer the process is not as simple thus the singer does not change the octave in the middle of a phrase.

Unlike western scale where two tetrachords are separated by a whole tone, in Persian music the two tetrachords are joined (*do-dângi*). To reach the octave a tone is added preceding or succeeding two joined-tetrachords.

Third: In the formation of modes the third is the most characteristic interval. There are three types of third: Minor, Major, and Neutral. We find the minor and major third in the Western music theory, and the neutral third falls in between. Since the intervals are not tempered in Persian music each of the three types of third may be found variably in different modes. Since at least the 20th century every variation of third has been theoretically recognized as belonging to one of the following types.

- 1- Minor = 1 & ½ tone
- 2- Neutral = 1 & ¾ tone
- 3- Major = 2 tones

In the medieval theories there were many discussions about the third or more exactly about the placement of the related fret *vostâ* (middle finger) which makes a third with the open string *motlaq*.

Second: Since the music moves as a continuum the second by far is the most common interval. In a pure interpretation of modes (*maqâm*) the movement of sound to the neighboring note is abundantly in the second interval. In this sense the note either moves away from a pole of gravity or is attracted to a place of stability (*shâhed* or *ist* note). Theoretically, all variations of the second are conceptualized as belonging to one of the following types:

- 1- Minor = ½ tone
- 2- Neutral = ¾ tone

- 3- Major = 1 tone
- 4- Augmented = $5/4$ tone

Sixth & Seventh: these intervals are present as parallel sounds either in relation to a pedal note, or as counterpoint notes, but they are not used as an interval in a melodic line. For example, traditionally, a singer never sings in such intervals, however in modern styles the tendency is otherwise.

Intervals in theory and practice

Historically there were many studies about intervals and many books were written on this subject, some of which appear as its most rigorous treatment. Often times these studies were conducted by Islamic scholars who took an abstract approach to the treatment of the subject. They attempted at mathematical divisions of a string to describe the exact placement of each note. In these studies fractions of a string were used to obtain different intervals and intervals of octave, fifth and fourth were accurately described by ratios of $1/2$, $1/3$ and $1/4$. Therefore, they tried to describe the exact placement of other intervals through mathematical ratios, and as a result they proposed different types of seconds, thirds and sixths. This mathematical method, which seemed to be “scientific” was the preferred subject of theorists. The presentation of these works and the discussion about this approach finds its place in the history of music theory. Here we will discuss the question of intervals in the practice of music.

Intervals in practice

In practice, unlike its theoretical representation, an interval is not an absolute entity but a flexible range. This flexibility is an important feature of the musical language that contributes to the modal treatment of music and a personal interpretation, which is not acquired based on specific rules but rather absorbed through the musical environment.

In Persian music the melodic line appears in each mode by stepping up and down on the scale of a mode in a “broidery” manner. Therefore seconds are the most common intervals. According to my measurements, in practice this interval is chosen amongst a variety of intervals between 80 and 250 cents.⁶ This does not mean that the interval fluctuates within this range, but depending on the type of tetrachord genre of mode (tetrachord and *maqâm*) and a musician’s school and style they could be different. Of course in practice, depending on the style, there is always a degree of tolerance in fluctuation. Theoretically speaking in a $1/4$ tone system of scales different intervals are $1/2$, $3/4$, 1 and $5/4$ ($1 + 1/4$). We can play all Persian music with this system originally proposed

by Ali NaqiVaziri in the early 20th century. This system was practiced in his music school and adopted by most radio and television musical ensembles. Although the theory of this system is easy to understand, and very practical for “modern” ensembles, it requires a certain degree of compromise not tolerated by a good performer of the *dastgâh* system. I will discuss this issue further in my theory, where the intervals are enclosed in a fixed frame (tetrachord) and they could have different degrees of flexibility within that frame.

Functionality of notes

In any given scale, there is a certain hierarchy among the functionality of notes leading to the composition of a mode. The following functional notes have been defined.

***Shâhed*:** literally meaning “one who bears witness”. Generally speaking this is the “tonic” note. *Shâhed* is the most important note in a scale because in effect all other notes revolve around it. In the development of a *dastgâh* when the modal system progresses and the music goes a step (or a flat) higher the mode is changed because the *shâhed* is changed from one note -of the same scale- to another. Here I will discuss how a note acquires the role and characteristics of the *shâhed*.

- 1- Reverberation and harmonic richness (enforced by *vâhkun*⁷). In string instruments such as *târ* and *setâr*, which have the leading role in pedagogy and practice of Persian music (similar to the role of the Oud in Arabic music) the tuning for each mode is chosen to enforce the vibration of the *shâhed*. In these instruments the melodic line is mostly played on the first string and the tuning of other strings is considered to be most harmonized with the *shâhed* when they make a unison, an octave, a fifth or a forth.

The fretting and tuning are exactly the same on *târ* and *setâr*, the only difference being that in *tar* the first and second chords are doubled. For example, the tuning for *dastgâh Mâhur* in C is: C3, G2, C3 and C2. The *shâhed* of most important *shah-gushe (darâmad)* is C3. So we observe that the *shâhed* C3 has a forth (G2) a unison (C3) and an octave (C2) as sympathetic and *vâkhun*. When a string resonates with a melodic note, enriching the sound of a note without being stroked, this string is considered as “sympathetic.” But when this string has the same role but it is stroked it is considered as *vâkhun*.

- 2- Emphasizing by repeating: The most tangible way of making a note into a *shâhed* is to repeat it more than others. This can be achieved by merely playing it more than other notes in a phrase.

