Iranian Classical Ney: Pedagogy and Performance

Arya BastaniNezhad Teheran School of Music. Teheran. Iran

Abstract

The Iranian ney is the chief wind instrument of Iranian classical music. This exploration of the structural and key pedagogical elements of ney playing, such as timbre, tone production, posture, inner hearing and expressive fingering, is undertaken through using an autoethnographical approach. The author's long experience of learning and teaching the ney and Western classical flute has largely contributed to its formation. This will provide a source for ney players, teachers and teacher educators to gain a better understanding of the commonalities and the differences between the two great traditions, Iranian classical and Western classical styles.

Keywords Iranian, classical, ney, performance, pedagogy

Both of the terms *ney* or *nay* are Persian words meaning grass pipe or windpipe.¹ The person who plays the ney is called a *neynavaz* or ney player. The ney is probably the oldest pitched instrument known to humanity and dates back to at least the third millennium BCE. Until the last decade, the term *ney* had been the most widely used as a name for the instrument although recently traditions have replaced it with more native names such as the Arabic *Shabbaba*, Armenian *duduk*, or in the Azeri language, Balaban and Kurdish *shemshal*. Despite being the chief instrument of Iranian classical music,² the ney has been mostly overlooked by writers and researchers.³ Not only is Iranian classical music, particularly that performed on the ney, overlooked, but there is also a tendency by international scholars to group diverse Middle Eastern musical cultures under the misnomer 'Arab'. Such misconceptions are found especially concerning the 13th century manuscripts by Iranian theorist-musicians such as Abu-

¹ In the Persian language *Nay* also means trachea.

² Iranian classical music "refers to the master-disciple educational framework in which all performance and interpretation happens through imitation, memorization and repetition of the *radif* or the Iranian music repertoire until after many years of study the student becomes a mature improviser-composer". Iranian classical music may be referred to as traditional music by some authors. The author uses the term 'classical' as it perfectly demonstrates the kind of music following long-established principles rather than folk, regional, religious and ceremonial music, which are all important parts of the Iranian tradition and culture. By comparison, while Iranian music is chiefly reliant on oral transmission, the preference in the Western classical music tradition is mainly on written notation which is not necessarily appropriate to the Iranian context.

³ The ney has been treated very briefly and compactly (about one and a half pages) on all types of neys in Iran, Arab countries and Central Asia, in *Grove Music Online*.

nasr Farabi (Farab is a city in Khorasan, Iran), Safi-edin Urmavi (Uromiyeh is a province in northwest Iran), Abdol Qader Maraqi (or Maraqeh, is a city in northwest Iran), and the 15th century theorist Ootbedin-Mohammad Shirazi (Shiraz is a city in southwest Iran). Each scholar's name identifies him with his city of origin in Iran – this is important as many Western authors have mistakenly identified these theorists as 'Arabic or Islamic' (see Farhat, 1990). This study is the first to address the pedagogy of Iranian classical ney that merges both Western and Iranian pedagogies. Iranian classical music education follows the master-disciple educational context in which all performance and interpretation takes place "through imitation, memorization and repetition of the *radif* or the Iranian music repertoire until after many years of study the student becomes a mature improviser-composer" (BastaniNezhad, 2014). This helps ney students, teachers and teacher educators to better understand the similarities as well as the distinctions that lie between the two great music traditions, Iranian classical and Western classical styles. Furthermore, such multicultural research allows a deeper awareness and understanding that there are multitudinous but equally valid forms of musical traditions and artistic expression. This can help researchers and performers to broaden their perspectives based on understanding, tolerance, and respect for a variety of opinions and musical genres (William & Campbell, 1989).

Research Methodology

Authoethnography is a research method that encompasses "self-observation and reflexive investigation in the context of ethnographic field work and writing" (Maréchal, 2010, p.43). Authoethnography is a composite which amalgamates ethnographic and autobiographical research methods (see Ellis, 1997; Ellis & Bochner, 2000). It is a form of pedagogical investigation that allows an insider-researcher to utilise personal lifelong experiences to enrich research. This method has been used by many autoethnographers in various research fields (e.g. Ellis, 2004; Hayano, 1979; Jones, 2005; Maréchal, 2010, and others). This research method has been employed where it is important to frame autobiography in the ethnic, historic and socio-cultural values to which the researcher belongs. For example, Luitel (2003) used his experiences in narrative and artistic modes to examine his placement in relation to others in his social environment. Also, Kiester (2008) used the same approach to question how cultural and musical traditions and values are renegotiated in modern society. This method helped him to demonstrate how the cultural values are best appreciated "not as a fixed doctrine imposed from above by elite culture-bearers" but rather in the "action of handing down" (Kiester, 2008, p.239). This self-conscious form of documentation allows a researcher to illustrate the transmissional experiences that they participated in have undergone during their pedagogic journey.

This method will reflect a more "reflexive account of one's own experiences situated in culture" and relies on the "claims made by the authors than anything else" (Ellingson & Ellis, 2008, p.449). In this sense, autoethnography is also a musical practice as the researcher is reflecting on the experiences and practices that embrace both content, for example Iranian classical music, and the context in which it is transmitted. An important advantage of this approach in researcher is to familiarise readers with the subject matters that may be hidden to an outsider researcher although

the status of "an insider or an outsider is a very fluid status" (Rabe, 2003, p.150). My academic background in both Western flute and Iranian classical ney reflects this type of two-sided approach in research in order to improve the accuracy of the research findings. To gain this I also combine autoethnography with critical and interpretative frameworks for researching the practices and techniques of ney (Iranian) and flute (Western) pedagogies.

