

The Use of Pianistic and Non-Pianistic Imagery in Solo Piano Performance:

The Case of Chopin's Ballade No. 1

By

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Abstract/ Abstrait:

This study presents a framework for categorization of the imagery used in solo piano practice. The framework sorts imagery into two large category: pianistic and non-pianistic and further subdivides into three groups: auditory, kinesthetic, and visual. Given such a range of function for imagery, such as a “view” of the score, instrument, or the space in which performance takes place, a number of terms have emerged to describe imagery within musical practice, terms such as mental rehearsal, mental practice, aural or internal representations, inner hearing, visualization, and finger practice. My goal for this study is not only to investigate the potential of imagery and to devise a framework in which such terms could be defined with more consistency across the whole scope of piano performance studies; but also to apply such findings by suggesting ways in which the framework could be used in practice. With an understanding of imagery and the benefits it may bring, this study suggests paths for further exploration, paths that can impact how music educators might assist music enhance expression, music appreciation and learning, as well as technique in performance practice.

Cette étude présente un cadre pour la catégorisation des images utilisées dans la pratique du piano solo. Le cadre trie les images en deux grandes catégories: pianistique et non pianistique et subdivisé en trois groupes: auditif, kinesthésique et visuel. Compte tenu de la diversité des fonctions de l’imagerie, telles que la «vue» de la partition, de l’instrument ou de l’espace dans lequel la performance se déroule, un certain nombre de termes décrivent l’imagerie dans la

pratique musicale. pratique, représentations sonores ou internes, audition interne, visualisation et pratique du doigt. Mon objectif pour cette étude est non seulement d'étudier le potentiel de l'imagerie et de concevoir un cadre dans lequel de tels termes pourraient être définis avec plus de cohérence dans toute la portée des études de performance de piano. les manières dont le cadre pourrait être utilisé dans la pratique. Avec une compréhension de l'imagerie et des avantages que cela peut apporter, cette étude suggère des pistes pour une exploration plus poussée, des voies pouvant influencer la façon dont les éducateurs musicaux pourraient aider la musique à améliorer l'expression, l'appréciation musicale et l'apprentissage.

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Chapter 1: Introduction to Imagery in Piano Performance

Chapter summary: This chapter outlines how imagery is used in piano performance such as piano injury, piano education, and expressive playing techniques. An overview of studies on imagery will provide some background.

As a piano teacher, I often use descriptive words when motivating my students to play with a certain emotion. For instance, if the music has staccatos and should be played lightly, I will tell them to imagine a lively rabbit hopping on the grass. By likening their hands to the feet of the rabbit, students seem to be able to perform staccatos with more character. To me, using such imagery facilitates not only expressive playing, but also enjoyment. Even though I started playing the piano at the age of 6, such enjoyment did not begin until I my undergraduate professor. She told me that I need to start picturing scenes, have a plot in mind, and try to express a story with through my playing. She asked me to think of a story on the piece that I was working on. During the process, I realized that music becomes meaningful, lively, and realistic. I was no longer playing a piece that was composed 200 years ago, I was playing music that can tell stories to others in the present. Thus, from this study, I wish to not only contribute to the research field of musical imagery, I also hope to encourage the use of imagery to educators as they can influence the next generation in the way my professor has inspired me.

Even a brief consideration of the discourse around piano playing suggests that imagery is intrinsic to effective playing: imagination is often described as that which gives energy to the

sound.¹ Many piano teachers incorporate imagery (e.g. “the music is bouncy” and “the sound gets bigger and heavier”)² when instructing students to play expressively. Chopin, for instance, endorsed as a basic principle of interpretation that pianists “play as you feel and you will play well.”³ In fact, Chopin often used visual imagery in order to elicit more expressive playing from students. To one who was playing mechanically, he would advise to “put your whole soul into it.”⁴ Putting one’s soul into the music may have the effect, as Thompson (2007) suggests, of imbuing the music with meaning and expression:

The main motivation for developing gesture-controlled interfaces for musical applications is due to the fact that traditionalists often shun electronic or computer-produced music because it lacks expressivity (Rovan et al., 1997). It seems that traditional instruments have a universal appeal to audiences. The reason for this may be that when a musician plays the piano, or when we listen to an orchestra, there is a close correlation in the way that the player is moving their body and the expressive quality of the sound being produced. The expressive intentions are not only heard in the music but also seen visually in the demeanor of the musician.⁵

While such intentions could be generated from an awareness of historical context, analytic insights, and stylistic choices, it would seem it is musical imagery that acts as a crucial mediator for the delivery of these intentions in actual performance.

It would seem that such metaphorical terminology is useful with respect to piano performance.⁶ Numerous leading pianists seem to concur. One of his most memorable characteristics of Lang Lang’s performance style is the passion expressed through his physical

¹ Energy & Imagery in Music and Voice, *Energy & Imagery in Music and Voice*.

² Robert H. Woody, *Emotion, Imagery and Metaphor in the Acquisition of Musical Performance Skill*. (Music Education Research 4, no. 2, 2002): 222.

³ Maurice, Hinson, *At the Piano with Chopin*. (Alfred Music, 2005): 12.

⁴ *Ibid.* 12

⁵ Marc R. Thompson, *Expressive Gestures in Piano Performance*. (Music, Mind & Technology, 2007): 23.

⁶ Godoy, H., *Musical Imagery*.

movements and facial expressions during performance. As suggested by recent studies on gesture in musical performance (Doğantan-Dack 2014 and Davidson 2011), such gesture seems to result from using the imagination to inspire expressive playing.⁷ Indeed, Lang Lang confesses that he often has a story or scene in mind as he plays. In an interview with Channel News Asia, for instance, he reveals how he treats performance as a creative mental activity: in his mind, he sees a multimedia screen onto which is project the score, storylines, and pictures. When he plays the music of Mozart, he “sees the colourful character in the music.”⁸ In effect, he explains that the notes he plays, the emotions he envisions, and the physical gestures to which these give rise all come together in an imaginary world that brings the music to life.

Since instrumentalists are often encouraged to imitate or imagine great singers, it is not a coincidence that many pianists share similar reflections upon the use of imagery in piano practice. Martha Argerich as well seems to make use of imagery when she mentions the music she heard in Argentina and how this music was all about “feeling.”⁹ Along with her hand gestures moving swiftly in the air, she describes the music as “bel canto,” a phrase which connects piano playing to the act of singing. Throughout the interview, Argerich consistently makes use of imagery to bring feeling and singing into her performing. Such usage is often heard in the discourse of the masterclass as well. György Sebök, for instance, regularly emphasizes the relationship between imagination and expressive playing in piano. In an interview on Busoni’s transcription of Bach’s Adagio from BWV 564, Sebök discusses how the war affects his

⁷ Mine Doğantan-Dack, *In the Beginning was Gesture* (Ashgate, 2011), 252.

⁸ Channel News Asia. *Interview with Pianist Lang Lang*. (December 13, 2013) [00:07:35-00:08:06]

⁹ EuroArtsChannel. *Martha Argerich Evening Talks*. (2011)

emotional connection to music, and the “singing” aspect of the piano. In one such masterclass at Oberlin Conservatory, he depicts the connections between expressiveness and imagination through the use of physical movements, such as the freedom of arms, wrists, and tension in hands. Moreover, Flavia Schechtman Belham, the chief scientist at Seneca Learning, also supports similar point of view in her study “use of imagery facilitates learning and memorization” that mental imagery is an effective learning strategy and stimulating students to do so, may enhance their understanding of the content. The use of images and imagination has also been shown to facilitate reading comprehension. In these cases, although it is words that give rise to the image, it is the image being imagined by the performer—the visual scene, audio soundscape, and kinesthetic movement—that drives musically expressive playing. Thus, educators often incorporate the use of imagery in teaching, to guide students towards more expressive playing and aiding them with memorization.

Studying the relationship between such mental processes and the physical responses to which they give rise has been a main focus within recent piano performance studies. In the same way that Benjamin took note of our lack of understanding of what really goes on between our hand and our brain when we pick up a cigarette lighter or a spoon (Benjamin 2002:117), performance studies seems to be calling for investigation of the relationship between our mind and the gestures we make when playing the instrument. This type of research often involves collaborations between neuroscientists and scholarly musicians. Some of the studies conducted by Antonio Damasio,¹⁰ Joseph LeDoux,¹¹ and Alain Berthoz¹² have shown that cognitive

¹⁰ Antonio, Damasio. *Descartes' Error: Emotion, Reason, and the Human Brain* (1994)

¹¹ Joseph, LeDoux. *Synaptic Self: How Our Brains Become Who We Are* (2002)

¹² Alain Berthoz. *The Brain's Sense of movement* (2000)

processes are fully embodied and that it is through our bodies that we perceive and experience the world. Moreover, Damasio states that feelings and emotions are necessary for the proper functioning of our cognitive faculties (Damasio 1994: xiii). As a result of such findings, it is likely that our moods and emotions play an important role in the performing process.

Although this field of study has developed through the past decade, it has come under criticism. Scholars such as Doğantan-Dack and Eric Clarke have argued that, at least in the western classical tradition, music needs to be understood as constituted both by abstract structures and performance acts, by both the score and by its performances. Musical meanings are emergent in the processes of listening, performing, and composing, where the abstract and the concrete are in continual interaction.¹³ As opposed to Schoenberg, many theorists state that the lack of an actual musical performance negatively impacts the cognitive process and the process of music-making. Carolyn Abbate wrote about the notion of drastic and gnostic in which she opposes physical performances of music as drastic to the more gnostic activity of elite and academic readings of music. She points out that musicologists often view music from a gnostic point of view.¹⁴ With reference to W. Benjamin's notion on the lost of "aura" during gnostic readings, she suggests musicologists to view their areas of study from both perspectives. The idea of perception from the observer and the interpretation from the musician are important features that structure performance studies. Thus, I believe it is essential to study the way in which performance takes place in order to add the understanding of music from the performer's

¹³ Mine Doğantan-Dack, *In the Beginning was Gesture* (Ashgate, 2011), 248.

¹⁴ Carolyn, Abbate. *Music-Drastic or Gnostic?* (The University of Chicago Press, 2004)

perspective into the discourse. A balance between the score and the physical performance of music can become a complex and rich area for study.

