Root Tone: A holistic approach to Tone Pedagogy of Western Classical flute

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Abstract

This article examines how key components of holistic tone production can help flutists form a resonant tone. This is framed in an exploration of tone pedagogy and includes a model of tone evaluation and education. This research is also applicable to other instrumentalists, especially wind players. In this case study information was collected by participant observation and interviews with various musicians. The ideas of expert flute educator Thomas Pinschof have been fundamental to this research, particularly those concerning the various elements of mature tone pedagogy that is acquired through a state of equilibrium and awareness in all physical and non-physical aspects of flute performance. Holistically, the entire process of tone production is a combination of different attributes that contribute to the ultimate goal in tone pedagogy – mastering the art of 'letting the tone happen'.

Key words: tone production, flute pedagogy, holistic music teaching, wind instrument performance.

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Introduction

A major challenge encountered by every serious flute learner is how to achieve and sustain a good tone across all registers. An ideal tone is a complex composite comprising various components whose integration and interactions are vital for its formation. Among the many intricacies and delicacies that are entangled with tone and its pedagogy the importance of individualizing the tone is of paramount importance. Tonal individualization is a means of expressing personality in music performance and distinguishing performers' levels of sophistication. Personal tone, defined hereafter as the root tone of the performer, is a major factor in reaching the highest degree of individualization in expression. Accordingly, this study addresses the questions: what is the root tone and how it can be achieved?

The root tone corresponds with the personal voice in singing that manifests the natural and genuine identity of the singer through his/her voice. Discovering personal voice has been a fundamental subject among singers. Commonly, imitating the voice of another singer, beyond that which happens of necessity in the learning process, is considered to be vulgar, non-artistic, and boring. Instrumental teachers should actively explore root tone from the early days of the learning process. This should not be confused with teaching various alternative tone colors as instruction in this comes much later when the root sound has been very well explored and established. According to the model (Figure 1), the core components of the root tone are: support, centre of gravity, air column and human primal sound. These will be examined in this discussion.

Learning to play the flute is primarily the process of exploring a tone that has adequate potential to express music. Therefore, producing a good tone and its maintenance (its durability)

are essential to both music and musicians. Tonal impairments are amongst the major causes of failure in performance. A dysfunctional tone hinders confidence, performance effectiveness and efficiency, and may lead to anxiety. Anxiety can place the performer in a vicious downward spiral that further impedes performance. A flute player with a good root tone will be free of such perturbation and able to concentrate on musical performance. This article considers a pedagogical approach to tone production that explores root tone, its components and other related parameters such as the role of practice.

The impetus for this research arose from the author's background in Iranian classical ney, an end-blown reed flute, in which the foundational values such as uniqueness and individuality of the tone are of heightened significance. The unique tonal print is known as an honorific determinant that allows Iranian masters and their schools to be denoted and distinguished.[1] As a musician, music teacher and performance researcher I have become deeply aware of the intricacy involved in teaching and learning tone production in contrast to the more objective and technical skills of playing the flute. I also became aware of the obvious negligence towards tone pedagogical skills in academia with little investment in its investigation.

Context

Flute tone has been discussed by various authors since the first significant flute pedagogist J. J. Quantz (1697-1773) to contemporary authors (Moyse, 1934, 1973, 1991; Le Roy, 1965; Galway, 2009). Quantz (2001) considered the flute to be closest to a moderated human voice by claiming that the most pleasing tone quality (*sonus*) on the flute is that which more nearly resembles a contralto than a soprano, or which imitates the chest tones of the human voice.

Historically the concept, use and definition of the tone of the flute have evolved due to the development of the instrument's structure, changes in artistic and aesthetic values, and the diversity of the playing styles and expression. For example, in the early French schools of flute performance the emphasis was on imitating the patterns and qualities of spoken French. With the introduction of the Boehm flute in the mid-nineteenth century the emphasis changed towards the imitation of the violin. This involved the adoption of violin terminology such as the term *détaché*.[2] This evolution included the imitation of singing and later on towards more expressive use of the tone that advocated the production of tone not just as an aesthetic end in itself, but as a more flexible and dynamic means of expression.[3] There are a variety of strategies and approaches that exist across the world that flutists can draw upon to acquire and improve tonal development. Most of these are provided by flute teachers. Some instrumental teachers mainly concentrate on demonstration by playing and modelling in front of the learners while encouraging the students to follow physical imitation. Other teachers hold a more analytical approach or combine demonstration with verbal discussion and storytelling skills in teaching tonal development.[4]

1. It could be argued that the greatest portion of the transformations in Iranian classical context since the early twentieth century have been related to the innovations in sonority and virtuosity rather than other musical aspects.