Structure and Construction

The Iranian classical ney or *ney-e haft-band* is a vertical end-blown flute with five finger holes in front and one thumb hole in the back (Figure 1). The ney is solely a pipe with six holes with no keys or complicated mechanism. The ney is used in both Iranian regional music and Iranian classical music contexts; however, they are starkly different in terms of their performance practices and tonal quality. Today, the ney can be classified into two distinct types according to its performance style: Pastoral and Iranian classical styles. The pastoral ney is played on the lips and used to play Iranian regional music, such as that of shepherds. This manner produces a kind of scratchy and airy sound which is more limited in terms of clarity of the sound, distinction between the registers, dynamics, volume variation, articulation and détaché. This style is very much like the ney style which is common throughout the Middle East, specifically the Turkish, Arabic and Egyptian neys. However, what distinguishes the Iranian classical ney from the other similar types in the Middle East is the application of a mixed technique known as inter-dental or lip-tooth tongue performance technique which includes an advanced use of both the front teeth lips as well as the tongue.

This technique allows an absolutely pure and resonant sound, enabling performers to make a clear differentiation between the low, middle and high registers. This timbral distinction of the Iranian classical ney has brought considerable international recognition to this instrument. It has also led to the emergence of the unprecedented masterpieces such as the ney concertos by prominent Iranian classical ney, During says that "the remarkable attribute of the Persian ney is its sonority, very powerful or hardly audible, when in expert hands" (1931, p.135, as cited in Movahed, 1993, p.18). This unique timbral characteristic of Iranian classical ney is fundamental to both performance aesthetic, and learning and practicing Iranian classical music repertoire known as radif, which is referred to as the collection of the melodic patterns or *gusheh*-*ha* (singular: *gusheh*) constructing the structure of Iranian music. ⁴



Figure 1 Iranian classical ney.

⁴ Radif also signifies the specific discipline on which all gusheh-ha are performed, listened to and related to one after another. For more information on radif, please refer to Farhat (1999).

The Iranian classical ney is constructed of a piece of Arundo Donax which looks like a bamboo cane (Figure 1).⁵ In Iran, the neys are collected from the dry and hot climate regions such as Kashan, Qom and Esfahan. In the reed beds there are hundreds of canes, however, only a very few of them are appropriate for professional performance. Each ney consists of seven segments or *bands* and six knots. In fact, the expression 'ney-e haft-band' or the ney with seven segments has originated from this feature. However, the number of the bands sometimes varies such as neys with six bands. The ney's segments decrease slightly in length and diameter from the top to the end of the ney which gives the ney a slightly conical bore that is important in the formation of the ney's tonal strength, quality and timbre.

In constructing the ney, once the reed is cut the knots inside the ney need to be precisely cleaned and scraped. This also improves the sound quality as it increases the vibrating air column and resonance inside the tube. However, the other similar types, such as the Turkish ney and the shepherds' ney music of Iran, are not completely scraped from the inside. Some ney makers and players are of the belief that the unfiled bore might be the reason for the tonal impurities and therefore ineffective staccatos, articulation and attacks (Movahed, 1993).

Decorative and Protective External Accessories

There are some external accessories used in the construction of the ney, bringing long lasting endurance and elegant appearance to the ney. These are *sari, touq* and *leather ribbon*.

Sari

The upper opening of the ney is often covered by a short brass or plastic cylinder called *sari* (Figure 1). The sari is usually made of a piece of flexible plastic, such as X-ray film, wrapped around the top, sticking out slightly (about 0.5 cm). The sari is positioned in the tiny space between the upper incisors of the player. On some occasions, performers who have no gap between their front teeth to insert the ney in, prefer to make a small cut in the sari allowing the ney to enter further in the mouth.

In contrast to the other ney types, such as Turkish ney, the sari is not considered as a mouth piece and is mainly used as a protective device. Otherwise, the edge of the top opening will be worn out after a short while, causing a gradual reduction in the length, and therefore, tuning of the instrument (Lotfi, 2009; Movahed, 1993). Some ney players create a smooth and very thin sari to improve the resonance and contribute to the purity (clarity) of the ney's second and third register sound. However, there are other important key elements such as posture, player's blowing manner, efficient use of the vowel shapes in the mouth cavity, throat, tongue, cheeks and embouchure that need to be considered prior to the use of sari. The sari is also used as a decorative attachment which could be made out of brass, gold or silver.

Two of the author's ney teachers, Kassaie and Jahandideh, used to apply a sari of the same material as the ney. There are certain reasons behind this: Firstly, playing with

⁵ Arundo Donax is also used to make reeds for clarinet, oboe and bassoon.

the wooden sari makes a more natural sonority; secondly, playing with the metal sari could be harmful for the performer's overall health; and, thirdly, the edge of the brass metal could be detrimental for the oral health as it scratches the teeth and gums.

The sari can change the pitch either up or down up to a semitone by sliding it up or down in order for the ney to be tuned with other instruments. The author has observed many ney masters, including my teachers Kassaie, Jahandideh and Afsharnia, playing the ney with and without sari in various musical events with no difference in the produced sound.

Touq

The touq is a brass ring or cylinder which is placed at the bottom of the ney (see Figure 1). Touq is used to protect the ney against cracking and to contribute to the elegance of the instrument. In addition to its decorative role, the touq can be also be used to adjust the tuning and intonation by enlarging the ney length and therefore lowering the pitch.

Leather Ribbon (Band)

In addition to the metal cylinders at either the top or bottom of the ney, the leather ribbons or strings are wrapped around the nodes (or knots or the cane) (Figure 1). This is to cover the points where the leaves have been cut off the ney, from one hand, and to protect the ney against probable breakage, as the nodes are the most vulnerable spots on the ney.