- 3- Length: also gives advantage to a note and adds to the proportion of a note with respect to others. In the vocal repertory most often a very long *shâhed* note appears at the beginning of a *shah-gushe*. In general, the *shâhed* attracts the other notes and when they arrive to *shâhed* they tend to stay longer or rest.
- 4- Referred to by another note: most often by a neighboring note, and sometimes by a tierce as in the case of *Chahârgâh* and *Segâh*. Reference to the *shâhed* is one of the most salient characteristic of Persian music. Often it seems that the *shâhed* is being attacked by another note, usually by a lower pitch neighbor.

The *shâhed* is always referred to by a very short (fast) note and here the rhythm is very important. There are figures and phrases in *radif* just to point out the *shâhed* by this figure, for example: b-C, b-C, b-c-b-c-b-C, C__ (a capital letter stands for long and capital with an under line for even longer duration). Reference to the *shâhed* note may be made more effective by placing the accent on it.

Ist: literally meaning to stop. The *ist* note is another important modal element of Persian music. The *ist* note may be the same as the *shâhed* (e.g., *Mâhur*, *Shur*, and *Chahârgâh*), or different (e.g., *Homâyun*, *Dashti*, *Esfahân*). Sometimes there may be two *ist* notes, one “temporary” (*mozaqat*) and the other “definitive” (*kâmel*) (e.g., *Afshâri*, *Abu’Atâ*).

Moteghaiir: literally meaning variable. In the 20th century theory of Persian music, which is based upon a unique scale for each *dastgâh* this figure is considered as one of the basic modal elements. However in my theory, which considers *dastgâh* as a multimodal system and describes it as being constructed upon different tetrachords this case (*moteghaiir*) is considered as a superimposition of two different tetrachords. In any theoretical approach the *moteghaiir* is an important modal element. (e.g., *Dashti*, *Afshâri*).

It is not sufficient to determine a *gushe* by the hierarchy the notes such as scale, *shâhed*, *Ist* and *moteghaiir*. There are specific melodic elements and movements which characterize a *gushe* and that is what differentiates between *Dashti*, *Bayât-e Kord*, *Hejâz*, *Bayât-e Râje*. We will discuss this issue in melodic and rhythmic elements.

Figure Legend:

Figure I - Large scales and functionality of notes in all *dastgâhs*. Here, S stands for *shâhed*, I for *ist*, and M for *moteghaiir*. In instances where there are two *shâheds* within a mode, they are designated as S1 and S2. In this scale, different *shâheds* refer to their corresponding *shah-gushes*.

[illegible]

BAYÂT-E TORK

The image shows a musical staff with a treble clef and a key signature of one flat (B-flat). The scale is written as a sequence of notes: B-flat, C, D, E-flat, F, G, A, B-flat. Below the staff, there are two labels with arrows pointing to specific notes: 'S I Darâmad' points to the E-flat note, and 'S Shekaste' points to the A note.