2. Margaret Crawford, a well-respected Australian flutist and flute teacher, states French flute players borrowed the term détaché from violin playing to develop a flute technique as a means of imitating both French speech and the action of the violin bow. Détaché is performed on the flute through producing articulated breath pulses by the abdomen that could be likened to an act of silent laughing (December, 2011).

3. A good example of the influence of singing upon flute performance is evident in Moyse's book Tone Development Through Interpretation (1973). In this book Moyse uses melodies from opera and other lyrical tunes to inspire the flute players to sing on the flute.

4. As Crawford states, Rampal's teaching, especially in tone development and interpretation, was done mainly through, for example, demonstration, and Moyse's mainly through imaginative storytelling rather than through discussion and analysis as is often the case in England and the USA.

The most common belief held by instrumentalists gives priority to the embouchure (lip formation) as the most significant determinant in the acquisition of flute tone (see Toff, 1996; Wilcocks, 2006). To explore root tone flutists need to rely on core playing components such as support, balance and stability rather than merely on the embouchure. Embouchure-oriented approaches are the "very example of putting stress on weak muscles" while in fact "most of the energy for supporting tone comes from support" (Debost, 2002, p. 167). The author recognizes the role of the embouchure as only one of the many parameters of flute playing that functions mainly as a pressure relief system that directs the air into the flute and helps to create variable tonal color effects (Pinschof, 2011).

Methodology

This qualitative case study research was undertaken through participant observation methodology. This approach embraces a number of roles that the author held (sometimes simultaneously) as both participant and observer. Participant observation may be one of the most appropriate modes allowing a great deal of immersion and a considerable description of the pedagogical approaches needed to discover complex paradigms such as the tone pedagogy. Becker (1970) notes that participant observation "is close to everyday interaction, involving conversations to discover participants' interpretations of situations they are involved in" (p. 652). In the case of understanding music pedagogy, this kind of intimate approach appears to be particularly relevant. My data collection as a 'participant observer' took the form of keeping a diary of my observations during my lessons and also recording these where possible. To paraphrase Becker, this methodology allows a "thick description" of the pedagogical paradigms and modes of communication. Barton (2003) puts it slightly differently when she writes that "participant observation was the most suitable method given the high level of immersion required, and the responsiveness of the method to diverse research settings and complex research problems arising from social phenomena" (p. 58).

To contextualise and extend my participant research, semi-structured interviews have been conducted worldwide with prominent flute players, teachers and student-teachers and pedagogues of Australian universities,[5] Australian Flute Festival (2011) in Canberra, various master classes held by international flutists in Australia and Tehran Arts University in Iran through various visits to Tehran. This multifaceted approach enabled me to stand both inside and outside the pedagogical systems that were observed to conduct in-depth research. I was able to remain as an ongoing learner as well as a performing pedagogue while maintaining regular communication, performance and studying occasions with my master teachers throughout the data collection processes.[6] These features allow for clarification of data and interpretation during the research process and enable exploration of the complexities that lie between theory and practice in all physical and musical matters. In this approach I used the recordings of my own personal experience as a student and later a teacher. I have thirty recordings, each ninety minutes long and containing three lessons each. In order to use this material, I sought the written permission of my former teachers. I also have ethical approval from Monash University to conduct this research.

I have been tremendously nourished by the sophisticated ideas of Thomas Pinschof, a well-respected Viennese flute player, pedagogue and my mentor, whose thoughts have been provided a basis for this research. I found Pinschof's ideas on the functionality of the lower body and feet

5. The author has been in contact with the students and flute teachers, students and other instrumental and singing teachers at Monash University since 2009.