Maintenance of the Ney

There are a number of important procedures regarding the maintenance of the ney before and after construction. The canes should not be stretched or bent while cutting on the nodes in the bush. Also, care should be taken during removing and filing the knots from inside the ney (Figure 2). After being constructed, oiling is considered the most crucial rule of ney maintenance. Oiling not only protects the ney from drying out but also provides the performer with the desired tonal smoothness through providing a far smoother surface across the interior surface of the ney. A newly made ney needs to be oiled every week within the first month. Following that, it needs to be oiled once a month. The frequency of oiling is highly dependent on the time spent playing the ney after its construction. The author has often heard from his and other ney teachers that for a new which is regularly in use, oil is not required. This is because the regular blowing supplies enough moisture for the ney. The necessity for oiling could also be related to the dryness and temperature of the surrounding environment; the hotter and drier the weather is, the more oiling it requires. It is worth mentioning that some *neynavaz-ha* (plural meaning ney players) give the ney water, as a moist or wet ney has a much smoother sonority; otherwise, it takes five to 10 minutes to be naturally moisturised by the blowing of the performer. There are various kinds of oils, such as olive and almond oil, and also many oiling instructions around the world which could be executed by different individuals. As an example, one method is explained: After

pouring a few spills of oil through the top opening and dripping a few droplets in each hole of the ney (50 ml is enough for the whole ney), the inner tube of the ney needs to be slowly rubbed with an oil-soaked cloth or sponge which is joined to the club or wire. This could be repeated two to three times until the inside of the tube becomes saturated with oil. Following that, it is suggested to lay down the ney horizontally on a smooth surface for at least four to five hours to completely absorb the oil. Then it is desirable for the ney to be leaned against the wall for a while, allowing it to drain the extra oil accumulated through its inter-nodal structure. In this way, the oil covers all parts of the ney without being wasted or being spread much on the exterior side of the tube and its attachments.

Neys are naturally strong and hard to break easily, however they could be bent if they are exposed to intense heat or rapid temperature changes. It is preferable to keep neys in a hard case, however, ventilation is important otherwise the closed box could smell unpleasant from the oil and possible spots of mould inside the instruments.

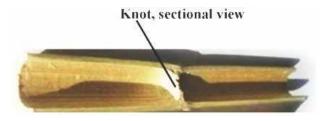


Figure 2 Ney's Knot.

Registers of the Ney

The ney is an harmonic woodwind instrument. This means that on a ney, with all fingers down, one can play about four harmonic notes, including C¹, C², G² and C⁴, which form an harmonic series.⁶ These four tones are the (lowest) starting tones of each of the ney's four registers. These tones can be naturally produced by overblowing that is accompanied and supported by vowelising through changing the vowel shapes in the mouth, while using different vocables such as ho, hā, hoo and he, to produce a resonant tone in each register. This technique can be used to raise the pitch from the first harmonic (C) to the second harmonic (C²) and similarly from C² to the third harmonic or G², and accordingly to the fourth harmonic (C⁴).

Therefore, the ney has a range of two and a half octaves divided into four distinct registers named as (1) *bam*, (2) *zir*, (3) *qis*, and (4) *pas-qis* (Figure 3). These terms are applicable to both the ney's registers as well as the sounds of different registers (i.e. the bam register or bam sound). There are two accidentals, E^{\uparrow} and sori as F^{\ddagger} in the bam, accounting for the microtonal adjustments of the pitches (see the section on fingering below).

 $^{^{6}}$ The third harmonic note, G^{2} , is considered the fifth note of the second register, as well as the first note of the third register.

 1.bam: C¹, D¹, E P¹, F¹, F¹, G¹, A¹ (seven fundamental notes).
zir: C², D², E P², F², F³, G², A² (second harmonics, one octave above the bam).
qis: G², A², B P³, C³, C³, D³, E³ (Third harmonics, one octave and a perfect fifth above the bam).
pas-gis: C⁴, D⁴, E P⁴, F⁴, F⁴, G⁴ (Fourth harmonic, two octaves above the bam).

Figure 3 The registers of Iranian classical ney

As shown in Figure 2, the first register, the bam, goes from C to A. There is a missing note in the bam, that is the B, which can be produced by pulling up the corner of the lip where the ney is anchored, corresponding with changing the angle of the air in flute playing, and through over-breathing into the B note, or a combination of these two techniques. Similarly, the upper lip technique can be used to reach the B that sounds a semitone below the lowest note of the first and second register, C¹ and C², by bending down the pitch with the upper lip. The second register or zir plays an octave higher than bam and goes from C² to the A². The third register, the qis, sounds an octave and a perfect fifth higher than bam which goes from G² to E³. Qis register shares two notes that are G² and A² with the second register. In other words, the two highest notes of the zir, are the same as the two lowest notes of the qis. These notes are used as a bridge between the second and third registers making it possible to connect these two registers smoothly in ascending and descending phrases. The fourth register, the pas-qis, plays two octaves above bam. Pas-qiz is used to produce only one tone, which is F⁴ as the continuum of the high E³, although it is rarely used in performance.

Timbre

The timbre of each register aurally distinguishes one from another. The bam register can be played in two ways: The strong rough bam with a considerable portion of the first, second and third harmonics, which are hardly discernible by an amateur listener; and the soft or smooth bam or *bam-e narm* which has by comparison a darker and softer tone. The sound of the zir register is quite distinct from that of bam with its gentle and sweet tone character. The zir sound, in contrast with the Turkish-Arabic ney, is pure and clearly distinct from that of bam. Accordingly, the qis and pas-qis can be recognised by their shrill sound. It is important to mention that, traditionally, phrases in bam are not mixed with the zir and qis whereas the phrases in zir and qis can be mixed with each other while maintaining their own specific timbre.