ABU'ATÂ

I S2 S1 S S Oj

Darâmad

Hejâz

AFSHÂRI

I2 I1 S M S
Darâmad Arâq

DASHTI

I

S
M

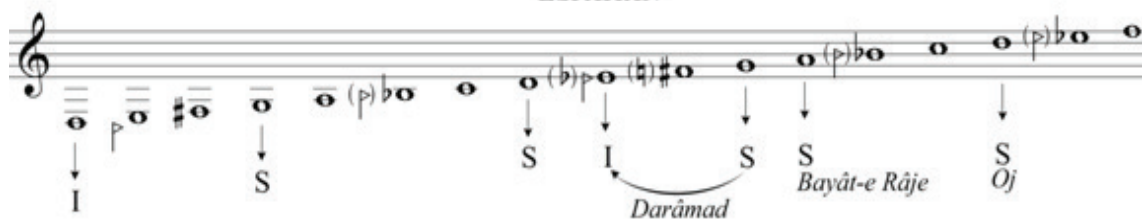
S
Oj

Darâmad

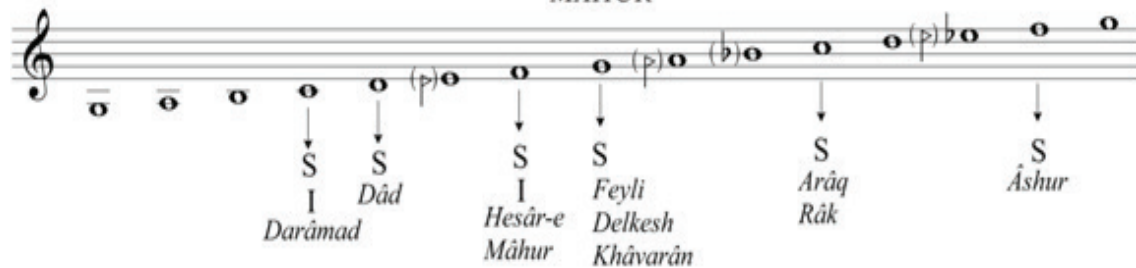
SEGÂH

Darâmad *Zâbol* *Mokhâlef* *Rahâb* *Takht-e Tâghdis Masihi*

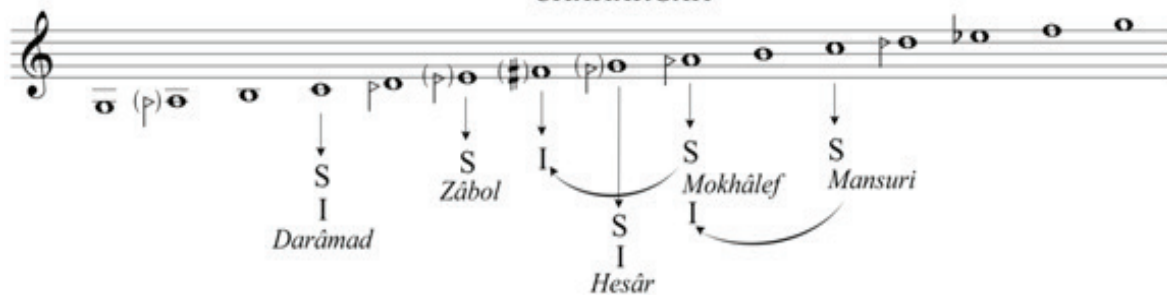
ESFAHÂN



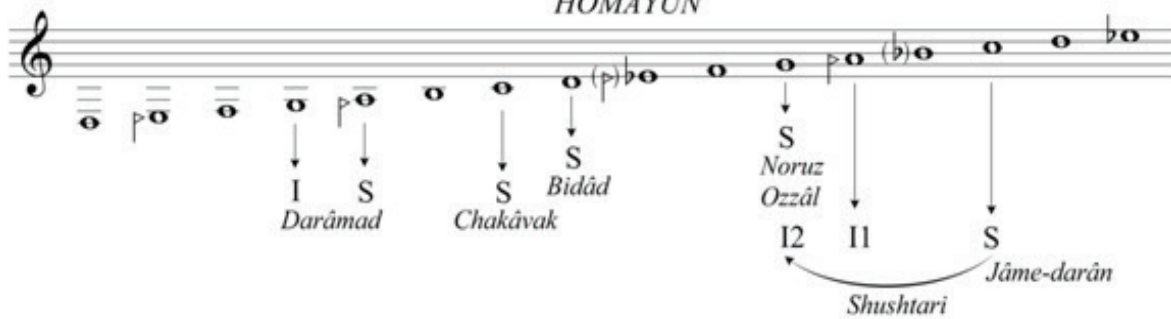
MÂHUR



CHÂHÂRGÂH



HOMÂYUN



HOMÂYUN

I S
Darâmad

S Bidâd
Chakâvak

S Noruz
Ozzâl

I2 I1 S
Jâme-darân
Shushtari

RÂST-PANJGÂH

S1 S2 I S
Darâmad-e Râst

S Panjgâh
Oshshâq

S Qarache

I S
Tarz

S Noruz
Mâvarâ on-nahr

The genesis of modes

In the repertory of Persian music the essence of a mode is born in the *darâmad* of *âvâz*. This part is rhythmically and melodically free and has no significant form however there are restrictions on the phrasing and functionality of the notes, similar to that of the *taqsim* in Arabo-Turkish *maqâm*. Phrases are determined by movements and rests that consist of internal “iambic” rhythms, which make them characteristic to Persian music.

The most pure interpretation of *âvâz* begins with a tonic note and its neighboring notes. The various behaviors of the neighboring notes determine the tonic note, which can change throughout the course of the *dastgâh*. This tonic note, which has been previously discussed, is called *shâhed*.

General literature: content and characteristics

Persian music is a monodic (one-voice) and melodic music. It progresses through time in the same manner as the spoken language. It is articulated in phrases, which are made from figures. An important part of these phrases, other than basing the prosodic metric of poetry, is also the

structural forms of Persian poetry such as: *dobeyti*, *ghazal*, *charpâre* and *masnavi*. The phrases performed even by an instrument soloist, could be in monologue, dialogue and even more voices but the most common form of dialogue could be between a vocalist and an instrument, between two instruments or even one soloist playing phrases which meant to be the response to the other (usually in different registers – *zir o bam*).

Persian Music as in spoken language progress through time and has a story to tell, perhaps a myth. But, even in referring to old Persian myths, histories, and personages it is mostly about a philosophical and mystical statement or about love, from earthly to divine. It has basically a mystical support (from mystical poetry) in which “love” is considered as a school (*dars-e eshq*) and the lover is a student who rises in levels step by step: *Âsheqi gar zin saro gar zân sar ast / ‘âqebat mâ râ bedân sâr rahbar ast* [“temporal and spiritual loves will lead us to the real love at last”] (Rumi).

Rhythm

16

Before the modern period and the supremacy of western notation (which had the consequence of bringing the concept of measurement for the rhythm) theorists and musicians used to consider poetry and music to be metrically related and referred them as the same concept. They even used the same terms for these arts. ‘Abd al-Qâder Marâghi (d. 1435) in his book *Maqâsed al Alhân* in 1418 wrote:

“Musicians call *naqare* the fact to pronounce a syllable, to pick a string, to clap one’s hands once and, furthermore, to strike any object with another object. The *aruzi* [scholar in prosody] say that the *naqare* is a letter, where letters are always mobile or fixed; and for the same reason that *arkâns* are used to give rhythm to poetry which composed in *bahrs*, we can define the musical rhythm after *arkâns*, which compose rhythmic cycles; and there are 3 types of *arkâns*: *sabab*, *vataad* and *fâsele*” (Marâghi 1977:89).⁸

The unity between the rhythmic concept of music and poetry is obvious because the *afâ’il* in *aruz* corresponds to *atânin* in music. For example, *mafâ’ilon* (u---) in *aruz* corresponds to *tan tan tan* (u---) and the poet may choose words that are based on prosodic metric patterns [e.g. *negârinâ* (u---)]. One hemistich presents a complete prosodic pattern of each poetic form, whether it is a *dobeyti*, *ghazal* or *masnavi*. This metrical pattern in prosody is called *bahr*. Coming from

Arabic prosody the metrical patterns are presented by *afâ'il*.