One such area of study might involve gesture. In his study on the expressive features of Chopin's *Étude in E Major*, Bruno Repp (1999) proposes that the overall aesthetic quality of performance has little to do with timing and dynamics. Rather, Repp speculates that other variables, for instance touch, might play a more important role than timing and dynamics in making aesthetic evaluations. A pianist's touch not only impacts the expressiveness of a performance, the specific gestures that pianists use during performances also gives information about their understanding of both music and the biomechanics involved in making it. The gestures also help to establish the relationship between the listener and the performer, and between the score and the concrete performance. These relationships are often unique between people and contribute to the entire "aura" of the piece. The "aura" then helps to create an image and contributes to the delivery of the story of the piece. Perceptually, the timbre of a sound is the physical cause produced by the gesture, rather than its pitch or duration.¹⁵ On the piano, we experience timbre at the moment which the pianist comes into contact with the key. However, when the execution of the note is finished, the audience may still latch onto the feeling that the note brings. This is what makes music memorable and combines each individual note into a bigger picture which could be a story. The approach to each note is, therefore, critical to the overall expressivity of the piece as even the finest detail in gesture, such as the speed of attack and weight applied, are magnified in the final sound product produced by the performer. The phenomenon of timbre, especially for piano performances, lies within the ears of both listeners

¹⁵ *Ibid.* 248.

and performers. As opposed to pitches and rhythms of a melody which can be made one's own more readily than its original timbre, we cannot faithfully reproduce in our own voice the timbres of natural instruments. One of the most fascinating aspects of acoustical music is that the timbre of musical instruments is perceived as being constant, even though research reveals that "the transient and steady-note frequency spectra change dramatically from note to note across an instrument's playing range" (Handel 1991: 170). For example, we experience the number and amplitude of the low and high notes of a piano differently while the timbre of the piano as the same throughout all its registers as being that of a "piano." Thus, it is more natural to recall a performance by its pitches and rhythms, rather than timbres. The timbre then represents the unique interaction between the instrument and the body, forming an abstract concept often referred as the "aura." Such aura would differentiate a recording of a piece to its live performance. Thus, the timbre, often depicted by details in gesture, plays a crucial role in the expressivity during live performances.

Not only is the experience of timbre different for listeners depending on the listening situation, whether listening to live or recorded performances, but the nature of timbre experience is also often different for the performer. As Dogantan-Dack writes, "because the timbre of a sound and the human gesture initiating and sustaining this sound are indissolubly linked, timbre or tone colour is at the foreground of the performer's conscious experience of the music that they physically bring about."¹⁶ As the result, the owner of the timbre focuses mainly on the gestures that create the desired tone colour. Since gestures are executed by the performer and are often

¹⁶ *Ibid.* 250.

practiced and prepared both physically and mentally, the mental preparation, which involves kinesthetic imagery, becomes an important event for the success of expressive playing.

As the field of musical imagery develops rapidly over the last decade, it is now a conjunction of multiple related disciplines encompassing creativity, performance, and perception (more details will be discussed in chapter 2). Each discipline subdivides further into various categories. For example, the area of study in creativity centres on the phenomena of musical invention, improvisation and composition; performance focuses on performing techniques such as body gestures and expressive playing; and perception tackles psychological aspects from the audience. While musicians often refer to imagery in such terms as mental rehearsal, mental practice, inner hearing, visualization, or finger practice, the definition of imagery continues to develop. However, a clear definition organized specifically for the purpose of piano performance studies would emphasize the development of the field in an academic and global direction.

It is the contention of this thesis that such imagery, whether pianistic and non-pianistic, not only enhances expressive performance, but also aides in injury prevention and recovery, and facilitates learning and memorization. Injury is a risk in any human activity. It stems in general from repetition, poor mechanics, or accidents. In the case of piano performance, injury most often results from a combination of the first two factors. A survey of the literature in dance and sports science shows that injury prevention and treatment tends to follow four steps: injury awareness, reduction of pain, faster rehabilitation period, and critique.

Above all, while the majority of research in this field acknowledges the benefits of imagery in injury cases, including the enhancement of injury prevention through body

awareness, pain reduction, and faster rehabilitation periods, an investigation about accuracy in application is still ongoing. A study by Molly Driediger states that results were clear about that imagery served cognitive, motivational and healing purposes in effectively rehabilitating an injury.¹⁷ More specifically, cognitive imagery was used to learn and properly perform the rehabilitation exercises and visual and kinesthetic imageries were used to manage pain. Since numerous experiments in dance and sports show the benefits of imagery, it is essential to understand how such phenomenon functions in other disciplines and how we can adapt the results to piano practice. Keeping this in mind, pianists could incorporate these injury prevention techniques in their practice sessions.

However, for the purpose of this study, I will focus only on piano performance aspects of imagery. A total of 4 chapters are presented with the aim of outlining the current state of study in musical imagery as well as experimental results and applications. Chapter 2 defines a framework that categorize musical imagery based on preexisting knowledge or experience with my original contribution. Furthermore, this chapter subdivides both the pianistic imagery and non-pianistic imagery into three categories (visual, auditory and kinesthetic) and provides examples for each category. In addition to state definitions, each example will be explained in regards to its function in piano practice. Chapter 3 presents a case study in which the model developed in the previous chapter is applied on a single piano piece, Chopin's Ballade No. 1. It is important to make clear distinction that this study is different from a narrative study and that imagery is part of the performing process and part of the teaching and learning process. Although I will be describing how the framework applies to a selected piano choice, which researchers in other

¹⁷ Molly, Driediger. *Imagery use by injured athletes: A qualitative analysis*. (2006)

disciplines have used to describe narrative music, I will be explaining the difference between my study and the existing ones and showing that there is no contradiction between them. Chapter 4 makes references to Mine Doğantan-Dack's work. As a pianist-scholar, her publication on gesture is influential to the kinesthetic imagery category of this research. I conclude with a summary of the implications for performers and researchers alike.

Chapter 2: Imagery in Piano Performance

Chapter summary: This chapter defines musical imagery as the ability to produce an imaginary perception based on preexisting knowledge or experience. The chapter aims to extend existing research on imagery framework and to provide readers with specific examples and definitions that clarify how musical imagery is used in solo-piano performance. The chapter distinguishes between two main categories of imagery, pianistic and non-pianistic, and further subdivides these into three sub categories (visual, auditory and kinesthetic). The chapter provides examples for each category.

As scholars continue to crystallize the concept of imagery, it is essential at this point to focus on a specific musical context, namely a specific instrument and a particular style of performance. While imagery generally refers to the ability to produce an imaginary perception based on preexisting knowledge or experience, scholars such as Clark and Williamon state that “musical imagery is the recreation of sounds in the mind when no audible sounds are present, and it differs from musical imagination in that the latter involves invention—whereas musical imagination involves the mental creation of new sounds, musical imagery involves the recreation of existing ones.”¹⁸ Although such terminology suggests that musical imagery is entirely auditory, there are at least six other types of imagery (visual, olfactory, gustatory, tactile, kinesthetic, and organic). For the purpose of this thesis, I will confine my analysis to only those

¹⁸ *Ibid.* 4

three that seem to occupy pianists most: visual, auditory, and kinesthetic imagery.

A consideration of imagery should not be confused with embodiment, hermeneutics, program music, and narrative. The study of embodiment in music tends to focus on the relation between the instrument and the performer's body. For example, Mine Doğantan-Dack explored the relationship between the gesture that the performer makes while striking a key and the sound produced.¹⁹ This branch of performance studies covers topics such as how the performer's body movements affect the outcome of sound and how certain types of movements aide in particular technical passages. Although such movement may be the outcome after using imagery, this study concentrates on the thought process that gives rise to physical movements, not the physical movements that arise from the thought process. In hermeneutics, scholars seek to uncover or decode the expressive content of musical works. The focus here often lies on how music has such content and from which vantages such content might be understood. For example, Lawrence Kramer among many others argues that msuical works have discursive meanings (Kramer 1993). By contrast, I do not participate in the debate of whether music has meaning or not. Rather I argue that the use of imagery could help performers to play expressively, even if the images being used do not correspond to the composer's own expressive intentions or what seems to be expressed discursively in musical works. Similarly, the use of imagery does not align with discussions of program music. An example of such study would be Lydia Goehr's research on whether music has political intentions, where she believes that music could serve its purely musical and political or religious roles simultaneously whether described as absolute or

¹⁹ Mine Doğantan-Dack, *In the Beginning was Gesture* (Ashgate, 2011), 243.

programmatic.²⁰ Debates such as whether music involves narrative or plot does not apply to this study. Rather, I am stating that using imagery as a strategy or a tool, which may or may not involve imagining a program, could effectively enhance the expressivity of piano performances.

I will now introduce the framework used to categorize imagery. Although imagery is a wholly mental perception that is not susceptible to direct observation, imagery is nevertheless linked to numerous sense perceptions. In the case of music, it is obvious that all the perceptions involving sound will be involved. Audiation, which Lehmann (1997) defines as the ability to hear a piece and to identify aurally specific elements or aspects of it, seems integral to musical experience. Studies on auditory imagery in music tend to focus on this internal impression sound makes on the listener. See, for instance, Lehmann (1997), Zatorre and Halpern (2005) and Clark (2011). But as the number of studies on this matter continues to rise, it may become evident that the converse is true, that how a musician imagines sound can directly impact the sound being made.