6. This research approach resonates with the study undertaken by Kiester (2008).

to provided support and balance for performers and its influence upon tone production original and innovative in tone pedagogy particularly formative. Information from vocology and various voice pedagogues has largely contributed to establishing a pedagogical foundation that offers an integrative and combined approach to this research.

The two conducted seminars including both demonstration and discussion during my field work in Tehran and Shiraz in Iran helped me broaden my research findings. The data collected through these and other interviews helped me demonstrate whether and how much the teachers' methods of instruction and modes of interacting with students have changed since I completed my studies with them. These materials revealed the challenges confronting flute students in tone pedagogy due to lack of an integrative methodical and responsive approach. I also noted that there are innumerable details involved in the teaching of tone that are often only conveyed from master to pupil and rarely documented.

Auxiliary somatic systems, such as Alexander Technique, Feldenkrais method and yoga, have brought many benefits regarding teaching tonal development and posture to instrumentalists by representing the strategies to increase knowledge of beneficial practices in the performing arts. However, these are often highly controversial and the principles concerning these systems have not been fully ratified amongst instrumentalists, teachers and researchers. There remains little unanimity among instrumental teachers concerning the compatibility of Alexander Technique with music performance. Almost all the master flute teachers consulted for this study claimed the paradoxical consequences of Alexander Technique and its effect upon flutists' support, posture, breathing and tone. For example, the idea of conveying the weight to the heels was the first step in the author's Alexander Technique lessons between 2002 and 2004 in Tehran in Iran. However, almost all the interviewees were against transferring the weight onto the heels as it weakens the performer's stability and balance compared to when the weight is placed on the forefoot. The interviewees mainly referred the author to the natural position of the feet in relation to the knees and body by drawing an analogy between flute performance and various sports such as tennis. Sport practice, such as internal[7] martial arts, has been shown to have a tremendous impact on improving postural control, rehabilitation and equilibrium processes (Gorgy et al., 2008; Jacobson et al., 1997; McGibbon et al., 2004; Tsang & Hui-Chuan, 2006; Hrysomallis, 2011). Based on the interviews, there has been more attention paid towards the pedagogical instructions and styles of the prominent instrumentalists. Also, there has been a stronger inclination towards the principles of the Feldenkrais method compared to the other existing disciplines. This implies limited data on conflicting disciplines that would benefit from investigation. The following section will explore the root tone and its core components.

Root tone

A good tone has often been referred by various instrumentalists as a resonant, rich, dark, clean, round, colorful and expressive musical sound. However, the problem with this verbal approach to labeling tonal qualities is that these attributes are more a matter of personal preference and may sometimes serve as pragmatic considerations rather than being a precise definition of good tone. It implies that one initially needs to own a basic and personal tone that can be subsequently converted into different imagined colours, shapes and moods.

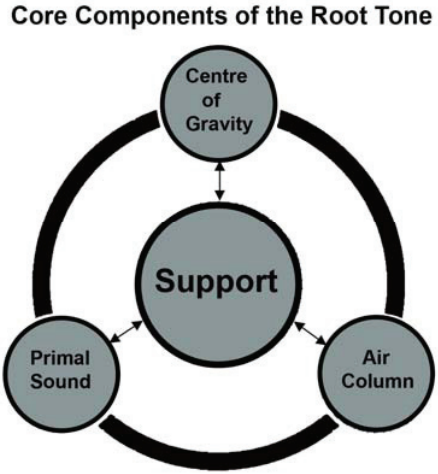
7. Martial arts could be divided into (1) external, such as Karate, in which the body moves to generate power towards an external target; and (2) internal, such as tai-chi-chuan, which is based on the "regulation of posture during the production of movements" (see Gorgy, 2008, p.629).

This basic tone can be used to deal with all the interpretative and cultural qualities of music as well as the acoustical aspects of the environment in which performance is to take place. Hence, the questions arising here are: What is the basic tone of the instrument that has the potential of coping with aforementioned requirements? What is the unique characteristic of the tone that constructs performers' distinct and individual tonal-print? and finally, How can such a tonal-print be taught to student performers? These questions are related to the fundamental characteristic of a good tone that affect all the other aspects of tone and its requirements, defined as root tone by the author. The root tone has the connotation of being original, personal and unique to every individual. The root tone possesses a distinct sound similar to the inborn quality of a person's voice.