The tone of the ney is very close to the sound of the human voice and it is said to have a very personal relationship with the personality of the voice of its performer. The ney requires the musician's breath, and the instrument uses it to sing. From a mystical aspect, it is worth mentioning that the ney had an extremely important status in the Persian Sufi practice. The ney has been respected as the mystics' instrument in

54

Iran. The reed flute is often compared to the human being; starting its life as a reed, it is removed from its home on the riverbed, mourning for its separation. It is only said to be reconnected once it is being played by a human's lips. Rumi, an Iranian poet and mystic of the 13th century has beautifully likened the ney's mournful tone to the human's soul in his Mathnavi Ma'navi, expressing the desiring, the mourning, the craving for a return to source as the soul also wants to be united and to return to the source. A verse from Rumi (translated by R. A. Nicholson) captures this feeling:

Listen to the ney, how it tells a tale complaining of separation,

Ever since I was separated from the reed bed my lament has caused man and woman to moan.

Tuning or kuk

The Iranian classical ney and other similar types of flutes throughout Middle East have fixed tuning. Therefore, the neys are produced in various tunes or sizes (from 20 to 90 cm) to meet the performers' musical needs. Neys are named by their lowest note (closed holes) although the size of the ney is always indicative of its tuning or *kuk* for an expert neynavaz. Therefore, the ney with the lowest note C, which is equivalent to the middle C of the piano (261.626 HZ), is called C ney or ney C kuk. The most commonly used neys for solo performances are those in C and B flat, and those used for ensembles are in B flat and G. The ney in F has a very low and dark sound and is occasionally used to produce sound effects in ensembles or music recording studios.

In contrast to Western music, in Iranian music the absolute pitch has not been of great importance. As a result, in Iranian classical music the concept of the pitch and therefore tuning (kuk) is relative (Lotfi, 2009, p.286). The *kuk* is slightly changeable in order to be adaptable to either the singers' voice range in the art of *javab-e āvāz* (call and response) or to performers' personal musical preferences for playing around the standardised pitches in different musical modes.

Performing various modes in Iranian classical music is possible through employing different length neys such as the neys with alternative tuning of the C#, B flat and F neys. For example, one can begin with the C ney and change it later during performance to the F ney which is an octave higher. This is the easiest way of changing the kuk which is sometimes undertaken to compensate for the performer's lack of expertise in confronting the parts which tend to be played at the ney's higher registers or especially when they are hard to perform in terms of their fingering techniques and the connection between the registers, as well as desiring to play with a specific timbre of a register. Establishing various tonalities is also possible by covering half or a quarter of the holes, although this would be a laborious task and takes a lot of effort to master.

The above description provided an examination of the structure, construction and maintenance of the Iranian classical ney. The following discourse aims to investigate the other important pedagogical elements which are determined as the crucial basis for both the pedagogy and performance of the ney and flute.

Pedagogical Elements

The emergence of the unique inter-dental or the lip-tooth-tongue performance technique by the Qajari master of the ney, Nayeb Asdollah, in the early 20th century created new opportunities for the ney to display itself beside the other Iranian classical instruments. The shift from a pastoral style to the current technique gained recognition through the efforts of the Ostad Kassaie (1928-2012), and is considered as a major development in bringing the ney from the Iranian regional to the Iranian classical style which is capable of rendering all the delicacies of the radif.

The next discussion will examine some pedagogical themes in relation to physical and musical aspects of ney performance. These elements have been completely overlooked in the literature by both Iranian and international scholars. Acquiring a true knowledge of these aspects is essential in ensuring the best outcome in teaching, learning and practicing the ney. These matters will be discussed under the broad headings of Posture, Inner hearing, Breathing, Tone production and Fingering.

Posture

The first consideration concerns the holding of the instrument and the second consideration is the position of the performer while playing (sitting or standing).

Holding the Ney

The procedures involved in holding the ney appear to be more simple and natural than that of the other wind instruments such as the flute due to two features. The first attribute is related to the constructional simplicity of the ney. For instance, the ney's weight is almost eight times lighter than the flute; a C ney with all the attachments weighs about 70 grams whereas a silver C flute with a B-foot joint is about 450 grams. The second attribute seems more anatomical and is related to the ney's symmetrical playing position. This is because the ney is held straight in front of the performer with the upper opening in the mouth with the sari being anchored between the incisors (front teeth) of neynavaz (see Figure 4). As a result, there is much less effort and energy consumed to resist gravity while holding the ney compared to the asymmetrical holding position of the flute. The ney has one actual hold-point which is on the knot between the first and second hole near the lower end of the ney or between the two lower pitches: C and D. A neynavaz or ney player uses his/her middle finger and thumb of the lower hand, which could be either left or right hand, to anchor the ney on this point without strain. Also, by putting the ney in the mouth, the lower jaw creates another fulcrum thereby the ney is kept steadily between the hands and the lips of the neynavaz while playing. In the fingering of the ney one finger, either the middle or the ring finger of the upper hand always remains on the ney. This adds more support for holding the ney during performance. There is no specific rule for the order of the hands on the ney; hence, one can hold the ney with either the left or the right hand. However, it may be difficult to switch the order of the hands after the neynavaz has been accustomed to it.



Figure 4 Neynavaz in standing and seated positions.

Sitting Cross-legged

In contrast to the Western performance style, in the Iranian classical context it is traditionally desirable for individual performers to play the instrument while sitting with their legs crossed on the floor. In Iran as well as other Middle Eastern countries there are many classical and traditional players who still adhere to this ancestral and conservative sitting style. However, since the advent of the 20th century there has been a shift from the traditional crossed-legged style to more modern manners such as sitting on a raised seat or stool.