Lehmann has proposed that musical images need not only be auditory but can also involve other sense modalities of which two, visualization and kinesthetic awareness are most relevant (Lehmann 1997:146). As Lehmann suggests, visualization, which refers to the ability to imagine graphical images, e.g. visual scenes, pictures, or anything that might involve the sense of sight, may be one of the main ways the mind represents music to itself, by creating, for instance, a mental picture of the score. Pianists can use visual imagery in other ways too, as when piano educators speak about imagining the setting of the piece or to visualize a piece as

²⁰ Lydia, Goehr. *'Music Has No Meaning to Speak of': On the Politics of Musical Interpretation.* (1993)

telling a store. Kinesthetic or motor imagery links strongly with piano practice as musicians imagine can imagine their movements apart from actually moving. This type of imagery focuses on the inner impression of what it feels like to play the music. According to Clark (2011), kinesthetic imagery is strongly linked with auditory imagery in the sense that an auditory representation of the music could also give rise to a sensation of what it would feel like to play the music.²¹ When a pianist mentally rehearses and imagines or plans their movement as if they were actually performing, kinesthetic imagery that has been involved enhances their memory of the planned actions. Therefore, kinesthetic imagery should also be considered as pertinent to piano performance.²²

Although both Lehmann and Holmes propose three categories of imagery (auditory, kinesthetic, and visual) in their work, they did not provide detailed examples drawn from actual musical practice. As will become evident in what follows, those examples suggest that two broader categorizations need to be distinguished in order to grasp the full extent of how auditory, visual, and kinesthetic imagery might be used in piano practice. These categories distinguish between the pianistic and non-pianistic domains of experience. While both categories of imagery require previous knowledge, pianistic imagery specifically requires technical-musical knowledge. For instance, in order to produce an auditory imagery of the quality of a piano sound, the pianist must have experience of the piano's pitch and tone. On the other hand, non-pianistic

²¹ *Ibid.* 5

²² These three types of imagery seem to cover what Holmes proposes in his work. Mental rehearsal, as which musicians think through their performance and focus on or rethink certain aspects of it (such as interpretation) seems to resemble auditory imagery; and internal impression of the sound of music, and motor imagery, the internal impression of what it feels, seems to resemble kinesthetic imagery (Holmes 2005).

imagery involves previous knowledge other than musical experiences. Further, these experiences could be both realistic or made up scenarios. For example, a pianist may produce a visual imagery of the background of the situation by positioning his characters in his own city as well as in a forbidden palace. Figure 2.1 charts some examples of such imagery:

Pianistic Imagery	Non-Pianistic Imagery
<p>Visual Imagery Imagine...</p> <ul style="list-style-type: none"> - What the score looks like²³ - The appearance of the piano that you are playing - What your hands look like when playing - The concert hall you are playing in - The keyboard and distances between keys 	<p>Visual Imagery Imagine...</p> <ul style="list-style-type: none"> - The atmosphere in the story in context with your piece - For example, does the story take place in a dark or bright environment? - The surroundings in the story - For example, where does the story take place? In a forest, a palace, or a city?
<p>Auditory Imagery Imagine...</p> <ul style="list-style-type: none"> - Hearing the tone of each note in your head - Estimating the volume of each note without or prior to playing - Hearing the pitch of each note without playing - Predicting the direction of phrasing or melodic contour - Hearing the echo of the concert hall you are playing in 	<p>Auditory Imagery Imagine...</p> <ul style="list-style-type: none"> - The soundscape of the story relevant to your piece - For example, the background noise of a train, the sound of water splashing, or a bird singing - The voice of characters in the story - For example, if the main character is a soldier, he may have a low and strong voice. If the main character is a princess, she may have a high voice
<p>Kinesthetic Imagery Imagine...</p> <ul style="list-style-type: none"> - How the arms will sway when playing - How the fingers will strum on every key - How the wrists will move when playing 	<p>Kinesthetic Imagery Imagine...</p> <ul style="list-style-type: none"> - The actions of the characters in the story - For example, the main character

²³ *Ibid.* 4

<ul style="list-style-type: none"> - How your body balances on the chair - How you are going to press down the pedal 	<ul style="list-style-type: none"> may be dancing, jumping, and sleeping - If you are in the story, what physical actions are you doing?
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Figure 2.1 - Types and Examples of Imagery Used in This Study.²⁴

As the chart suggests, pianistic visual imagery is used to represent the music using mental pictures (such as a score, an appearance of a piano, or a set of keys used to play a certain passages) whereas non-pianistic visual imagery is used to create a mental image in regards to the story or scene that performers choose to express. Taking Chopin’s Ballade No.1 as an example, a pianistic visual imagery of mm. 1-6 can include a mental picture of the score, the dynamic markings, the accidentals, and the slurs (Figure 1.2). The vivid picture of the score may effectively enhance the memory of the piece. Visual images that involve imagination of the piano’s physical traits, the audience’s appearance, and the lighting within the performance environment can also serve as part of pianistic visual imagery. By contrast, non-pianistic visual imagery for the same passage can involve imagining gradually rising melodic contour in relation to an unfolding curtain. The pianist may also imagine the setting of the scene, such as a royal palace, a theatre in the 1800s, or an opening of a movie. An imagination of the character’s physical traits such as hair colour, facial expression, and clothing also fall into the category of non-pianistic visual imagery. In producing such images, the pianist may find more inspirations in the artistic creation of the piece.

²⁴ *Ibid*, 4-5.



Figure 2.2 - Chopin, Frederic. Edited by Rudorff, Ernst. Ballade No. 1 in G Minor, Op. 23. Leipzig: Breitkopf und Hartel, 1881.

In the auditory category, pianistic imagery can refer to the musician’s ability to mentally “hear” or “play through” a given piece, whereas non-pianistic audio imagery is used to hear sounds that are not specific to the music itself as in the sounds that one might image in a story or scene.²⁵ Using Debussy’s Arabesque no. 1 as an example, pianistic audio imagery could involve the mental hearing of individual notes, phrases, and dynamic levels. The pianist may also imagine the direction of notes as she hears the piano sound lowers gradually from mm. 6-9 (Figure 2.3). With a sense of the sound in mind, such pianistic imageries may help pianists to accurately produce it by motivating a specific touch and, therefore, tone. Non-pianistic audio imagery in this particular section may involve hearing of waterfall sound, dripping water drops, or the breeze through a falling flower pedal. The blurry atmosphere of the piece may also suggest

²⁵ *Ibid.* 4

sounds such as bird singing, wind blowing, and other features that compose a peaceful and harmonious soundscape. These non-pianistic imageries may inspire special treatments on individual notes and passages as the pianist attempts to imitate the sound outside of the piano's soundboard.

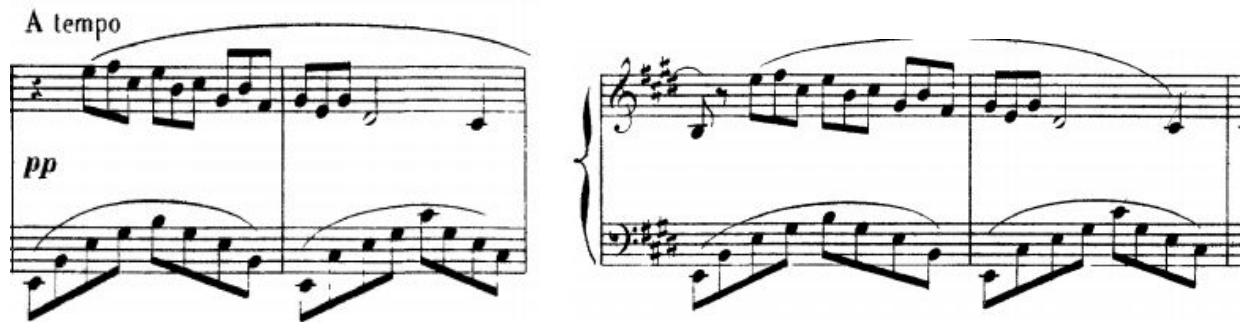


Figure 2.3 - Debussy, Claude. 2 Arabesques. New York: Dover Publications, 1974.

Lastly, pianistic kinesthetic imagery is used when the action of playing on the keyboard is imagined, whereas non-pianistic kinesthetic imagery refers to imagining actions that are not intrinsic to the actions required to play the piano, such as the actions of characters or elements in a story or scene. Take the mm.1-8 from Ravel's *Jeux d'Eau* for instance (Figure 1.4), in which a pianistic kinesthetic imagery could involve the imagination of the feeling when arms sway swiftly from left to right, wrists loosely swings in motion, or fingers touch through the smooth surface of the keyboard. Such pianistic kinesthetic images could guide pianists as they mentally prepare the actual movements of their body and predict the sensation that they will experience through the skin. By contrast, non-pianistic kinesthetic imagery involve creating images which reflect character's motion. In a dreamlike piece such as *Jeux d'Eau*, non-pianistic kinesthetic imagery could also include streams of water flowing smoothly in a pond, small dragonflies skimming the surface of the water, or waterlilies floating calmly over the lake. By having these

images in mind, pianists may deepen their engagement with the piece than if they were to perform without a plot in mind.



Figure 2.4 - Ravel, Maurice. Tres doux. Mineola: Dover Publications, 1986.

As important as it is to distinguish between the three basic types of imagery, it would seem more important to separate the pianistic and non-pianistic as these seem to function differently in performance and, therefore, have different affects on playing. When pianists

incorporate pianistic imagery into their playing, for instance, their imagination tends to be confined to the technical skills experienced previously through instruction and subsequent practice. By contrast, non-pianistic imagery involves bringing to bear imagery outside of the specific musical and instructional context. It is possible that pianists experience only one kind of imagery, such as using only pianistic or only non-pianistic imagery, since one may be able to imagine a vivid story scene using non-pianistic imagery but lack the technical experience to produce pianistic imagery. Thus, in order to achieve more accurate results in regards to the specific function and benefits imagery might bring to piano practice, all imagery are categorized as either pianistic or non-pianistic.

The importance of making a firm distinction between pianistic and non-pianistic imagery can be shown with regards to how kinesthetic imagery works in relation to timbre. Timbre represents the unique interaction between our body and the instrument, performers develop a memory for tone colour that is based on their kinesthetic sensations.²⁶ When practicing both physically and mentally, the pianist is essentially conducting trial and error exploration for the desired tone. Having achieved this tone, the pianist will then aim to duplicate the same kinesthetic movement that resulted in the same tone colour. This memory of desired movements is enhanced through practice and then becomes the desired presentation on the stage. In order to produce the desired tone colour, pianists could benefit from multiple practices of the desired kinesthetic movement both physically and mentally. As the result of practice, the pianist could quickly activate the memory of the desired kinesthetic movement and produce expressive phrases during live performances.

²⁶ *Ibid.* 250.