There are eight basic *afâ'îls*:

1-	<i>FA'ULON</i>	u - -	
2-	<i>FÂ'ELON</i>	- u - -	
3-	<i>MAFÂ'ILON</i>	u - - -	
4-	<i>MOSTAF'ELON</i>	- - u -	
5-	<i>FÂ'ELÂTON</i>	- u - -	
6-	<i>MAFÂ'ELÂTON</i>	u - u - -	
7-	<i>MOTEFÂ'ELON</i>	u u - u -	
8-	<i>MAF'ULÂTO</i>	- - - u	

Each *bahr* is made up of 3 or 4 repetitions of the *afâ'il*. It can be made from a complete form of the *afâ'il* (*kâmel*), for example:

FÂ'ELÂTON FÂ'ELÂTON FÂ'ELÂTON

Or a transformed form of *afâ'il*. Each transformation has a name: the following example is called *mahzuf*:

FÂ'ELÂTON FÂ'ELÂTON FÂ'ELON

This is an example of a metrical pattern which was used by Jalâl el-din Rumi to compose his monumental work, the *Masnavi*. Since each verse is made of two hemistiches this pattern is doubled for a verse. Since this *afâ'il* name is *ramal* and it appears at the *mahzuf* form, the *bahr* is called: *Bahr-e Ramal-e Mosadas-e Mahzuf* ("The metrical model of six *rama lmahzuf*").

An important *gushe* called the *Masnavi* has its most important characteristic in this metrical model. This is a Sufi *gushe* which was originally sung with the poems from the *Masnavi* of Jalâl al-din Rumi – hence the name of the *gushe* is *masnavi*- and it is sung in every Sufi poem that had the same metrical model.

For example, the first verse of *masnavi* of Molânâ Jalâl al-din runs:

Besh no az ney chon he kâ yat mikonad (“hear the ney for it tells stories”)

♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪

Az jo dâ ey hâ she kâ yat mikonad (“as it complains of separation”)

♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪

The *afâ’il* are made up of smaller units called *arkân*. There are 6 types of *arkâns*:

1- Sabab Khafif	tan	♪
2- Sabab Saqil tata	tata	♪ ♪
3- Vatad Maqrun	tatan	♪ ♪
4- Vatad Mafruq	tanta	♪ ♪
5- Fâsele Soghrâ	tatatan	♪ ♪ ♪
6- Fâsele Kobrâ	tatatatan	♪ ♪ ♪ ♪

The substance of metric prosodic consists of two syllables. The short syllable is musically pronounced (phoneme) as **ta** and the long syllable as **tan** (or **nan**). These syllables can be shown in musical symbols as ♪ for short and ♪ for long. In the following example we will present all of these components of the metric model. The designated syllables of **ta** and **tan** are ultimately destined to be replaced by their equivalents in words and notes.

In the Persian language, additional to the short (*kutah*) and long syllable (*boland*), there is a syllable as *keshide*, which occupies a short and long value depending upon the prosodic pattern. Interestingly in Persian traditional rhythmic pieces, the music follows the prosodic pattern. However the *keshide* syllable in the poetry is pronounced into two syllables of the prosodic pattern. The following is an example of a metric pattern, which is the main characteristic of the *gushe Kereshme*. Here we observe that in the second hemistich of this given poem, the *keshide* syllable, which is normally pronounced “mid”, is pronounced “mid-o” in song. The purpose of this is to fit the prosodic pattern, which would naturally flow with the rhythm.

Mafâ’elon	fa’elâton	Mafâ’elon	fa’elâton	(prosodic metrical pattern)
Tanan tanan	tananan tan	Tanan tanan	tananan tan	(musical metrical pattern)
♪ ♪	♪ ♪ ♪ ♪	♪ ♪	♪ ♪ ♪ ♪	(notational representation of the pattern)
Dar ân nafas ke be miram	darârezoo ye to bâsham	(appropriate poetry which occur in this pattern)		
Be dan omi-do deham jân	ke khâ ke ku ye to bâsham	(second hemistich)		

Figure II-An example of *gushe* of *Charpâre*, one of the most common prosodic patterns of the *radif* repertory.

The musical score is written on ten staves, each with a treble clef and a key signature of one flat (B-flat). The lyrics are in Vietnamese and are written below the notes. The melody is characterized by a series of eighth and sixteenth notes, often beamed together, and a consistent rhythmic pattern of eighth notes followed by a quarter note. The lyrics are as follows:

Mo Te Fâ 'e Lon Mo Te Fâ 'e Lon
 BÊ HÃ RÌ MÊ KHAI VÃ TÊ KHOD SHÃ BÌ
 TCHE SHA VAD NA HOF TE BE KHÂ NÌ YAM
 BÊ KE NÂ RE MAN BÊ NE SHI NÌ YO
 BÊ KE NÂ RE KHOD BÊ NE SHÂ NÌ YAM
 HA NA GAR TCHE PÌ RA HO NÂ TA VÂN
 TO HA RÂ ZE DAR GA HE KHOD HA RÂN
 KE GO ZASH TÊ DAR GHA HA TEY DÛA VÂN
 HA MÊ RU ZE GÂ RE DÛA VÂ NÌ YAM

Rhythm of the *Âvâz*⁹

The Persian *âvâz* is a sophisticated form of art. The masters of this art believed that when the rhythm has an ostensible display, the music becomes popular but lacks the ability to reflect the ethos of Persian poetry in depth. The primary role of the *âvâz* is to convey the Persian classical poetry. Hence the masters of this music always tended to reflect the rhythm of the poetry in a suggestive manner. Most often, the poems, chosen for the *âvâz*, were written by the greatest literary figures such as Hafez, Sa'di, and Rumi whose works represent a mystical philosophy of life.