In this context, the nature of healthy tone production can be understood as achieved through core components shown is a radial model (Figure 1). In this, the core components of the root tone are: support, centre of gravity, air column and human primal sound. The most important core component of the radial model offered is support and this is the aspect that a teacher must prioritize. This relies on the effectiveness of the large muscles of the lower body, as they are central to the performer's support, centre of gravity, posture, air column and breathing, over other parameters such as embouchure and technique. Based on the author's experience, there seems to be a natural and close association between the sound of the tone and human primal sound that can be used as a natural intermediary between the learner and tone that emphasizes the integrative bodily responses in the pedagogy of the root tone.

The core components are fundamental to the pedagogy of the root tone and interact with each other directly as outlined below.

Figure1: A radial model of effective root tone acquisition.



Support

Support is considered the most important determinant of tone production thus it is placed at the core of the radial of the root tone. Support is the ideal physical position of the body in performance or ecole (Lofti, 1997, pg 4) in which the body is firmly planted on the ground through pressing down the little toes against the ground and maintaining a heavy base on the feet. This definition of support in wind performance differs from the diaphragmatic support prescribed by wind and singing instructors. This new definition of support embraces the contribution of the feet and the lower abdominal muscles to the air column.

Centre of gravity

When dealing with a support and balance, the first place to explore, argues Pinschof (2011), is the centre of gravity. The centre of gravity of performers, according to Müller-Preis (ca1900, p. 2) is a point located in the lower back nearest the L4 lumbar vertebra, or small of the back, at which all body's weight is equally balanced or equally

distributed in all directions. The small of the back acts as the body's cross-point on which all the largest and strongest body muscles are crossed and attached to each other. Shifting the centre of gravity into proper position over the base of support, the feet, such as in standing performing stance, performers are able to keep efficiently balanced and well-earthed with ideal postural alignment and support to all the bones of the spine, shoulder, neck and head.

Primal sound

Based on the author's experience in ney performance, there seems to be a natural and close unity association between the sound of the tone and human primal sound that can be used as the reflexive bodily responses in the pedagogy of the root tone. Primal sounds already exist in individuals since they were born and only need to be discovered and used at will (Brown, 1998). The primal sound originates in the larynx where it becomes molded into vowels and consonants whose combinations constitute language or talking (Brown, 1998). The primal sound can be made in two ways: involuntarily as when it springs from the individual's emotions such as when they are hurt; and voluntarily as if it arises from the thinking, conceptualizing and planning part of the brain such as when someone says Uh-hum [əhəm] while nodding as a sign of agreement or says Hu-huh [həhə] as when teasing or make fun of someone or says Hey [hey] shouting one's name while s/he is far from you. Thus root tone can molded into various vowels, colors, moods and articulations that can be used transfer an idea in flute and ney performance. In order to use this potential capability one needs to explore the strong link that exists between the singing voice and other musical expression. This can be achieved by locating the primal sounds and the parts of the body that are involved in their production and understanding how the primal sounds function and how to use them to improve wind instrument tone.

Air column

In flute performance the air column is the vibrating tube that stretches from the lungs up towards the mouth shaped as embouchure and continues along the whole length of the flute. The air column generates the energy of the tone. This energy emanates from the base support of the feet and can be focused through engaging the big thigh muscles. The character of every one's root tone mainly relies on how and to what extend the air column vibrates inside the performer's body and is formed through variable vowel shapes inside the mouth. The air column provides the performer with a unique singularity of tone.[8]

Holistically, the core components of root tone need to be revisited and addressed regularly in each learning experience until they become incorporated into the sub-consciousness. The four building blocks are applied to develop the performer's root tone that allows the performance to become more homogeneous and enjoyable. These core components are best taught through a physiological language and are better perceived through hearing and feeling rather than rationalization.[9] To avoid boredom due to being too technical, learners should be encouraged to play their repertoire in every session and to appreciate the tonal changes in their playing. It is not practicable to try to condense the philosophy of tone pedagogy into any specific model or chart. In order to help individuals consider all parameters interactively, physiologically as well as accretionally, with the help of Thomas Pinschof (2011) I arrived at a full understanding of a spiral version of tone pedagogy.