As far as the postural-physiological aspects are concerned, the crossed sitting style can lead to many issues during performance such as a sense of pins and needles in the legs, thighs and buttocks, as well as respiratory problems. The reason is that the neynavaz has to spend quite a lot of energy that should be used for musical purposes on keeping the upper body, head, neck, shoulders and chest straight while constantly resisting the pull of gravity. This leads to a tensed upper body and will result in unfortunate tonal consequences such as an unwanted throat sound, a lack of brightness and fluidity, as well as a raised pitch. Moreover, the crossed-legged style draws the buttock inside towards the legs, giving an arched shape to the body. This position causes the nevnavaz-ha to lose the centre of gravity by tucking in the lowest 6-7cm of the lumbar spinal column. Additionally, such slumping prevents the ideal alignment of the head, shoulder and the buttocks, which is essential in playing almost all wind instruments. Finally, another problem for the cross-legged sitting style are the difficulties concerned with the use of the music stand. It seems so unusual to place a music stand while sitting on the floor as it hinders the natural visual interactions between the performer and the audience. As a result, the traditional cross-legged style would only be compatible with the improvisatory performances in which the music is preserved and rendered through the memory of the performer with no need for notation or music-stand.

57

Sitting on a Raised-seat

Since the mid-20th century the growing spread of printed, composed music for the ney ⁷ as well as the other Iranian classical instruments has brought about a shift from playing on the floor to playing on a raised seat. This shift may also be a response to the increased public awareness of the auxiliary somatic systems such as Yoga, Tai-chi, and more recently, Alexander Technique and the Feldenkrais Method, which have been used to improve postural coordination and body movement in music performance since the 20th century.

In addition, when playing with an ensemble, the ney is most often accompanied by percussion instruments, such as *dombak* and *daf*, for which the performer must sit to play. Unlike the Western music tradition, in Iranian solo performances it is not culturally desirable for the ney soloist to be separated from other performers by his/her standing on the stage.

It is notable that there has not still been unanimity on these two sitting styles among Iranian performers and the author has observed either style in various public concerts across Iran. In general, the crossed-leg style has been largely followed by folk and conservative performers, whereas the other style has been more attractive to the younger generation of the performers in the universities.

Standing Position

The ney is the only Iranian classical instrument that can be played while standing (Figure 4). This feature arises from the physical structure of most Iranian classical instruments which all need to be placed on a flat surface or held by the performer's legs and arms. Despite the general willingness of current ney performers to sit on a seat, standing is more compatible with playing the ney as it brings many benefits to the performers such as a stabilised posture, easy breathing, a better control of intonation and looseness of the upper body.

The advantage of the standing position over a seated stance is that almost all the essential performance skills would be attainable through using the big muscles of the lower body including the muscles of the lower back, the buttock and the thighs. Involving these muscles considerably helps the body to resonate besides providing the lowest possible centre of gravity. An ideal standing posture means that all the forces cross on the point of gravity that is the closest to the L4 lumbar vertebra. In such ecole the upper body does not have to carry the point of gravity in order to counteract the force of gravity (Feldenkrais, 1990). This contributes to an ideal alignment of the spine from the pelvic region up to the atlas, the topmost vertebrae. The ideal postural alignment helps to save energy and protects the performer against unnecessary body and head movements as well as the lips jerks that are prevalent among neynavaz-ha. It also helps the performer have a broader field of vision and contribute to the aesthetic impression of the audience. Otherwise, the muscles of the upper torso are continuously involved in a kind of compulsive and negative effort to maintain straight body posture.

⁷ Please refer to Neynava (1983) by Alizadeh and the ney concerto (2006) by Reza Vali.

Poor posture creates major difficulties in terms of breathing and technical aspects of performance with no reduction in tension. Such a concept of straight posture is far from the typically accepted posture for ney playing which is typified by a drawn abdomen, stiffened back and raised head or neck thrust forward.⁸

In order to maintain the upright posture the feet should firmly be planted on the floor. Accordingly, it is the best for the feet to be firmly planted on the floor all the time to provide enough stability and balance. In this situation, not only the feet form the vital base of support for performance but they allow the performer to be always able to feel his/her own weight and be conscious of gravity.

Also, it is important to ensure that the knees are relaxed and not locked in order to obtain a flexible posture. The feet shoud be about shoulder width apart to improve balance. Thus, acquiring an efficient standing posture is of great pedagogical value as it "will gratify the eye no less than the sound of the instrument will delight the ear" (Hotteterre, 1984, p.9).

Head, Shoulders, Elbows and Legs in the Sitting Position

In playing of the ney, the head is turned slightly, about five to ten degrees, to the left or right depending on the side on that the ney is positioned in the mouth (Figure 4). This little sidewise inclination contributes to the change of register from the bam to the zir and qis on the ney through changing the angle of the air (Kianinejad, 2011). In playing of the ney, the head should not fall over at any circumstances as any downward bending or forward positioning of the head can easily block the throat. This would be considered one of the foremost causes of a strained sound quality. The shoulders should be aligned with the elbows which are held outwards from the body. In both sitting crossed-leg on the floor or standing styles of playing, slumping is certainly incorrect as it limits the freedom of the chest and abdominal muscles that are essential to breathing and tone production. Therefore, it is crucial to keep the shoulders almost square in order to prevent the reduction of space for the lungs. Further, sitting or standing with the shoulders straight provides more freedom to the neck, throat, jaws and the embouchure in general. Crooked shoulders and projected neck may sometimes be followed by resting the elbows on the belly, bringing the body into an awkward position which leads to a shaky tone and airy sounding middle and high registers. In the ney performance the elbows should be approximately 10 to 15 centimetres apart from body. This remains the same in the standing position.