The most simple and popular interpretation of the long and short syllables in Persian music is found in the ratio of 2:1. This ratio gives an obvious sense of rhythm to the metrical patterns based upon the poetry. The second option (which is more common in classical Persian music) is to interpret the short syllables in the shortest duration while giving freedom and flexibility to the long syllables. Consequently, short syllables never represent more than one note while long syllables could cover numerous notes and also have the capability to utilize the *melismas* (*tahrir*).

20

When the musicians started to learn the western notation in the beginning of the 20th century, the main part of Persian music (*âvâz*) could not be accommodated by the measurement system of the imported notation system. As a result, it was only with difficulty that this vast and most important part of the repertory passed in to the modern period.¹⁰ Quite mistakenly, the *âvâz* was considered to be without rhythm. Contrary to this idea, the *âvâz* repertory has a rhythm with specific characteristics, which makes it very difficult to teach the concept with any other method than the traditional oral system.

There are two important aspects to be considered regarding this type of rhythm. First, they are based on syllabic models. Secondly, these syllabic patterns are respected in a very flexible manner. As previously described, each model is made of a specific arrangement of short and long syllables, while any musical phrase related to one of these syllabic models must respect the number and order of syllables.

Patterns are displayed by contrasting these two elements (short and long) in a vast range of duration. Short syllables are represented by a short duration signified by one note, and long syllable are represented by a long duration signified by one or a multitude of notes.

Figure III- The following is an example of different representations upon a segment (such as

Mo Te Fâ 'e Lon

Be Ha Ri Mé Kha

1. 2. 3. 4. 5. 6. 7. 8. 9.

mote fâ'elon) of a pattern.

During my extensive experience of teaching this repertory to students of different backgrounds, I came to realize an inevitable process for teaching and studying this repertory. In order to understand this repertory outside of the traditional system I have developed four symbols to present the repertory in notational form. These symbols are compromised between syllabic values and notational symbols. In reference to the syllabic value, I understand that this concept is a

flexible duration, which regards to other immediate durational values.

These four signs (♩ ♪ ♫ ♮) are used as a concept of unity of time in the same regard as prosody considers the short and long durations. *Keshide* is a syllable existing in the Persian language, which occupies the place of one short and one long value. I have added *tavil*, which is generally used for the very long notes or the grand pauses.¹¹

Short ♩ Long ♪ Keshide ♫ Tavil ♮

In this article we will refer to the numerous examples written by this method.

Rhythm of the *Zarbi*

The other major rhythmic category is *zarbi*. *Zarbis* are pieces in which the units (beats) of rhythm are interpreted in exact proportions. In musicology it is acknowledged this category of pieces are metric-based. By the same fact, they can be accompanied by percussion (for example the *zarb*) can be interpreted by an ensemble and can be written in the Western notation.

22

The 6-beat rhythms

These are the most common rhythms, where their large variations cover the range of the very slow *pishdarâmads* and *tasnifs* to the very fast *tasnifs*, *rengs* and *charmezrâbs*.

Each of these rhythms have their own different characteristics and are based in their cyclic accentuation. For example the slow *pishdarâmads* are based on the cyclic accentuated pattern given by the *zarb*:

♩ ♪ ♫ ♩ ♪ ♩ ♩ { (♩ = 56) each beat is shown by a ♩

example of pattern for *Reng*:

♩. ♩. ♩. ♩. ♩. (♩. = 92) each beat is shown by a ♩.

example of pattern for *charmezrâb*:

♩. ♩. ♩. ♩. ♩. (♩. = 120) each beat is shown by a ♩.

The 3-beat rhythms

The 3-beat rhythm is rarely used in a 3 beats cycle such as ♪ ♪ ♪ but in new tendency when the complicated slow 6 beats accentuation are not fully understood they are simplified by being written and interpreted in 3 beats.

The 4-beat rhythms

Some *pishdarâmads*, *zarbis* and old *gushes* such as *Sâqinâme* are in 4 beats. The basic accentuation cycle given by percussion is:



The 2-beat rhythms

This rhythm is a light (*khafif*) rhythm. It is mostly used for instrumental pieces.



This rhythm has also a very specific version (it is typically the rhythm played by *zarb* for many old *tasifs* such as *eytir*) which is when the most important accent is put on the last beat. This beat comes also with a little delay.

The rhythm on 5 beats:

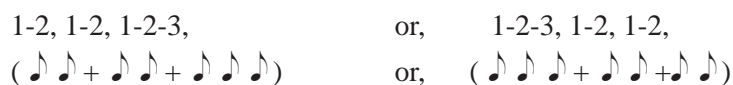
Since all rhythms are made from combination of 2 or 3 beats, this rhythm is considered to be a composed or *lang* rhythm because it is the combination of 2 and 3 beats.



This rhythm is most common in folk music than classical music but in modern tendency it is abundantly used and is very popular today.

The rhythm on 7 beats:

This rhythm is also composed by 2 and 3 beats. This sort of *lang* rhythm are counted in cycles of:



This rhythm also was not common in classical music from the period of mid 19th century but

it is become one of the most popular rhythms in the new tendency.

Other rhythms

Many rhythms could be composed by combination of 2 and 3 beats. The middle age treatises reveal their use in the past, but rhythms in use since 19th century are what we mentioned above. Since this period the artistic challenge in rhythm was mostly a search for the refinement within these frames rather than a pursuit of long rhythmic cycles.