Instead of thinking about expression in terms of pitch and rhythms, which are fixed parameters values in the score, the kinesthetic feel of a particular gesture made to bring about a desired tone colour are left to the interpretation of the performer and will vary between musicians. Thus, the desired kinesthetic feel are often personal and unique to each pianists. For the performer, the continuity between tone colour and gesture and expressive performance in general are results of both music theory analysis and the emotions that emerge when playing the piece. Both of these features could be analyzed as pianistic and non-pianistic approach to the piece. On one hand, the use of pianistic features in searching for the desired gesture involves technical or musical knowledge such as counting and feeling the syncopated pick-up at the beginning of a piece. To present a sense of syncopation at the beginning of a section, the performer has to apply her musical knowledge of rhythm to deliver a certain forward impulse towards the downbeat from the kinesthetic feel of an uplifting gesture. Since the audience may not know when the performer starts counting into the piece, the gesture in this case plays a crucial role in giving a common sense of start point and aligning the performance with audience reception. When the pianist counts in her head a bar or two prior to striking the first note, she has produced a pianistic kinesthetic imagery that helps to set the tempo of the piece. Applying such imagery in practice and at the moment of performance could benefit both the performer in her musical experience.

On the other hand, the use of non-pianistic features in searching for the desired gesture is more abstract and complex as each performer develops their own relationship to the piece. This kind of usage often involves metaphors and imagination as the performer uses non-musical

features such as creating a story to give the playing more expressive dimension. Some of the common metaphors used for this purpose are “feeling the music going up and down” which turns into the wrist moving gently in a vertical motion or “pretending that you are turning a doorknob” which transferring into the wrist twisting slightly when playing arpeggiated and repetitive sessions. Dogantan-Dack asserts that she does not learn, represent and store desired rhythmic and melodic units without their accompanying gestural and expressive dimensions.²⁷ As such, the performer does not come to know the desired rhythmic and melodic units separately from the physical gestures and movements required to bring them about. The dynamic shape, such as a curve or a vertical line, is often incorporated into the performer’s imagination while performance is on going. The physical trace of the imagination then comes as the result of this invisible movement experience in the brain. Since the movements required to produce the desired sound are often practiced through imagination, kinesthetic imagery plays a crucial role in expressive playing.

To investigate further the function of kinesthetic imagery, it is necessary to examine and classify the types of kinesthetic imagery that can be used during artistic creation. Aside from the larger categorization of pianistic and non-pianistic kinesthetic imagery (as proposed earlier in this chapter), further subdivisions within each category could be established for greater precision in the study of imagery. Davidson and Correia (2002) have suggested that performance movements and gestures can be classified as purely biomechanical, culturally learned, and technically necessary or used for expressive purposes. These can be further grouped in pianistic and non-pianistic categories charted as follows:

²⁷ *Ibid.* 251.

Chart 2.5 - Classification of kinesthetic imagery

Pianistic kinesthetic imagery	Non-pianistic kinesthetic imagery
- Biomechanical	- Culturally learned
- Technical	- Personal habit
- Expressive	- Story related

Pianistic kinesthetic imagery involves biomechanical, technical, and expressive. Biomechanical imagery involves mental representations of the performer’s most direct physical contact with the instrument and the environment. For example, the performer could imagine the movement of piano keys going up and down as fingers strike on the surface. This mental image of the surroundings and a performer’s own physicality could mentally prepare the performer in becoming acclimated to the performing environment. Another subdivision of pianistic kinesthetic imagery involves all the technical skills necessary for delivering what the score specifies. For instance, the performer can imagine her fingers moving in thirds for a passage full of parallel thirds. By thinking about such movement, the performer could prepare the challenging sections of a piece using technically necessary images. The last subdivision of this category includes imagery used for expressive purposes. An example of this type of imagery would be imagining the body leaning heavily in a forward direction to produce a weighted and solid sound quality for a cadential moment in the piece. As the performer has practiced and stored the “feeling” of the movement in order to produce the desired tone, the performer could quickly draw out the similar “desired feeling” by recalling the imagery of this forward moving action.

This mental activity could be helpful in reproducing the desired movement during live performances.

Another second category, the non-pianistic kinesthetic imagery, also includes three subdivisions: culturally learned, personal habit, and story related. As suggested by Davidson and Correia, culturally learned movements could involve actions such as bowing sincerely and having a few seconds of pause before and after the performance.²⁸ Although these social norms may not directly affect the music being performed, they do play a role in producing a professional live performance setting. Thus, mentally preparing from the very beginning to the last second being on the stage could likely enhance the performer's confidence and experience about the performance. Another subdivision that could also help in a similar way refers to kinesthetic movements that developed through personal habits. For instance, some pianists lift hands up high for playing staccatos while others may prefer staying close to the keys. Imagining these details would help the performer to reflect on her own personal habit and be aware of the common movements that she usually makes unconsciously. Having an awareness of one's own personal performance habits could bring more vividness to the overall imagery experience, which provides more efficiency during mental practices. In the words of Gyorgy Sandor, "touch and tone quality were most personal things, and they are clearly recognizable. Even if they are hard to define, the difference in tone qualities among certain artists undoubtedly exists and is not imagines. There can be no argument that the piano sounds different when Horowitz, Richter, Michelangeli, or Argerich play it." (Sandor 1995: 14) Thus, it is apparent that personal

²⁸ Jane, W. Davidson. *Meaningful Musical Performance: A Bodily Experience*. (2001)

attachment to the music, such as the imagery used during performance, plays a key role in bringing the unique style of an artist and the character to the piece.

Lastly, as musicians relate the musical work to the storylines they have created for expressive purposes, kinesthetic imagery about the characters or environment in that story could also guide how performers produce the desired sound. When a performer plays a waltz, for example, she might imagine dancers twirling around and the edges of their dresses swinging sideways. The image of twirling and swinging could transfer to the performer's wrists swifiting gently in a similar fashion during performance. Even though these non-pianistic kinesthetic images may not require technical skills or musical knowledge, they can be used in piano practices for expressive creation.

In most cases, pianists are use a combination of a variety of imagery types in practice. For example, the American pianist William Mason, a pupil of Liszt, spoke of the “elastic touch....[The] tone produced by this touch has a buoyancy, lightness, and flexibility which is enlivening and exhilarating. The tones float and rebound, as it were, and are not dull, colorless or monotonous.” (Mason 1897: 51) In this phrase, Mason uses pianistic kinesthetic imagery for expressive purposes as he describes the movement for the production of the desired tone as as light and flexible. He also uses non-pianistic kinesthetic imagery for story related features as he imagines the tone floating in parallel motion with his hands. Similarly, pianists are firmly convinced that the striking of a single note of the piano could involve a vast amount of expression: some claim to be able to draw emotion out of a single key (Jeans 1968: 98). Scientific research on the physics of such a process is still ongoing and controversial. One of the

earliest experiments, conducted by Otto Ortmann, had experienced pianists play in a manner that they thought involved different kinds of touch. Images such as singing, dry, velvety, bell-like, and pearly were involved in describing the quality and experience of the sound produced.

(Ortmann 1925: 26) From this, he discovered that “each difference in quality corresponded to a difference in the speed of the key. Combining this finding with the earlier one he made, that increase in key speed is accompanied by increase in volume.”²⁹ Since different kinesthetic motions produce different speeds when striking the keys and since imageries were often used to bring out the physical motions, it seems plausible to conclude that it is the imagination that plays a key role in producing a variety of levels of volume and colour in piano playing. As Parncutt and Troup also confirm: “tone quality in piano performance is determined not only by the physics of individual keystrokes but also involves a complex and largely intuitive interaction among body movements, technical finesse, and musical interpretation, (Parncutt & Troup 2002: 290)” musical interpretations such as the imagined characters or movements of the musical contour are key features to tone production.

Piano performance is a field that explores the music making outside of solely the score. The process of every artistic creation is unique and involves more than simply bringing the score to reality. During such process, imagination is often used to stimulate creativity and guide the delivery of the desired sound. When teaching students to play expressively, educators incorporate imageries in such similar fashion. As pianist Heinrich Neuhaus writes: “Teachers inevitably and constantly use metaphor to define the various ways of producing tone on the piano. We speak of fingers fusing with the keyboard, of “growing into the keyboard”

²⁹ *Ibid.* 254.

(Rachmaninov's expressions) as if the keyboard were resilient and one could "sink" into it at will." (Neuhaus 1993: 62) While researchers continue to explore the different types and benefits of imagery, the application of imagery, such as using imagery in music education, is also an important field of study.

In this chapter, I investigated the influence of imagery upon piano performance. According to Hargreaves (2011), imagination is essentially perceptual: it is the ability to produce an imaginary perception based on pre-existing knowledge or experience. When applying this definition to musical performance, it is important to note that such perceptions are internal and not directly observable,³⁰ and that such imagery involves the recreation of existing ones.³¹ For example, one may experience physical responses such as a watery mouth when imagining the juice from a lemon. In creating the image and drawing such response, this person drew on his or her sensory experience with lemons. If this person has never tasted a lemon, the body would not respond to the imagery because he or she lacks the experience needed to create the evoking image. Similarly, an experience such as a mental picture of the score would be required in order to produce a visual imagery of it; or the musician would require knowledge of the piece and instruments in order to produce an audio imagery and mentally "hear" or "play through" a given piece. The understanding of the role of preexisting experience and knowledge affects the sample population selected for the experiment of this study. For example, a pianistic kinesthetic imagery, such as imagining how the wrists will move when playing, provides an internal

³⁰ David J. Hargreaves, Dorothy Miell, and Raymond A. R. MacDonald, *Musical Imaginations: Multidisciplinary Perspectives on Creativity, Performance, and Perception*. (Oxford: Oxford University Press, 2012): 3

³¹ *Ibid.* 4

impression of what it feels like to play the music. This action of preparation is an example of biomechanical pianistic imagery, where it strongly links the sense of touch with auditory imagery in the sense that an auditory representation of the music could give rise to a sensation of the potential feeling of physically playing the music.³² Since the experiment involves actively producing an imagery upon a given piece, participants must have enough musical and pianistic knowledge, technique and experience in order to qualify. More information in regards to the recruitment process will be provided in chapter 4.

³² *Ibid.* 5

Chapter 3: Case Study of Pianistic and Non-Pianistic Imagery

Chapter summary: this chapter explores the practical use of the two major categories (pianistic and non-pianistic imagery) in a specific case, Chopin's Ballade No. 1. The chapter divides into three sections. The first two discuss the three main types of imagery (visual, auditory, and kinesthetic) in the given piece according to the two divisions (pianistic and non-pianistic). The last section examines similarities between Janet Schmalfeldt's theory of analysis and performance and the findings of this chapter.