8. Also, see Debost, 2002, pp.4, 154.

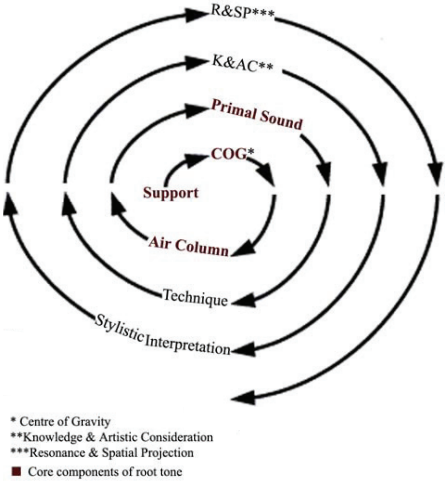
9. As Alexander says "As a matter of fact, feeling is much more use than what they call 'mind' when it's right" (Alcantara quotes from Alexander, 1997, p.271).

Spiral model of accretional tone pedagogy

The spiral model is a good pictorial demonstration of how the author has learnt and was taught. This model can also be used as a teaching scheme to develop the root tone of the instrumentalist and should be continued until it becomes incorporated into the individuals' subconscious. When this happens, the performers will spend most of his/her time on the interpretative and artistic aspects of performance. The spiral model provides a flexible basis and should not limit constant refinement and the capacity for further alteration but on the contrary it should be as creative and dynamic as possible. Also, it must be continuously nourished by constant and dynamic interaction between master and pupil and the growth of their knowledge. The core components of tone have been shown to be closer to the centre of the spiral model and with a red colour.

The author was first introduced to the accretional method in music pedagogy through Sharif Lotfi, former dean of the Tehran Music School and the author's mentor on aural training and conducting for more than thirteen years.

Figure 2: Spiral model.



It can be argued that efficient tone pedagogy should involve an accretional approach at certain stages of the learning process as it is among accomplished flute players. 'Accretional' refers to the process of becoming greater. As part of this process tone pedagogy that "can be broken down into manageable components, whose natural hierarchy of effect should not be ignored" (Lotfi, 2010).[10] Although the components of tone pedagogy are all connected and overlapping, it is difficult to consider it without addressing the separate components and their functions. Thus effective pedagogy becomes a balancing act between addressing individual components of tone production and not losing sight of the whole. It is crucial to inform learners about the nature and benefits of accretional development of the individual components and how each one can be separately trained to improve tone. An accretional approach to tone development needs to be applied until the learner achieves a degree of unconscious mastery. The knowledge of learning how to use and improve each component separately can ultimately serve the whole. This accretional approach enables successful performance and shortens apprenticeship.

While working accretionally, the duration of learning and the number of different ideas must be considered. Lotfi (2010) states that it is advisable to break down each lesson into three twenty-minute sessions. The author believes that one is more likely to achieve a good tone through taking small steps rather than huge strides. Accretional steps use less energy, allows the learner to gain better control over the learning process, and provide more opportunities to respond quickly. The accretional approach can be applied to all levels of learning from novice to professional. In the learning process each

10. Sharif Lotfi, is the former director of Music School-Tehran Arts University with whom the author studied various subjects including teaching methodology, advocates integrative approach in his pedagogical framework (see Lotfi, 2007 and 2008).

individual is able to put a new combination of the tonal components into a new context, that could be any piece of music in any style. It is wise to sort out the combinations based on the natural hierarchy of the tone's core components first – support, centre of gravity, air column or primal sound – and then blend it with other aspects such as technique, artistic perception, style, resonance and spatial projection (see Figure 2). The natural hierarchy in tone pedagogy reflects the structure of the various levels of learning in which each one is built on the previous one though all the components will remain valuable pedagogical aspects for every learner. For example, while a novice player needs to prioritize working on the support-centre of gravity combination, an advanced player can focus on further parameters such as primal sound or style. This removes limitations and the learner can easily move on to the next learning step. In this sense, accretional learning is motivational.