Melody

The melody is the whole substance of Persian music. The melodies are recognized within general categories, which would be the *dastgâhs* and their subdivisions. Because of the importance of poetry in the Persian culture the vocal repertory has a primary role but in certain regards the instrument (*sâz*) would take the lead. Not only because there are specific instrumental melodies, but also the instrumental reprise of the originally vocal melodies has given a vaster dimension to these melodies. The main repertory of melodies in Persian music is the collection of melody-models gathered together by the greatest masters of the mid-nineteenth century. These masters who were from a family of *târ* players made a musical corpus with these melodies and called it *radif* (order, row, or sequence). The *radif*, which served also as pedagogical material has made a very influential impact on Persian music since that time by providing a musical education to the next generations of masters of this music.¹²

The melodies in *radif* are articulated by phrases. The phrases in vocal repertory belong to one of three categories; *âvâz*, *she'r* or *tahrir*.

Âvâz is a sort of melody, which is not sung to poetry and is not related to any poetic metre. It is made up by long notes vocalized on vowels such as *â*, *yâ*, *hâ*. It comes often at the beginning of the vocal *gushes*. For this reason this part in vocal *gushes* is called also *darâmad* for that *gushe*.

She'r, the most important part of the vocal phrase is sung to poetry (*she'r*). The choice of the poem is very important. The prosodic pattern (*bahr*) gives the metre and length of the phrase, the subject matter (literary content) conveying the general climate, and each word referring to an image or a symbol, are all the important elements to be taken in consideration in order to acquire compatibility with the substance (ethos) of the *gushe*.

The *tahrir* is primarily defined as a technical vocal capacity. This technique consists of fast and short repetitive notes by alternately cutting the air in the throat to produce melismatic phrases. It is believed that the “*bolbol*” (nightingale) is the master of the *tahrir*. Since the *tahrir* is a difficult technique, famous and prominent singers in Iran and Azerbaijan were referred to the title of “*bolbol*” or “*bulbul*”.

Another definition of the *tahrir* refers to that part of the *gushe*, which is produced by this technique. The same part played on an instrument is also called *tahrir*. There are many different combinations and uses of *tahrir*, which is declared to be the specialisation of a school or style.

The anatomy of *gushe*

A *gushe* is a complete unit. It is not easy to define a form for all *gushes* (we already discussed the common characteristics by which we classify *gushes*), but in the same way as one can speak of syntax for a literary text or a poetic form such as *ghazal*, one can also speak of the anatomy of *gushe* and define the components and their relative functions.

A *gushe* is like a story or text: it has words, sentences, phrases and paragraphs. A *gushe* could be highly developed, or brief and simple. In a complete *gushe* we can find the following parts:

1. *Âghâzin* (opening)

This phrase is aimed to start the *gushe*. It is often a short phrase with specific rhythm and movement, which expresses the *e'lân* (“announce”) and demands our attention.

Examples of opening phrases from *radif* of Mirzâ Abdollâh:

From *dastgâh Shur*; *gushe Darâmad*; (example 1)



From dastgâh Segâh; gushe Baste negâr (in Zâbol); (example 2)



From dastgâh Homâyun; gushe Zange-shotor; (example 3)



2. *Mo'arref* (signifier)

This is the most important part of the *gushe*. This part includes somehow the unique theme, sign or characteristic of each *gushe*. This singularity could be a metrical pattern with a certain turning of the melody on the pattern such as in *Kereshme* and *Baste Negâr*. It could be specific melodies¹³ like *Ghamangiz* or *Leyli o Majnoun*, it could be a *tahrir* like *Javâd Khâni* or a passage like *Mohiir*. It belongs to each *gushe* and it is like its sign of identification.

Some *gushes* (*shah-gushes*), do not have a unique *Mo'arref* because their modal characteristics are so dominant that they do not need a typical melody to be recognized.

Examples of signifier phrases:

From dastgâh Shur; gushe Darâmad; (example 4)



From dastgâh Segâh; gushe Baste negâr; (example 5)



From dastgâh Homâyun; gushe Zange shotor; (example 6)



3. *Gostareshi*(expansive).

This part is the growth and development phase of the signifier. This development is mostly achieved through a stepwise increase (*bishtar*) or decrease (*kamtar*) of the signifier. This up and down transition of a phrase follows typical paths for accomplishment of the *gushe*.

Examples of expansive parts:

From dastgâh Shur; gushe Darâmad; (example 7)



From dastgâh Segâh; gushe Baste negâr; (example 8)



From dastgâh Homâyun; gushe Zange shotor; (example 9)



4. Takmili (complementary)

This part does not exclusively belong to a *gushe*. It is served to complete the *gushe* and it could be used as complementary in various *gushe*. This part usually has its own intern expansibility. Most often it consists of *tahrir* phrases (or non metric *mezhârâbi* in instrumental cases).

Examples of complementary parts:

From dastgâh Shur; gushe Kereshme; (example 10)



From dastgâh Segâh; gushe Baste negâr;(example 11)



From dastgâh Homâyun; gushe Zange shotor; (example 12)



5. Pâyâni(ending)

This part prepares the *gushe* for the ending (bringing to an end). As the order of *gushes* in *dastgâh* has an ascendant progress this part should give a sense of achievement to the *gushe*. It could be the “*forud*,” in case the *gushe* is not in *darâmad* register, and it returns to the basic register of *dastgâh*, which is *darâmad*.

Examples of ending parts:

From dastgâh Shur; gushe Darâmad; (example 13)



From dastgâh Segâh; gushe Muye ; (example 14)



From dastgâh Homâyun; gushe Zange shotor; (example 15)



6- *Khatm* (final)

Final is a short and precise (clear-cut) phrase with a closing character. The final itself can have a final figure containing two or three notes finishing by forth to tonic or fifth to tonic, called "*bâlekabotar*".