Schmalfeldt's notion of approaching music from both a theoretical and performance perspective seems to map into the two groups of imagery (pianistic and non-pianistic) used for piano performance. The theorist's view focuses on the technical aspect of the music, such as the form, melodic contour, and harmony.

Furthermore, in Schmalfeldt's research, a complete study of a piece would involve two perspectives—that of a theorist and a performer. In her essay, she presents a Schenkerian analysis as an example of studying a piece through theoretical perspective. The point seems to be that theorist's approach could be implemented when the performer uses such theoretical knowledge to guide her way through imagining the sound of the melody or subject, visualizing the structure of the piece, and the sections making up its form. From a theoretical point of view, the analyst or performer could incorporate pianistic imagery when studying or practicing for the piece.

Section 3.1 - Application of Pianistic Imagery on Chopin’s Ballade No. 1

The ways in which the specific categories and types of imagery will apply in the context of actual performance depends on the actual physical context of each performer. For example, if the performer has a small hand span, a pianistic kinesthetic image for an arpeggiated section may involve imagining the fingers spreading out and stretching for the upcoming note. Even for the same section of the piece, such imagination would be different for a performer with larger hand span for whom the image of spreading out and stretching may have no relevance. Thus, the imagery that I draw upon comes from my own experience and will therefore serve only as a suggestion which others can alter or adapt accordingly in order to use imagery effectively. As the chart suggests below, each section of Chopin’s Ballade stimulates all three kinds of pianistic imagery: pianistic auditory imagery, pianistic kinesthetic imagery, and pianistic visual imagery.

(Figure 3.1)

Form	Measure Numbers	Pianistic-Auditory Imagery	Pianistic-Kinesthetic Imagery	Pianistic-Visual Imagery
Introduction	Mm. 1-7	Aside from imagining the actual pitch going from low to high, the performer also imagines the deep and solemn tone produced by the first note of the piece.	The performer imagines her hand moving from the very left to the right side across the keyboard.	As the melodic contour rises gradually on the score, the performer may feel the rising figure internally and present such movement through her performance

<p>Theme I (G minor)</p>	<p>Mm. 8-35</p>	<p>The performer imagines the melody line while keeping a sense of steady pulse with the imagined accompaniment part.</p>	<p>As the accompaniment part is shared between both hands, the performer imagines her hands pushing down gently on the keys when producing soft and light staccatos.</p>	<p>Imagining the staccato signs above the chords reminds the performer to play with a light and bouncy character. The performer could also imagine the hammers inside the piano bouncing lightly as the waltz rhythm ensues. This may guide the performer in producing the desired articulation in order to replicate the waltz style.</p>
<p>Theme II (G minor)</p>	<p>Mm. 36-43</p>	<p>The distinctive feature for this section lies in the syncopated rhythm and melodic contour in the left hand. When preparing or performing this section, the performer may use auditory imagery according to the expected syncopation. By running through the syncopated rhythm in mind, the performer prepares the delivery of this special passage. The performer</p>	<p>The performer imagines left arm and hand moving left to right when reaching the leaps. She can also imagine right hand spreading out when playing the octaves.</p>	<p>By imagining the large leap figures in the left hand, the performer can better prepare for the upcoming note and perform with more accuracy as she is expecting for large leaps ahead of time.</p>

		could also imagine the melodic line formed by the first note of every group in the right hand. Hearing the melody and voicing it helps to shape the overall crescendo in this section.		
Transition/ Modulation	Mm. 44-66	The performer imagines the pitch of the notes switching rapidly as both hands are changing registers between each bar.	While this is a technically challenging section, the performer can prepare for this section by imagining the hand position in both hands. For the right hand, since the notes form a three-note pattern that goes from a fourth to a single note and to another, the imagined hand position could correspond to such pattern. For the left hand, the four-note chord that involves an accent each time could be the central hand position for imagination.	The performer could imagine the line of the melodic contour to guide dynamic levels in this section. For instance, the volume increases when the melodic contour rises.
Theme III (E-flat major)	Mm. 67-93	This lyrical section creates both rhythmic and melodic contrast from the previous	The performer imagines her wrists being relax and moving swiftly to produce the sotto	The performer imagines the pianissimo and the sempre pianissimo signs on the music,

		fast-moving transition section. A pianistic auditory imagery of the sound of the keys and modulations could benefit the performer in enhancing their memory of this section.	voce character.	reminding herself to play as soft as possible in this section.
Theme I (A minor)	Mm. 94-105	The performer could imagine the sound of the key to remind herself that a key change has occurred in this section. She may imagine the pitch sound of an A-sharp in this section which is distinct from the initial statement of Theme I.	In order to draw attention to the melodic line, the performer imagines putting more strength on the pinky finger when voicing for the melody.	The performer imagines seeing the changes in register on the score. As the performer sees that more notes are added and the span of the hands becoming larger, her pianistic visual imagery helps her to prepare for the gradual changes.
Theme III (A major)	Mm. 106-125	The performer imagines hearing a fuller sound as opposed to the initial statement of Theme III. Feeling the fullness of the sound quality helps the performer to bring out the essence of this section, in which the music is getting closer to	The difference between the initial statement of theme III and this recall is that the accompaniment is much more complicated. It would help to navigate through this passage if the performer imagines the left hand motion as it moves in a left	This time, Chopin brings theme III back immediately following theme I at m. 106. Although this restatement of theme III shows almost identical melodic contour to the initial statement, the transition into A major and the addition of chords and a large span of

		the climax.	to right pattern. Recognizing patterns will help the hand the perform with mental preparation. A pianistic kinesthetic imagery of arms spreading as the register expands and fingers moving faster as the number chords increases would help the performer to mentally prepare these expected changes.	register work together in expressing a passionate and bright atmosphere. The performer could imagine the melodic contour in helping to voice for the melody in the right hand.
Transition/ Modulation	Mm. 126-137	As this section has been suggested to play with a piu animato feeling, the performer could imagine hearing notes becoming closer together and the overall character becoming more tight.	The performer imagines the left hand spreading out for playing octaves during the beginning of this section.	Since the left hand involves quick motion when traveling between a span of a 10th, a pianistic visual imagery of the keyboard and the distance between notes could increase the accuracy of performance.
Theme II (E-flat major)	Mm. 138-149	This restatement of theme II takes place in E-flat major. While having a new passage for the right hand, the left hand presents similar syncopated rhythm and descending	The performer imagines left hand jumping rapidly from left to right as it switches from bass to treble clef.	The performer imagines seeing the legato signs in the right hand in which she is reminded to lift slightly at the end of each phrase.

		<p>melodic contour. In this section, the performer could produce a pianistic auditory imagery which focuses on the light and bouncy quality of the left hand melody. This pianistic auditory imagery may help the performer to bring out the playful character of this section.</p>		
Transition/ Modulation	Mm. 150-165	<p>The performer imagines hearing the chromaticism during this section. The chromatic movement creates a sense of tension that leads into the next section.</p>	<p>Similar to the previous transition section, the performer could utilize a pianistic kinesthetic imagery to increase the accuracy when playing the left hand part.</p>	<p>The performer imagines seeing the double-stemmed quarter notes in the right hand as a reminder to draw more attention to these notes and to hold them through the expected value.</p>
Theme III (E-flat major)	Mm. 166-193	<p>The performer imagines hearing the arpeggiated left hand part streaming through underneath the melody. Having a sense of forward motion helps to build momentum into the climax of the piece.</p>	<p>While the melody is almost identical to the initial statement of theme III, the arpeggiated accompaniment provides a different texture and builds momentum into the end of the piece. When the performer kinesthetically imagines the left</p>	<p>While this is the third statement of theme III, Chopin has put in unique ornamentations for the interest of this section. Thus, the performer could imagine seeing the grace notes and other special ornamentations that is unique to this</p>

			hand swinging swiftly from left to right, she may experience an easier time playing this arpeggio motion.	section as a way to remember the details and to draw attention through them.
Theme I (G minor)	Mm. 194-207	It is important to notice the slight differences between the initial statement and this last restatement of Theme I. At this time, a pianistic auditory imagery could guide the performer in remembering the small differences between the two sections.	The performer imagines putting more strength onto her hands gradually as the music moves from pianissimo to forte.	The performer imagines seeing the stream of parallel sixths and to draw attention to that as it leads into the climax.
Coda/ Theme IV (G minor)	Mm. 208-264	The performer imagines hearing a new melody as the coda is distinctively different from other sections. Hearing a new part makes the performer to be on the same page as the listener as they both look forward to this final moment of the piece.	The performer could make use of pianistic kinesthetic imagery as she anticipates an increase of body motion in order to produce the crescendos and momentum towards the end of the piece.	The performer imagines seeing the long and extended bars of scales in the last page. The observation of how the notes moving from low to high on the score corresponds to the desired volume of this section.

Figure 3.1 - Pianistic imagery chart

While the above chart shows many possible images for each section, images that could be used when performing the Ballade, the performer may not have enough time or capacity to think in all three types in the moment of performance. Thus, the performer should choose those that best work for her in each section and the type of imagery that is chosen could vary depending on what she wants to focus on in each section, the character of each section, and the physical context of the performer. Below is a chart showing such the selection of imagery that I made in my own practice. See example 3.2.