After the learner has gained mastery over the accretional elements, it is desirable to deal with the whole again (which is considered as the third step). In the reconstructed whole, the student combines his/her newly-mastered skills into context, while making automatic and reflexive use of the parts that are already integrated and have become unconscious elements of their musical competence. The whole-part-whole pedagogical scheme creates an open-loop system in which the learned materials will establish effective feedback to the whole and therefore will provide more potential for learning new data. This process is creative and dynamic, and opens the way for the performer to reach their full potential.

The accretional approach can also create a mental environment in which the learner can compete with him/herself while monitoring progress. Ultimately it is hoped that the learner can forget about the core components while remaining constantly in touch with them. This process may take some time. At the next level, the learner can be introduced to a variety of combinations of the core components in relation to the other parameters through adding one parameter at a time (see Figure 2). It has been the author's experience that he can process three variables at one time (i.e., core component, tonguing and style) but may lose control if a fourth is introduced as the new focal point. The author was able to challenge himself by visualizing his future self having already progressed to the next step. The accretional method engages all the mental and physical aspects of learning. In this sense, effective tone pedagogy needs a combined pedagogical philosophy as its foundation that reflecting both the integrative and physiological approaches.

Integrative tone pedagogy

The term integrative[11] implies the combining of particular characteristics into equal participation in a process. Integrative is associated with holistic learning and the interconnections of compartments. In tone pedagogy, an integrative approach combines the whole being – the performer – and embraces cohesive use of all dimensions including mental, emotional, physical, spiritual and cultural – both interior and exterior contexts – to form a good tone. If an accretional approach emphasizes the division of pedagogy into compartments, an integrative approach aims to bring the previously explored parts into unity. An integrative approach might be one of the most appropriate forms of tone instruction because the flute is a side-blown instrument and, unlike the piano, strings and other wind instruments, does not allow the performer to observe the instrument, fingering positions, changes and delicate motions of the lips, tongue, throat and other important muscles responsible for tone production. The larger and pivotal part of the flute is invisible to players.

11. Integrative may also be referred to as holistic when used in different contexts such as in medicine and psychology.

Physiological

The Oxford Dictionary defines the physiological as dealing with "the normal functions of living organisms and their parts". The physiological which is drawn upon to illustrate tone pedagogy is embedded in the principles of human anatomy, the functions of the body muscles and their interrelationships. Physiological refinements are necessary tools in the development of the tone. There is a need to break the vicious circle and unlearn many habitual dysfunctions. Only slight modifications in the performer's stance and the centre of gravity can cause noticeable alterations in tone. In some situations when a performer encounters specific anatomical and physiological difficulties such as respiratory-related issues, medical therapies or other auxiliary systems can be sought.

Physiological approach in tone pedagogy involves training the functions of the little toes and the strong thigh muscles as the body's support provider, the small of the back as the body's centre of gravity, and the primal sound as the optimal intermediary between the performer and his/her instrument. This kind of physiological approach leads to a better understanding the core components of tone pedagogy (support, centre of gravity, air column and primal sound), and other determinant aspects, including technique, artistic perception, style, and resonance. Utilizing this approach will gradually lead the learner to self-reliance in learning as they develop a manner and technique of tone production that emanates from their own anatomical and physiological properties. Over time, the performer becomes able to subconsciously predict the practical solutions for tonal development and to correct dysfunctions whilst focusing on other aspects of performance such as interpretation.

Philosophical conclusion

As mentioned earlier, there are many intricacies involved in tone pedagogy. This is mainly because almost all the critical tonal modifications need to be supported and developed inside the mouth and other internal parts of the body rather than external elements. This means that, the larger and pivotal part of flute performance remains largely invisible. This has brought an inconsistency to the tone pedagogy of flute that makes it hard to "document most of the techniques visually" compared to stringed and keyboard instruments (Toff, 1996, p. 91). For example, it is impossible to observe the speed or the volume of the air blown into the mouthpiece hole or the position of the tongue while blowing or articulating the notes.

Educating students about the hidden aspects of the tone production could lead to two major benefits, namely (1) unveiling the secrets of producing a good tone; and (2) building up a performance inner capability that emphasizes the transcendence of the performer's inner capability and underlying pedagogical process. As Lotfi (2011) says, every musical observation should serve to acquire self-advancement through sublime music education otherwise it would hardly be considered as art.[12] Such a dynamic approach towards the pedagogy of the tone production will bring the music to life through the strategies that are applied to the mind and body of the performer.