Examples of final phrases:

From dastgâh Shur; gushe Darâmad, ...; (example 16)



From dastgâh Segâh; gushe Muye, ...; (example 17)



From dastgâh Homâyûn; gushe Zange shotor, ...; (example 18)



Figure IV – A diagrammatic representation of *radif* and *dasthâgs*

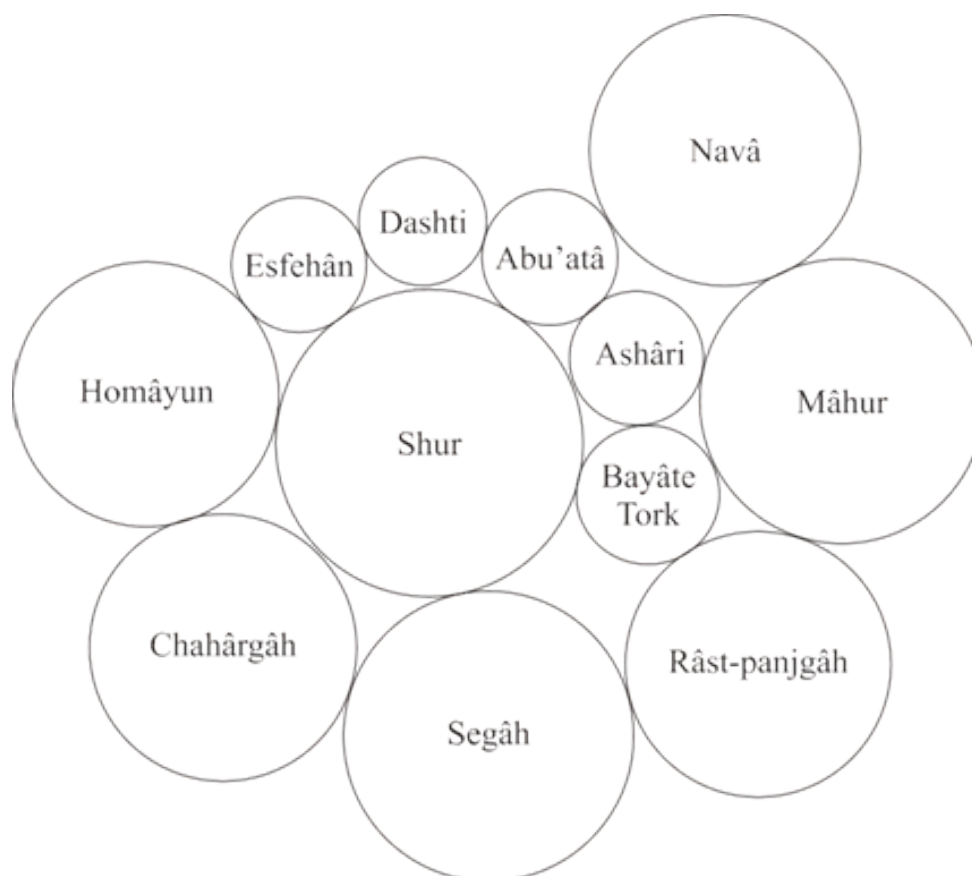
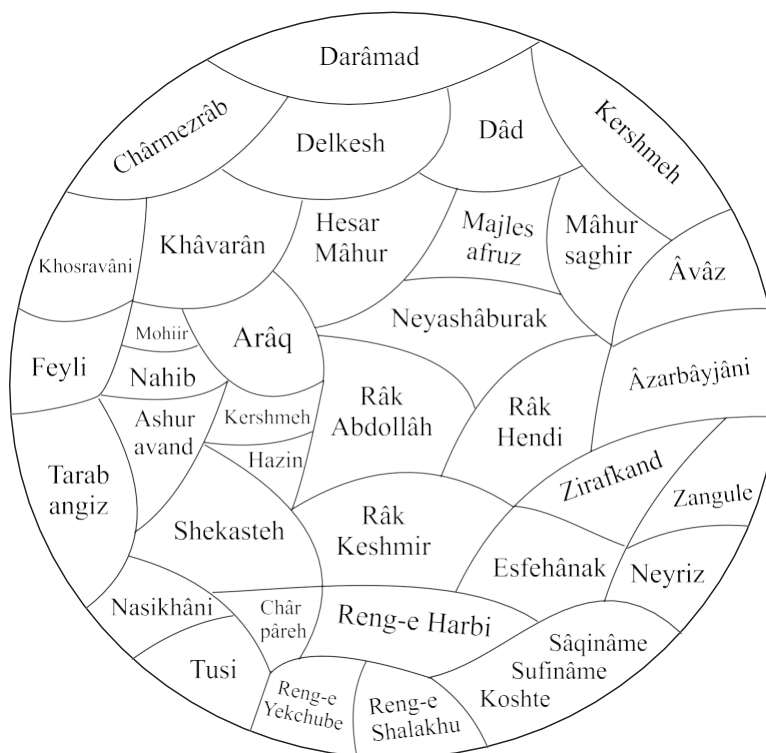


Figure V- A diagrammatic representation of *dastgâh Mâhur* and its *gushes*



The *dastgâh* in performance

In a performance of the *dastgâh*, which is similar to a suit, all musical materials such as composition, *radif* and improvisation are applied to accomplish this form.