Form/Sections	Measure Numbers	Possible Imagery Used for Each Section
Introduction	Mm. 1-7	<p>pianistic visual Imagery: As the melodic contour rises gradually on the score, the performer may feel the rising figure internally and present such movement through her performance. A pianistic visual imagery is chosen for this section because I want to focus on the rising feeling that the notes portray. Thus, seeing the notes rising on the score helps me to shape such movement.</p>
Theme I (G minor)	Mm. 8-35	<p>pianistic kinesthetic Imagery: The performer could imagine the hammers inside the piano bouncing lightly as the waltz rhythm ensues. This may guide the performer in producing the desired articulation in order to replicate the waltz style. A pianistic kinesthetic imagery is chosen for this section as the waltz is the core of this theme. I want to feel the lightness of my hands as a preparation to executing that on the keys.</p>
Theme II (G minor)	Mm. 36-43	<p>pianistic auditory Imagery:</p>

		<p>The distinctive feature for this section lies in the syncopated rhythm and melodic contour in the left hand. When preparing or performing this section, the performer may use auditory imagery according to the expected syncopation. By running through the syncopated rhythm in mind, the performer prepares the delivery of this special passage.</p> <p>A pianistic auditory imagery works best in this section as syncopation is a sense of hearing the lack of the expected note. Although I expect to hear the note, but because of the syncopation I do not hear it. Thus, having this sense of incompleteness in my ear helps me to bring out the sense of syncopation.</p>
Transition/Modulation	Mm. 44-66	<p>pianistic visual Imagery: The performer could imagine the line of the melodic contour to guide dynamic levels in this section. For instance, the volume increases when the melodic contour rises.</p> <p>A pianistic visual imagery is chosen for this section because there are unexpected accents and rapid changes of volume in this section. Imagining the details on the score helps to remind me of the specific details that I should be showing when performing this section.</p>
Theme III (E-flat major)	Mm. 67-93	<p>pianistic auditory Imagery: This lyrical section creates both rhythmic and melodic contrast from the previous fast-moving transition section. A pianistic auditory imagery of the sound of the keys and modulations could benefit the performer in enhancing their memory of this section.</p> <p>A pianistic auditory imagery works well for this section because there is a sudden change in tempo and character. When I imagine hearing the sound moving slower and the</p>

		overall character becomes more smooth and gentle, I can bring out the contrast between this section and the other ones.
Theme I (A minor)	Mm. 94-105	<p>pianistic auditory Imagery: The performer could imagine the sound of the key to remind herself that a key change has occurred in this section. She may imagine the pitch sound of an A-sharp in this section which is distinct from the initial statement of Theme I.</p> <p>A pianistic auditory imagery is chosen again for this section because I want to draw attention to the sudden change in keys. As we are moving from a major to a minor key, imagining the change in tone helps me to prepare for the recall of a minor key.</p>
Theme III (A major)	Mm. 106-125	<p>pianistic kinesthetic Imagery: This time, Chopin brings theme III back immediately following theme I at m. 106. Although this restatement of theme III shows almost identical melodic contour to the initial statement, the transition into A major and the addition of chords and a large span of register work together in expressing a passionate and bright atmosphere. A pianistic kinesthetic imagery of arms spreading as the register expands and fingers moving faster as the number chords increases would help the performer to mentally prepare these expected changes.</p> <p>A pianistic kinesthetic imagery would be the best choice for this section because the difference of the initial statement of theme III and this one is the added harmonies and octave doublings. As I have a small hand span (maximum reaching an octave), imagining my hand is bigger and stretching my hand in my mind helps me to navigate through this passage.</p>

Transition/Modulation	Mm. 126-137	<p>pianistic visual Imagery: Since the left hand involves quick motion when traveling between a span of a 10th, a pianistic visual imagery of the keyboard and the distance between notes could increase the accuracy of performance.</p> <p>A pianistic visual imagery is chosen for this section as this section becomes chromatic. In a chromatic transition section, unexpected intervals and accidentals is the feature. Thus, I need to imagine the accidentals and the intervals presented on the score as a reminder for playing the accurate notes.</p>
Theme II (E-flat major)	Mm. 138-149	<p>pianistic auditory Imagery: This restatement of theme II takes place in E-flat major. While having a new passage for the right hand, the left hand presents similar syncopated rhythm and descending melodic contour. In this section, the performer could produce a pianistic auditory imagery which focuses on the light and bouncy quality of the left hand melody. This pianistic auditory imagery may help the performer to bring out the playful character of this section.</p> <p>A pianistic auditory imagery is used in this section because the melody line is difficult to recognize. As opposed to the initial statement of theme II, this section puts the melody in left hand. It was difficult for me to discover the melody at first because it was buried along with the left hand accompaniment. Thus, it helps me alot to imagine the melody line when voicing for this section.</p>
Transition/Modulation	Mm. 150-165	<p>pianistic kinesthetic Imagery: Similar to the previous transition section, the performer could utilize a pianistic kinesthetic imagery to increase the accuracy when playing the left hand part.</p>

		<p>A pianistic kinesthetic imagery is chosen for this section for the similar reason of my small hand span. The left hand is completely playing in octaves in this section. The imagination of my left hand being bigger than it actually is helps me to stretch out in reaching for the notes.</p>
Theme III (E-flat major)	Mm. 166-193	<p>pianistic kinesthetic Imagery: While the melody is almost identical to the initial statement of theme III, the arpeggiated accompaniment provides a different texture and builds momentum into the end of the piece. When the performer kinesthetically imagines the left hand swinging swiftly from left to right, she may experience an easier time playing this arpeggio motion. A pianistic kinesthetic imagery works well in this section as the left hand switches to arpeggiated style. When playing such movement, I imagine my wrist being relax and touching the notes on the way as I move the wrist horizontally. This helps me to play the arpeggiated movement with clear and steady notes.</p>
Theme I (G minor)	Mm. 194-207	<p>pianistic auditory Imagery: It is important to notice the slight differences between the initial statement and this last restatement of Theme I. At this time, a pianistic auditory imagery could guide the performer in remembering the small differences between the two sections. A pianistic auditory imagery is used for this section as a reminder of the difference in volume and details between the initial statement of theme I and this section.</p>
Coda/Theme IV (G minor)	Mm. 208-264	<p>Pianistic Kinesthetic Imagery: The performer could make use of pianistic kinesthetic imagery as she anticipates an</p>

		<p>increase of body motion in order to produce the crescendos and momentum towards the end of the piece.</p> <p>I often use pianistic kinesthetic imagery on technically challenging parts because by imagining the movements ahead of time, I can mentally prepare the for the arrival of a technically challenging sections.</p>
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Example 3.2 - Performer's choices when applying pianistic imageries to Chopin's ballade No. 1

In my own preparation of the Ballade, all three kinds of imageries are equally helpful. I use auditory imagery for sections that show contrast in character. When modulating from a major to a minor key, for instance, I prepare the switch by having a mindset about a change in tone. I choose to use kinesthetic imagery for technically challenging sections as mental preparation of the movements helps to prepare for the actual execution of the notes. I also tend to use visual imagery for similar sections that have been brought back multiple times. Composers tend to add small details to the restatement of a theme. Thus, a solid imagination of the score for that section helps as a reminder for the unique changes. Other musical features such as the form and patterns in melodic contour, register, and rhythm can also influence the choice for imagery and be enhanced during performance by incorporating pianistic imageries. When the performer associates these musical features with visual, auditory, and kinesthetic imagery, she may be able to incorporate more expressive nuance as she portrays the contrasts between sections. In the case of the Ballade, a pianistic visual imagery of the rising melodic contour could assist the performer when creating a crescendo and building momentum through the introduction. This occurs at mm.

1-7, where the pianist could produce an imagery of the rising figure of the melody which could guide the specific input on strength used in striking every note. (Figure 3.3)



Example 3.3 - Chopin Ballade No. 1 Op. 23 mm. 1-7.

Pianistic auditory imageries function similarly as the performer imagines the melodic contour prior or during the performance. Such imaginary auditory feedback guides expressive creation as the performer mentally prepares the execution of the desired sound. For example, the section from mm. 36-44 possesses distinctive feature in the syncopated rhythm and melodic contour in the left hand. (Figure 3.4) When preparing or performing this section, the performer may use auditory imagery according to the expected syncopation. By running through the syncopated rhythm in mind, the performer prepares the delivery of this special passage.



Figure 3.4 - Chopin Ballade No. 1 Op. 23 mm. 36-39.

Then as well, pianistic kinesthetic imagery produces a similar outcome as evident in the first statement of theme I (mm. 8-35). The waltz-like rhythm derived from the left hand part and the melody in the right hand stands out from the rest of the movement. In this section, the performer could imagine the hammers inside the piano bouncing lightly as the waltz rhythm progress. This kinesthetic pianistic imagery may guide the performer in producing the desired articulation (as indicated on the score) in order to replicate the waltz style (Figure 3.5).



Figure 3.5 - Chopin Ballade No. 1 Op. 23 mm. 8-11

While a performer may benefit in using pianistic imageries to improve technical practices, she may also profit from non-pianistic imagery whether she be a musician with more limited theoretical background or a musician who is conversant in theory. The following section will illustrate how performers might approach the performance of the Ballade with recourse to only non-pianistic imagery.

Section 3.2 - Application of Non-Pianistic Imagery in Chopin's Ballade No. 1

According to the definition in which the production of imagination requires previous or related experience in order to provide vivid imaginations on the piece, the images that a performer imagines should be familiar and/or related to the performer's experience. Thus, as a performer

aiming to perform this Ballade, I would not choose to develop my imagination around the original narrative. Rather, I would search for narratives with which I am familiar and which share similarities to the original poem. Since the goal for me as a performer is to perform the work expressively, I will deploy imagery from Shakespeare's *Romeo and Juliet* rather than the original narrative poem by Konrad Wallenrod.³³ Building a performance on the basis of non-pianistic imagery might seem counter to the theorist's approach which always follows musical structure. But performers often use such imagery as a tool for making performance more expressive. In the following chart, similar criteria have been applied when analyzing the piece in the performers' point of view.

Form/Sections	Measure Numbers	Non-Pianistic Auditory Imagery	Non-Pianistic Kinesthetic Imagery	Non-Pianistic Visual Imagery
Curtain	Mm. 1-7	The performer imagines the applause of the audience going from quiet (at the start) to strong (where everyone claps) and to quiet (where the applause ends with a single clap). This might correspond to the dynamic and pitch changes throughout this section.	The performer imagines the movement of the bottom tip of the curtain gradually moving up as the curtains are being pulled. Similar rising motion is presented through the increasing dynamics and pitch.	As the ascending line in both hands along with the gradual increase in dynamics create an opening atmosphere as if a curtain slowly unfolds from the spotlight, the performer could produce a non-pianistic visual imagery that reflects this introduction.

³³ Doing so does not imply that the Ballade expresses the Shakespeare play.