The most important principle regarding the shoulders, arms and elbows in all positions is to allow the arms to be suspended so they are not stiffened or locked. Stiffness around these areas can interfere with the breathing process since it brings the rib muscles into real spasm. This causes the performer to pant throughout performance and can result in undesirable mid-phrase interruptions to the music. On the other hand, suspending the arms and the elbows helps the performer breathe in on the musically appropriate spots. Thus, breathing should not turn into a tedious dilemma for the performers. Also, holding the arms away from the body makes the performer feel more

59

⁸ For more information on support-balance and the centre of gravity see BastaniNezhad (2012a).

relaxed so they can comfortably play for a longer performance time. It is very important to hold the ney still while playing to avoid tonal and technical problems. Some ney players are used to moving the ney or both their body and ney with the meter of the phrase. This requires caution as the performer should refrain from generating isolated and distracting movements of the arms, head, neck and shoulders. Such movements can be replaced with harmonious, musically appropriate and holistic body movement that are mainly seen as lateral body movements among professional virtuosos.⁹

Inner Hearing

The simplicity of the ney's construction has led ney players to be more reliant on their musical competence and musicality rather than the physical components of the instrument. This simplicity has led to the complexities involved in the tuning, intonation and tone production techniques of the ney. This means that developing a very accurate sense of inner hearing and instrumental readiness seem to be very crucial prior to initiating learning this instrument. In fact, what makes Iranian classical ney distinct from the keyboard and fretted instruments is the importance and necessity of inner hearing during performance. Although developing all instruments, in the case of the ney it needs to be developed even before starting to learn to play the instrument. Inner hearing is developed by means of the art of $\bar{a}v\bar{a}z$ or Iranian classical singing taught based on the vocal radif of Iranian music and aural skills through solfège exercises. ¹⁰ Sometimes, these kinds of learning are used to increase learner's musicianship in conjunction with ney playing.

All the tones of the ney, in all registers, really need to be adjusted by the control of the air pressure and speed as well as the inner hearing. It means that all the notes have to be precisely heard, sensed and adjusted internally before the actual performance on the instrument. The performer must think through the music entirely in advance. This demands a very high quality of musical concentration. The ability of inner hearing can be developed through singing Iranian vocal music known as $\bar{a}v\bar{a}z$. The expression singing through the ney arises from this concept of inner hearing in which the performer sings the music in his/her mind and then evokes the very sounds through the ney.

Breathing

Breathing technique is considered one of the most determinant factors in playing the ney, and directly affects the quality of the sound produced. The performer's control over the respiratory muscles in relation to the role of the tongue, and embouchure are all important factors accounting for the quality of tone and performance proficiency.

⁹ For more information on support-balance and the centre of gravity see BastaniNezhad (2012b).

¹⁰ In Iranian music universities solfège is taught based on French Fixed-Do solfège system in which the syllables, *do, re, mi, fa, sol, la, si*, are used to sing scales, intervals, and melodic exercises.

Apart from the technical aspects of breathing,¹¹ one important aspect of breathing in the performance of the ney is how to determine the timing of breathing during improvisation or "the creation of a musical work, or the final form of a musical work, as it is being performed" by its performer. ¹² It is easier to specify in advance the time when a performer should take breath in pre-composed music such as Western classical music, rather than in improvised music such as the Iranian classical music. This means that the master of the ney has to think of the times when he may breathe based on the modes, length and meter of the non-written musical phrases during improvisation. To achieve a high level of skill in finding the proper breathing spots, an Iranian ney performer is required to think ahead of the actual time that he performs in order to determine the phrase(s) that must follow throughout the improvisation. To gain mastery of this technique in Persian music, which is constructed of numerous varied modes and

melodies, necessitates years of practice besides a high degree of musical knowledge.

Tone Production

Tone production is influenced by embouchure and the resonating facial sinus and chest cavities. As part of the embouchure facial muscles, lips, tongue and teeth enable the ney player to play the instrument at its full range with a pure, clear tone and without strain or harm to his or her muscles. Figure 5 demonstrates the ideal neynavaz embouchure and the proper position of the jaw, the lips and the tongue. As shown in the photo, the tongue is placed behind the ney's mouth piece, moving very gently to produce different registers by varying the airstream blown into the ney, corresponding to the hissing sound made whilst blowing into the ney. The tongue is, in fact, involved in positioning the reed inside the mouth and thereby directing the quantity of air blown into the ney at the proper angle. By pressing the tongue against the palate, for example, the performer can switch to the upper register. Therefore, every note and register of the ney is constantly influenced by the very subtle motions and changes of the tongue during performance and the speed of the airstream. Thus, the foremost principle of producing the right tone is to control the tongue's angle in relation to the ney's mouthpiece. As such, since the tongue is fixed behind the sari, it cannot play any role in making different articulations similar to Western tonguing technique. The throat, the cavity of the mouth, teeth, sinuses and the chest cavity are the performer's resonating box. Hence, keeping the throat open besides placing the ney more deeply inside the mouth help enlarge the resonating box resulting in creating a finer and stronger sound, especially in the low register.

Consequently, the second most important requirement of a good sound is the role of the throat and the mouth cavity in enriching and supporting the sound. The shape, size and quality of the teeth will impact the vibration of a note and therefore the quality of the produced tone. This is because the player has to put the ney between the front

¹¹ More information on breathing may be referred to BastaniNezhad (2012a).

¹² The New Grove Dictionary of Music and Musicians, Sadie (1980, pp.31-32). The research on improvisation and pedagogy of Iranian music is beyond the scope of this research. Useful information on improvisation in Iranian music pedagogy may be found in Bastaninezhad (2014) and Nooshin (1996).

upper teeth in order to produce the sound. Similarly, the teeth of a singer would be an important feature influencing the voice quality as a singer without teeth is unlikely to have a pleasant voice. The upper lip is used to move the tones around in order to facilitate vibrato. In addition, the upper lip is used to produce two more notes that are out of the normal ney's scale as already discussed.