The following is a standard format for the performance of a *dastgâh*:

Pishdarâmad (rhythmic composition for the instrumental ensemble)

Charmeizrâb (solo rhythmic composition or improvisation)

Gushe 1(darâmad) (improvisation based on non-rhythmic aspects of the *radif*)

âvâz (tonal vocal)

Javâb (solo instrumental response to the previous section)

She'r (lyrical vocal)

Javâb (instrumental response to the previous section)

Tharir (melismatic vocal)

<i>Javâb</i>	(solo instrumental response to the previous section)
<i>She'r2</i>	(lyrical vocal, second verse)
<i>Javâb2</i>	(solo instrumental response to the previous section)
...	
<i>Gushe 2</i>	(the next succeeding major or <i>shah-gushe</i>)
<i>Charmezrâb</i> (optional)	(solo rhythmic improvisation or composition)
<i>âvâz</i>	(tonal vocal)
<i>Javâb</i>	(solo instrumental response to the previous section)
<i>She'r</i>	(lyrical vocal)
<i>Javâb</i>	(solo instrumental response to the previous section)
<i>Tharir</i>	(melismatic vocal)
<i>Javâb</i>	(solo instrumental response to the previous section)
<i>She'r2</i>	(lyrical vocal, second verse)
<i>Javâb2</i>	(solo instrumental response to the previous section)
...	

Gushe 3, 4, etc

Follow the same format as the first and second *gushes* which can be proceeded by an optional *tasnif*.

Tasnif (rhythmic/lyrical composition)

At the end of the final *gushe* the *performace* of a *tasnif* is mandatory. The following sections comprise the traditional arrangement of the *tasnif*.

Introduction	(instrumental ensemble performance derived from the first vocal section)
Vocal	(lyrical opening of the <i>tasnif</i> which reflects the <i>darâmad</i> of the <i>dastgâh</i>)
<i>Javâb</i>	(instrumental ensembles response to the previous section)
Vocal2	(next lyrical section which reflects the second major <i>gushe</i> of the <i>dastgâh</i>)
<i>Javâb2</i>	(instrumental ensembles response to the previous section)
Section 3, 4, etc	(follow the same format as the first and second sections of the <i>tasnif</i>)

Reng (instrumental rhythmic composition which signifies the ending of the performance)

Endnotes

1. Each *dastgâh* could be interpreted in several tonalities by changing the “fretting” (*parde*) or changing the “tuning” (*kook*). For example the female voice ranges are chap kook and for male voice are râst kook.

2. Large scales occur in different genres. Several genres may participate in parallel in the construction of large scales because different paths may be taken to arrive at different poles of the large scale. In fact, the forth, fifth and octave have a specific energy which create a significant polarity in the hierarchy and anarchy of sounds.

3. The sign “b” stands for a flat and “p” stands for a koron. A *koron* is a sign, that decreases a note about a $\frac{1}{4}$ of a tone.

4. There are folk musicians in Iran such as Âshiq of Azerbaijan or Bakhshi of Khorâsân who continue this tradition to this day.

5. For example in darâmad of Shur an open string (F) is tuned with an interval of second with the next open string (G). Therefore, the tetracord G, Ap, Bb, C is augmented with a lower tone and becomes the pentachord F, G, Ap, Bb, C. In the same *gushe*, starting from a higher octave (*darâmad-e Khârâ*), in descending to the lower position we observe that in fact the tone (F-G), which has been added to the tetrachord, is the last tone of the lower tetrachord which is D, Ep, F, G.

6. As the frets are movable on the setâr, I fixed them for playing all different modes on different occasions and I measured the placement of the frets by an electronic tuner. The measurements in cents are based in this experience.

7. In general, it is a continuous note

accompanying the melody line. In string instruments, such as the târ and setâr, two of the strings are tuned to the functional notes of a particular mode. These strings, also called *vâkhun*, resonate as sympathetic strings and are intermittently stroked. However in wind or bowed instruments this note could be played by the same or another instrument.

8. Marâghi, ‘Abd al-Qâder, 1977 *Maqâsed al Alhân*, Tehran, Bongâh-e Tarjome va Nashre Ketâb.

9. Here we are referring to *âvâz* as a part of repertory which has a very flexible and non-measured rhythm, contrary to zarbi which has a measured rhythm and can be accompanied by a *zarb* percussion instrument. *Âvâz* has several meanings in Persian music. The first meaning of *âvâz* is vocal and the other meaning is a smaller modal system which is considered to be a derivative of the *dastgâh*.

10. This period signified “western notation” as an emblem of musical modernization for Iranians. Western notation came to Iran at the end of the 19th century. Iranian pioneers using this notation did not realize that this method of writing was based upon concepts that may not be suitable for Persian music. Instead of conforming music to this structure they utilized the notation to serve the music. The invention of two signs (*koron and sorî*), which represented half flat and half sharp notes, were meant to enable the writing of the scales in quarter tones.

11. In this system, the structure of melody, which cannot be transformed, is written by these

notational symbols where the ornaments are written by additional signs. Therefore a beginner can start by playing the structure,

and as he/she progresses can add supplements. Separating the structures and supplements helps to reveal what is considered to be non-changeable from what is changeable. Traditionally the same repertory is used for beginner and advanced students. Therefore it is important for the professor who is teaching the repertory by heart to adapt the material to the level of the student by simplifying the lesson simultaneously. It is important to note that this repertory is a material meant for musical creation. Therefore it is important for the learner to grasp the idea of the fundamental structure and distinguish it from the changeable and flexible elements.

12. The repertory of melody-models (*gushes*) has been collected and taught by master târ and setâr-players by the mid-nineteenth century, but gradually other instruments such as santur, violin, kamânche and ney followed this school and appropriated their own version and style within this musical corpus.

13. Some gushes are the independent forms based on the poetry, such as: Masnavi, *Rajaz*, *Chârpâre*, *Dobeyti*. We can consider one part which is a complete cycle of these gushes as signifier (for example, the first four phrases in the case of *chârpâre*).