<p>Theme I: Capulet ball</p>	<p>Mm. 8-35</p>	<p>The first scene of the play occurs in a Capulet ball as both families, the Capulets and Montagues, join in a fine hall. This “Capulet ball” scene occurs from mm. 8 to 35 as the waltz-like accompaniment signatures this section for later recurrence. A non-pianistic auditory imagery could be used here to bring out the light waltz feeling. The performer could also imagine the right-hand quarter notes as footstep sounds produced by the dancers.</p>	<p>The performer imagines her characters tipping up their toes as they dance carefully in the ballroom trying to not knock someone over. This carefulness corresponds to the feeling that is required to play the light and soft staccatos in a minor key.</p>	<p>The performer imagines the dimness of the lights. The lighting is not too bright in this ballroom as it is a place to relax and enjoy. The lack of brightness in the light correspond to the concept of a minor key.</p>
<p>Theme II: Romeo’s affair (forgets about Rosaline and loves Juliet)</p>	<p>Mm. 36-43</p>	<p>The performer imagines hearing Romeo breathing rapidly as if he is almost out of breath from running. The desire to breath more correspond to the idea of a syncopated rhythm.</p>	<p>The center of the act then shifts to Romeo, the main male character of the play, as he forgets about Rosaline and becomes attracted by Juliet. The syncopation in rhythm and the gradual increase of tempo give momentum to the</p>	<p>The performer imagines seeing Romeo’s steps going out of sync with the music and the rest of the characters who were dancing. As he steps out in searching for Juliet, the sound of his steps are presented by the</p>

			<p>music as Romeo discovers his love towards Juliet. This section forms the second scene “Romeo’s affair”. Along with the syncopated rhythm, the performer could imagine Romeo running eagerly towards Juliet to bring out the momentum set in the music</p>	<p>syncopation in this section.</p>
<p>Transition: Tybalt (trying to kill Romeo but stopped by Juliet’s father)</p>	<p>Mm. 44-66</p>	<p>The performer imagines hearing the sword swinging in the air. As the sword goes up and down, the pitches also goes up and down rapidly.</p>	<p>The performer imagines the movement of Tybalt’s arms swinging furiously at Romeo with a sword. The strong movement of his arms are depicted through the accents in this section.</p>	<p>Tybalt enters the stage at mm. 44 as he tries to kill Romeo. Although stopped by Juliet’s father, Tybalt’s agitated emotion corresponds to the rapid change in harmony and a stream of rapid passages. In this case, “Tybalt’s” scene acts as a transition between important scenes. In the midst of frequent melodic and harmonic changes during this transition section, the performer could use a non-pianistic visual imagery,</p>

				such as imagining characters running and raising swords at each other, to enhance the mental picture of the atmosphere that she wants to portray.
Theme III: Balcony	Mm. 67-93	This “balcony” scene possesses a sweet romantic character expressed through the lyrical melody line and arpeggiated harmony in the accompaniment. At this moment, the performer can generate a non-pianistic auditory, such as imagining the arpeggio patterns as finger patterns on Romeo’s guitar, to illustrate dreamy scene.	The performer imagines Romeo and Juliet standing beside each other. Talking to each other in sweet poses as well doing what lovers are doing on the balcony. This sense of sweetness and happiness makes this section the most stable and calm section of the piece.	The performer imagines seeing the environment and the atmosphere surrounding the characters. For example, she can see the soft moon light, the empty streets, and the happiness shown on Romeo and Juliet’s faces. Having a sense of the environment contributes in performing the dolce feeling desired for this section.
Theme I: Capulet ball (memory)	Mm. 94-105	The performer imagines the distance sound coming from inside the ballroom. Although the characters are out in the balcony, Romeo is	The performer imagines Romeo turning slightly away from Juliet as he remembers, although not clearly, that he was here for someone else (Rosaline). This	While Romeo and Juliet confess their love through the “balcony” scene, a flashback memory occurs during this “Capulet ball”. Since this section is a restatement of the first theme

		subconsciously worried that there would be problem coming from inside the ballroom.	sense of worriness correspond to the dark and deep character portrayed by the low E and the minor key setting.	with slight variation, the characteristic of being familiar but with a few differences closely resembles a flashback section in a story. When the performer visually imagines the blurry atmosphere created by Romeo, she may feel the emotions more as she continues to play expressively. This recurrence of the “Capulet ball” scene serves a bridge as the theme foreshadows the next section - “balcony.”
Theme III: Balcony (confirm marriage)	Mm. 106-125	The performer imagines hearing Romeo speaking with a confident voice when proposing to Juliet. This sense of confirmation helps to bring out the brightness, the dignity, and the greatness of this section produced by the octaves and fuller chords.	While the melody mirrors the initial statement, the full chords in both melody and accompaniment parts brings the music to one of many climaxes. This part resembles the play when Romeo and Juliet confirm their marriage with passionate	The performer imagines seeing Romeo’s eyes looking straight into Juliet’s eyes. His sense of confident correspond to the solid chords and octaves used in this section in creating a fuller sound than the initial statement of theme III.

			emotions. To better capture the emotions at this moment, the performer could create a non-pianistic kinesthetic imagery. For instance, she can imagine Romeo kneeling down and confess his love towards Juliet or Romeo and Juliet embracing each other	
Transition: Tybalt (incensed that Romeo had sneaked into the Capulet hall, challenges him to a duel)	Mm. 126-137	The performer imagines hearing the swords clashing with each other as Tybalt and Romeo fight, corresponding to the accidentals added in this section.	Derived from the fast moving harmonic rhythm and chromatic pitches, the performer could visually or kinesthetically imagines the conflict where Tybalt feels incensed that Romeo sneaks into the Capulet hall and challenges him to a duel.	The performer imagines seeing the swords swinging up and down, left and right in the air as left hand presents large intervals which symbolizes the fast moving swords.
Theme II: Romeo's affair (Romeo refuses to fight because he considers Tybalt his kinsman)	Mm. 138-149	The fast moving harmonic rhythm and chromatic pitches reminds the audience of the conflict where Tybalt feels	The performer imagines the movement of the character's feet as Romeo runs away from Tybalt. A sense of chasing is	The performer imagines seeing both characters running away from the Capulet's castle. The characters coming

		<p>incensed that Romeo sneaks into the Capulet hall and challenges him to a duel. To portray the tension at the point, the performer could imagine the sound of frequent footsteps as Tybalt runs eagerly towards Romeo. While this section brings contrast between both statements of “Romeo’s affair” where the second one involves less stress and tension, which corresponds to Romeo’s perspective as he views Tybalt as one of his family members.</p>	<p>helpful in expressing the syncopated rhythm in the left hand melody.</p>	<p>together as Tybalt is almost caught up with Romeo. Seeing an intense chasing scene helps the performer to play with more momentum in the music.</p>
<p>Transition: Tybalt (fights with Mercutio)</p>	<p>Mm. 150-165</p>	<p>The performer imagines hearing the furious characters shouting at each other. This sense of anger is needed when performing this chromatic transition.</p>	<p>This third “Tybalt” scene also captivates the chromatic and fast moving feature as shown in previous statements. When the performer aims to present the friction between the characters, she could use</p>	<p>The performer imagines seeing the swords swinging in larger movements than before as this time, the characters are really trying to kill each other. The movement of the sword helps to bring out the</p>

			non-pianistic kinesthetic imagery by imagining the characters moving rapidly and raising swords against each other.	fluctuating dynamics and the melodic contour.
Theme III: Balcony (Romeo meets Juliet, plans their leave)	Mm. 166-193	The performer imagines hearing Juliet agrees surely to Romeo's plan and confirms their love. The con Forza and sempre f section would be the best representative of this imagery.	The performer imagines the movement of Romeo holding strongly onto Juliet's hands as he is sure that his plan will have to succeed as the consequent of failure would be death. This sense of confirmation correspond to the character of a major key as well with the left hand arpeggio stimulating the stream of passion that Romeo has.	While all these chaos and confusion are happening, the play switches the point of view onto the main characters. Romeo and Juliet meet again at the balcony and plans their leave during this section. With the use of accelerando and continuous moving lines in both hands stream through with passionate playing from the pianist, this third statement of "balcony" scene builds up momentum into the end of the play as both characters anticipate their plan. The passionate emotion at this scene could be

				guided by the mental picture of Romeo and Juliet embracing and devoting their affection.
Theme I: Capulet ball (recalls the marriage set during the ball, Juliet lies to her parents)	Mm. 194-207	The performer imagines hearing Juliet speaking with a weak voice as she lies to her parents. As she speaks quietly, the performer also plays in <i>sempre pianissimo</i> and <i>sotto voce</i> .	Romeo and Juliet present their last flashback on their first meeting during the ball. They recall their marriage engagement and Juliet lies to her parents. Similarly, since the function of the recapitulation of the first theme resembles a flashback in a story, the performer could use this imagination to present music as a narrative. As this section moves back to G minor, it builds tension that leads into the final section.	The performer imagines seeing Juliet looking worried as she lies to her parents. She then receives courage from recalling to her marriage engagement of Romeo and then looked more assured in the end of this section. This switch in character's emotion helps to portray the gradual dynamic change from <i>pianissimo</i> to <i>forte</i> .
Coda: Escape, potion, dies in the end.	Mm. 208-264	The performer imagines hearing the rapid footsteps of all characters involved in this scene: Romeo and Juliet running	The performer imagines Juliet taking the action of drinking the poison. This sense of stressness, confusion, and	A coda section representing Romeo and Juliet's escape procedure and the tragic ending finishes the

		away from their family. The sense of intensiveness helps to bring out the essence of the final coda.	finally leading to confirmation correspond to the chromaticism and complicated technical passages in the coda.	ballade in a catastrophic atmosphere. The performer could imagine a view of the death from Romeo and Juliet. The large amount of technically difficult passages and the stress and rhythm and harmony all complement the disastrous finale.
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Figure 3.1 - Applying non-pianistic imageries to Chopin's ballade No. 1.

With such images in mind, performers might find more connections to the Ballade and play expressively when carrying these mixed emotions and a variety of images derived from the plot. Firstly, the performance begins with a curtain, the opening theme from mm. 1-7. As the ascending line in both hands along with the gradual increase in dynamics create an opening atmosphere, as if a curtain slowly unfolds from the spotlight, the performer could use a non-pianistic visual imagery to create such an effect. The performer can associate the melodic line from mm. 8-35 with a scene involving Romeo and Juliet. The camera then shifts to Romeo, the main male character of the play, as he forgets about Rosaline and becomes attracted by Juliet. The syncopation in rhythm and the gradual increase of tempo give momentum to the music as Romeo discovers his love towards Juliet. This section from mm. 36-43 forms the second scene which I have termed "Romeo's affair." Along with the syncopated rhythm (Figure 3.2), the

performer could imagine Romeo running eagerly towards Juliet to bring out the momentum set in the music (non-pianistic kinesthetic imagery).