Figure 5 Neynavaz embouchure

Fingering

Microtones are structural to Iranian classical music. Therefore, in addition to the sharp and flat used in Western music theory, there are two more accidentals used in Iranian classical tradition: *koron* ($\stackrel{\triangleright}{}$) and *sori* ($\stackrel{\triangleright}{}$) which stand for "the microtonal lowering (about 45 cent) and raising (about 65 cent) of tones" (Farhat, 1991, pp.10, 17, 26). Koron flatten a pitch by a microtone and sori raise the pitch by a microtone. The only notes that naturally sound microtonal on the new include E^1 koron and its two harmonics, E^2 koron and B^3 koron in addition to F^1 sori and its two harmonics, F^2 soro and C^2 sori. The rest of the microtonal pitches and semi-tones could be reached through half or partial closing of holes from above which is fulfilled with accurate blowing and lips adjustments. Therefore, no cross-fingerings are required on the ney to generate either the microtones or the harmonic tones and all pitches follow the same sequence of holes on the ney. However, unlike the western flute in which the pitches are adjusted by means of the fingering and its complex system, none of the pitches of the ney sound perfectly in tune by themselves. This means that the pitches should be created and tuned first in the mind through inner hearing, as mentioned formerly. This characteristic of not relying on the tuning of the holes makes the ney a very challenging instrument to master compared to other instruments.

Fingering Technique

The performer's finger balls can be applied to cover the ney's six holes in three different manners: (1) a single finger covering the entire hole; (2) a finger covering half the hole; (3) a finger closing more than the half hole, about three-quarters, in order to

make the micro tones (Figure 6). Attaining the second and especially the third fingering positions demands a great deal of dexterity along with very sensitive and well-trained hearing acquired by lifelong effort. As a result, each hole has the capacity of producing three different pitches solely by the performer employing these three distinct fingering techniques.

Therefore, one is able to play three variations of, for example, A^1 that are: A^1 koron (a quartertone lower than A natural) by using thumb-hole, at the back of the ney, half-closed and by blowing less air; A^1 natural by blowing normal air; and A^1 flat by covering the half thumb-hole. Hence, the three different intonations of the A or other notes that can be achieved just by slight changes of the fingers and blowing intensity.

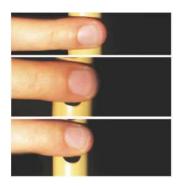


Figure 6 Three fingering positions

(From up to bottom: The entire hole covered; Half the hole covered; Three-quarters of the hole covered).

Expressive-fingering

There are some other specific manners of fingering which can serve to animate the ney's expression through varying the velocity and weight of the fingers closing and opening the holes. This fingering technique can be executed on the ney by hitting one hole successively for about four or five times (or more) without interrupting the air stream during the process. It may be likened to very briefly touching a hot surface by a finger. This technique of fingering helps to produce a tonal quality which is relatively similar to playing tenuto-staccato (a dash with a dot under or above it) on one note on the transverse flute. In fact, the balls of the fingers function as a substitute for tonguing which is never used to separate the notes on the ney. The finger's weight can be used to support a stronger attack on the note as it creates a tapping sound when hitting the ney's holes. Also, the notes can be nicely slurred up or down by very gently putting down or lifting up the finger balls on each hole in relation to the one before or after that. In this way the fingers act in a manner which is somehow analogous to rubbing the ney's holes to carry the sound from one note to either the next or previous note, similar to portamento in vocal music performance. This technique can be used to develop a mysterious character to the beginning or the ending of a phrase.

Another expressive fingering technique can be performed through shortly and promptly hitting the note which is either higher or lower than the actual ending note of a phrase. This technique may be used to bring a sudden end or pause to the music. One other important expressive-fingering technique can be achieved by imitating a vocal technique called *tahrir*, a metrically free melismatic segment, which is played to embellish the musical phrase or passage. On the ney, tahrir, which is shown with a little circle below or above the note(s), could be performed in several ways: First, to embellish one note by quick and successive alteration between two adjacent notes, which is relatively similar to the trill in Western classical music; secondly, to embellish a number of repeated notes playing in an upward, downward or cyclic melismatic movement; and thirdly, to embellish a group of extended notes, seven to 10 pitches, in either upward movement, which could be considered as the climax of music towards the cadence, or downward movement serving to bring the music to an actual end. However, the tahrir for the extended notes in both upward and downward directions could be performed solely for embellishment purposes without aiming to reflect the climatic point or cadence. These kinds of ornamental tahrirs frequently occur in the radif of Iranian classical music.

This aspect of fingering is certainly one of the major boundaries which separates the professional performer from semi-professional amateur ney players. The varying treatments of fingering techniques are to help the performer express their musical ideas from one hand and to respond to the various permutations of the complex radif from the other hand. In fact, the entire fingering variations on the ney are embedded in the radif. This finely reflects that the educational value of the radif lies as much in the process of learning as in the material being taught (Nooshin, 1996). As a result, after many years of learning and practicing the radif, the performers' fingering dexterity gradually rises whether or not they consciously utilise it. This is considered as the dynamic inner characteristic of Iranian classical music pedagogy.

Coda

Although the Iranian classical ney is the only wind instrument in the Iranian classical tradition, it has been the most overlooked subject by Iranian and international authors. As a result, the performance techniques and the pedagogy of the ney have not been addressed sufficiently by the ney teachers, and the pedagogical instructions have been largely based on an experimental basis with no tendency towards documentation. This has led to an uncertainty in explaining and analysing various aspects of ney performance and pedagogy, especially in tone production, breathing and postural considerations. This research may be the first attempt at addressing the performance and pedagogy of the ney by representing the key pedagogical elements that concern all ney teachers and learners, thus addressing a gap in the literature.