All efficient methods of tone production, whether verbal or demonstrational, are transferred through the modes that are either conscious and methodical or unconscious and instinctive. Many instrumental teachers primarily apply an instinctive approach and over time they progress towards a conscious and analytical approach. It may be wise to start within such

12. As S.Lotfi claims, "there are two pathways in front of every artist: one that is a professional way and the second path which is the way of personal life. So long as these two sides are not nurtured wisely, individuals fail to attain a normal equilibrium in their life and personality" (interview, June 2011).

a framework in teaching tone production to a flute learner. Such a comprehensive pedagogical system requires a combined pedagogical philosophy that could be summarized under three main headings: integrative, physiological and accretional.[13] In combined tone pedagogy, the aim is to explore root tone through placing less attention on the act of producing a tone, but more on creating the opportunities that embrace all the physical and non-physical dimensions, frameworks and strategies, in other words to 'let the tone happen'; or according to Alcantara "the aim is not to acquire the skill of putting things-right but of getting things right" (1997, p. 247).

Thus, a sophisticated tone pedagogy is achieved when an individual reaches a state of equilibrium and insight in all dimensions or according to Csikszentmihalyi (1996), when a subconscious connection between ideas fits so well that it is forced to pop out into awareness (p. 104). Such insight will lead individuals to what Chapman (2006) refers to as "unselfconscious focus" zone when the "time stands still, critical faculties are suspended and the experience imprints on the memory" of both artists and audience who "are drawn into a shared concentration that is greater than any of its individual parts" (p. 3). Every performer might have experienced such excellent moments in which the tone is rich while it is well-connected to the music both emotionally and aesthetically. In contrast, there are some bad days confronting performers in that the tone loses responsiveness, and the more the performer struggles, the worse he/she sounds. Such a situation may sometimes lead to a vicious circle continuing in a negative rotary manner and weaken the performer. The application of an integrative approach can produce more tonal satisfaction. This can be likened to speech that involves numerous motions of the lips, tongue and facial muscles, nuances in breathing speed and mood and many gestural modalities. It would seem strange if one were to delay speaking to calculate the muscular movements and changes needed to produce each vowel and phrases. However, one can easily alter or modify one's speech and its mood by the changes made to posture, emotional and mental perception, balance point and the centre of gravity that supports the air column. Almost the same integrative approach is applicable to tone pedagogy through developing a mental framework of the whole being (mind, emotion, body and spirit) in relation to the tone produced. Such an integrative approach familiarizes the learner to the generated tone through exploring the whole and the instinctive interdependence of its parts. This helps individuals acquire a level of practical and potential knowledge and self-sufficiency in learning that is the key to success not only in music pedagogy and the arts, but also in other fields.[14] As an integrative approach, for instance, the learner's different shapes of vowels can be drawn on as a natural intermediary to refine the tone, pitch and intonation instead of making unnecessary motions of the lips and jaws.

Given the above information, combined tone pedagogy explores a means of expressing music by placing less attention to the act of producing a tone and more to creating the opportunities embracing all the physical and non-physical dimensions and frameworks in order to 'let the tone happen'. This is an ability that is available to every performer and singer and which needs to be developed when one is learning to play a wind instrument. This ability is one of the great gifts that leads learners towards increased self-awareness rather than towards the external aspects of tone production. In order to achieve this kind of combined tone development a flute

13. Chapman has applied almost the same approach, but in different context, as the basis for the philosophy of teaching in her book Singing And Teaching Singing: A Holistic Approach to Classical Voice (2006, p. 3).

14. To explore more about the relevance between music performance and sport performance refer to the master dissertation by Carmel Liertz (2002), pp. 25-38.

player is strongly reliant on his/her auditory perception to communicate successfully with the instructor and to learn properly. Implementing physiological instructions that require muscles-memory often takes a minimum of three to four weeks to adapt to a change, whereas it is much easier to remember the refinements that are made to the tone through focusing the attention on the tone itself.[15]

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