This research may go some way to addressing the incorrect information available through popular websites about the ney. Although common, it is not appropriate to cover all Middle Eastern music traditions in one group. Also, combined cross-cultural, ethnographical and linguistic-informed studies can help to a large extent towards a better understanding about the influence and contribution of Persian musicians and theorists to the musicians of other parts of the Middle East, especially since the Arab invasion in the mid-seventh century. For example, in Arab countries the classical ney is designated by the name of its fundamental note (heard by playing the first hole) such as *Mahur* (a city in Fars province in Iran, hills and high grounds), *Dogāh* (*do*: two and *gāh*: music) or *Dukāh* in Arabic, *Segāh* (se: three and *gāh*: music) or *Sikāh* in Arabic, ¹³ *Nava* (melody or music) and so on. ¹⁴ The majority of those and many other musical words, which are fundamental to Arabic and Turkish classical music, are the pure Persian words and transmitted from Persian musicians to the Arab world and other Middle Eastern traditions. Further research will be needed to examine the association that exists between the performance practices and pedagogy of the ney tradition and that of other wind instruments such as Western flute, oboe and clarinet. ¹⁵ This will benefit both Iranian and Western musical traditions.

References

- BastaniNezhad, A. (2012a). Automatic breathing and flute performance. *Journal of British Flute Society*, *32*(3) (September 2013).
- BastaniNezhad, A. (2012b). Finding balance through support in flute performance. *Victorian Journal of Music Education*: 1, 34-48.
- BastaniNezhad, A. (2012c). The role of the performer's centre of gravity in teaching Western flute and Iranian classical ney. *National Flute Association Journal, 39*(1).
- BastaniNezhad, A. (2014). A critical study of the Iranian teaching textbooks on Iranian Classical Performance. *Journal of Historical Research in Music Education* (in press).
- BastaniNezhad, A. (2013). A critical study of the music pedagogy in post-revolutionary Iran (1979-2010): Breaking down the boundaries between two musical methods. (Unpublished PHD dissertation). Monash University, Melbourne, Australia.
- Ellis, C. (2004). *The ethnographic I: A methodological novel about Autoethnography*. Walnut Creek, CA: AltaMira Press.
- Ellingson, L. L. & Ellis, C. (2008). Autoethnography as constructionist project. In J. A. Holstein & J. F. Gubrium (Eds.), *Handbook of constructionist research* (pp. 445-466). New York, NY: Guilford Press.
- Farhat, H. (1990). The dastgāh concept in Persian music. Cambridge: Cambridge University Press.
- Hassan, S. Q. & During, J. (n.d.) Ney. In *Grove Music Online. Oxford Music Online*. Retrieved from http://www.oxfordmusiconline.com.ezproxy.lib.monash.edu.au/subscriber/article/ grove/music/19644 (September 24, 2012).
- Hayano, D. (1979). Auto-ethnography: Paradigms, problems and prospects. *Human* Organization, 38(1), 99-104.
- Hotteterre, J. (1984). Principles of the flute, recorder and oboe. London: Barrie & Jenkins.
- Jones, S. H. (2005). (M)othering loss: Telling adoption stories, telling performativity. *Text and Performance Quarterly*, 25(2), 113-135.
- Keister, J. (2008). Okeikoba: Lesson places as sites for negotiating tradition in Japanese music. *Ethnomusicology*, *52*(2), 239-269.
- Lotfi, M. R. (2009). Majmu'e Maqalat-e Musiqi. Tehran: Rahbin.
- Luitel, B. C. (2003). *Narrative explorations of Nepali mathematics curriculum: An epic journey.* (Unpublished MSc Project Report). Curtin University of Technology, Perth, Australia.

¹³ The Persian language uses four letters which do not exist in the Arabic language. These are [p], [ch], [zh] and [g].

¹⁴ Please see Hassan & During (n.d.).

¹⁵ To find out more information about the interrelationship between Iranian and Western pedagogy, see BastaniNezhad (2013).

- Maréchal, G. (2010). Autoethnography. In A. J. Mills, G. Durepos & E. Wiebe (Eds.). *Encyclopedia of case study research* (Vol. 2, pp. 43-45). Thousand Oaks, CA: Sage Publications.
- Movahed, A. (1993). *The Persian ney: The study of the instrument and its musical style*. (Unpublished DMA dissertation). University of Illinois, IL, USA.
- Nooshin, L. (1996). *The processes of creation and re-creation in Persian classical music*. (PhD dissertation). University of London, Goldsmiths' College, London.
- Sadie, S. (Ed.) (1980). *The New Grove Dictionary of Music and Musicians*. (Vol. 9, pp.31-32). London: Macmillan.
- William, M.A. & Campbell, P.S. (Eds). (1989). *Multicultural perspectives in music education*. VA, USA: Music Educators National Conference.

Biography

Dr. Arya BastaniNezhad was born in Shiraz, Iran. He is descended from an ancient musical lineage, completed a Bachelor of Music Performance on the ney, a Master of Music in Western classical flute performance at Tehran Art University, and in 2013 he was awarded a PhD in Music Education from Monash University, Australia, for his research into flute and ney pedagogies. Focusing on hybridized forms of music pedagogy, Arya researches meaning and purpose as well as the immense and sublime humanistic worthiness underlying the ways music is transmitted. His particular area of interest focuses on the ways that musical values are re-negotiated in modern Iranian pedagogy. He examines the master-disciple interactions that highlight the significance of musical transmission as a means to develop the self and embody intricate pedagogical behaviours. Arya returned to Tehran Music School as a senior lecturer of flute and aural skills in 2013 and was appointed to the head of wind performance. Email: aryabastaninezhad@gmail.com