Figure 3.2 - Chopin Ballade No. 1 Op. 23 mm. 36-43

However, during Tybalt's scene (when Tybalt enters the stage at mm. 44 (Figure 3.3) as he tries to kill Romeo), arpeggios and fast moving chromatic passages (which correspond to the transition) do not allow a clear melodic line to be heard.



Figure 3.3 - Chopin Ballade No. 1 Op. 23 mm. 44-52

This contrast in melodic contour correlates to the notion of the importance of main characters and the purpose of supporting roles. Although stopped by Juliet's father, Tybalt's agitation corresponds to the rapid change in harmony and a stream of rapid passages. In this case, Tybalt's scene from mm. 44-66 acts as a transition between important scenes. When a pianist decides on her story line and identified a group of main characters, it is reasonable to place more emphasis

on them by assigning memorable parts as a means for association. In this case, by having a plot and differentiating characters by their importance, the performer may have a clear understanding of tension and release in the piece. In the midst of frequent melodic and harmonic changes during this transition section, the performer could use a non-pianistic visual imagery, such as imagining characters running and raising swords at each other, to enhance the mental picture of the atmosphere that she wants to portray. Stepping onto the famous balcony, scene III starts on m. 44 and ends at m. 66. This balcony scene takes on a sweet romantic character expressed through the lyrical melody line and arpeggiated harmony in the accompaniment. At this moment, the performer can generate a non-pianistic auditory, such as imagining the arpeggio patterns as finger patterns on Romeo's guitar, to illustrate a dreamy scene. (Figure 3.4)



Figure 3.4 - Chopin Ballade No. 1 Op. 23 mm. 67-72

While Romeo and Juliet confess their love through the balcony scene, a flashback memory from the Capulet ball occurs (mm. 94-105). Since this section is a restatement of the first theme with slight variation, it resembles a flashback section in a story. When the performer visually imagines the blurry atmosphere created by Romeo, she may feel the emotions more as she continues to play expressively. This recurrence of the Capulet ball scene serves as a bridge foreshadowing the next section - "balcony" (mm.106-125). While the melody mirrors the initial statement, the full chords in both melody and accompaniment parts brings the music to one of many climaxes. This part resembles the play when Romeo and Juliet confirm their marriage with passionate emotions. To better capture the emotions at this moment, the performer could create a non-pianistic kinesthetic imagery. For instance, she can imagine Romeo kneeling down and confess his love towards Juliet or Romeo and Juliet embracing each other. In the meanwhile, the "Tybalt" scene begins immediately at m. 126 and goes on to m. 137. Derived from the fast moving harmonic rhythm and chromatic pitches, the performer could visually or kinesthetically imagine the conflict where Tybalt feels incensed that Romeo sneaks into the Capulet hall and challenges him to a duel. In the meantime, the "Tybalt" scene (mm.126-137), with its



Example 9 - Chopin Ballade No. 1 Op. 23 mm. 126-133.

fast moving harmonic rhythm and chromatic pitches, reminds the audience of the conflict that gives rise to the duel (Figure 3.5). To portray the tension at the point, the performer could imagine the sound of frequent footsteps as Tybalt runs eagerly towards Romeo (non-pianistic auditory imagery). While this section brings contrast between both statements of “Romeo’s affair,” this restatement involves less stress and tension, which corresponds to Romeo’s perspective as he views Tybalt as one of his family members. Despite Romeo’s intention, Tybalt starts a fight with Mercutio at mm. 150. This third “Tybalt” scene also captivates the chromatic and fast moving feature as shown in previous statements. When the performer aims to present the friction between the characters, she could use non-pianistic kinesthetic imagery by imagining the characters moving rapidly and raising swords against each other. While all these chaos and confusion ensue, the play switches the point of view onto the main characters. Romeo and Juliet meet again at the balcony and plan their escape during the following sections (mm.166-193). With the use of *accelerando* and continuous moving lines in both hands stream through with

passionate playing from the pianist, this third statement of “balcony” scene builds up momentum into the end of the play as both characters consider their plan. The passionate emotion at this scene could be guided by the mental picture of Romeo and Juliet embracing and devoting their affection (non-pianistic visual imagery). Moving on to the last statement of the “Capulet ball” scene (mm.194-207), Romeo and Juliet present their last flashback on their first meeting during the ball. They recall their marriage engagement and Juliet lies to her parents. Similarly, since the function of the recapitulation of the first theme resembles a flashback in a story, the performer could use this imagination to present music as a narrative. As this section moves back to G minor, it builds tension that leads into the final section. From m. 206 to the end of the work (Figure 3.6), a coda section representing Romeo and Juliet’s escape procedure and the tragic ending finishes the ballade in a catastrophic atmosphere. The large amount of technically difficult passages and the stress and rhythm and harmony all complement the disastrous finale.





Figure 3.6 - Chopin Ballade No. 1 Op. 23 mm. 206-211.

As was suggested above, performers may find it difficult to use all kinds of imagery all the time as there may not be enough capacity in our brains to think about all the details at the moment of performing the piece. As such, individual performers will seek out different images that best work for them at the moment of performance. The choice will vary according to technical ability, physicality, and the emotion of the section. For example, it is evident through listening that conflict scenes possess more registral change as well as larger span in register as opposed to the more romantic scenes. In scenes where fights and arguments dominate the plot, such as in most of the “Tybalt” scenes, the register in both melody and accompaniment tends to change frequently and expand. Since frequent changes often build momentum in music, this compositional technique effectively serves its purpose for the overall pacing of the plot. While the performer could use pianistic imageries to observe the technical changes, the conflict in the story, which is produced without the necessity of musical knowledge (non-pianistic imageries), would also enhance her understanding of the piece. Lastly, another significant pattern which associates with the rhythm complexity and level of syncopation continues to decorate this ballade. While a more complex and crowded rhythm occurs during conflict scenes, the level of syncopation also increases. In contrast, gentle and lyrical scenes generally involve no or low

levels of syncopation and the note value of each pitch increases which results in a less complex and crowded rhythm section. The performer may effectively associate these technical changes with the plot and enhance not only the expressiveness in performance, but also the memorization required. This performer's perspective could be executed with such images as they relate to plot. For instance, the initial statement of the melody at mm. 8-35 could be interpreted as the first scene of the play which occurs during a "Capulet ball" when both families, the Capulets and Montagues, join in a fine hall. To present the waltz-like accompaniment, a non-pianistic auditory imagery could be used here to bring out the light waltz feeling. The performer could also imagine the right-hand quarter notes as footstep sounds produced by the dancers. As mentioned in Schmalfeldt study, both side of analysis often share similarities and may benefit each other. As demonstrated by the first theme in Chopin's Ballade, both pianistic and non-pianistic imagery express similar references to the waltz rhythm. While the pianistic imagery allows the performer to depict this rhythm through technical aspects such as imagining the hammers within the piano or the hand gesture as she plays, non-pianistic imagery tackles the same rhythm through the imagination of characters dancing in a ball. Performers could utilize both kinds of images when aiming for expressive playing as they often bring similar performance outcomes.

Chapter 4: Application and Contribution

Chapter summary: this chapter discusses the application and contribution of this study to performance and education. Since the purpose of this thesis is to develop a framework for categorizing the types of imagery involved in piano performance, as well as to define and delimit the function of each, it is hoped that both pianists and piano educators can use imagery more selectively to achieve desired outcomes. To that end, the chapter suggests ways in which pianists and piano educators might incorporate imagery into their practice and teaching.

Given the extent to which imagery and physical action correlate, it only falls to reason that imagery can also be used to facilitate musical education and training. With the knowledge of imagery and the benefits it may bring, educators could introduce techniques to students that would enhance various aspects of piano playing (technical development, expression, memorization). With reference to Waterman (1996), Woody states that material learned while experiencing a particular mood is best recalled later while in the same mood.³⁴ This theory implies that, during the learning phase, using similar imagery and metaphor for a particular work might enhance the learning process. Educators can consider choosing a fixed set of vocabulary for a specific work rather than being flexible with the terminology. For example, common words and phrases used in application of Chopin's ballade no. 1 are listed below.

- Rises gradually/rising figure/gradually moving up

³⁴ Robert H. Woody, *Emotion, Imagery and Metaphor in the Acquisition of Musical Performance Skill* (Music Education Research 4, no. 2, 2002): 222.

- Light/lightly
- Bouncy
- Swiftly
- Imagine the score
- Spreading out
- Melodic contour
- Dark and deep
- Running
- Fighting
- romantic

Music is a way of communication in that listeners could find meaning in music through its emotions and expressive qualities. The relationship between music and emotion has been an active field of philosophical research since the time of Aristotle. The great philosopher claims that music supplies images that imitate feeling and “moral character” (Sorbom, 1994). Scholars from a variety of backgrounds and generations, including Addis, Tait, and Woody, explored the emotional aspects of music from the perspectives of both listeners and the preparation and production of musical performance. Through analysing the ways in which Western-Classical musicians receive training, expressive performance instruction often includes extensive use of imagery and metaphors as teachers attempt to make students aware of emotional content of a piece or feel certain emotions while performing.³⁵ Tait, the leading scholar and educator of the field, suggested that teachers could involve connections of musical knowledge to students’

³⁵ *Ibid.* 214.

personal experiences through a teaching vocabulary that includes imagery, metaphors, and analogies (Tait 1992). Images produced from personal experiences are examples of non-pianistic images. Consider an example of using non-pianistic imagery in music teaching: “Simply put, music is modeled on, and expressive of, the human condition. So rather than just saying ‘louder,’ or ‘crescendo here,’ or ‘make the ninety-five decibel light go on’ a la paint-by-numbers, it may be more instructive and likely to produce musical results to elaborate with something more in the realm of human experience or imagination: Try projecting, expanding your sound as though you were evolving into a tower of strength, growing into a giant weightlifter ... now raise that weight ... gradually” (Haack, 1982). Based on Clynes’ research on the relationship between emotions and brain patterns, scholars have advanced theories on the role of emotion, imagery, and metaphor in the development of expressive performance skills. “Barten (1998) described heuristic imagery as a means of communicating to students the desired target experience for the physical skills required in music performance or the produced sound itself.”³⁶ For example, it is more efficient to tell a beginning flute student to imagine a hot potato in the mouth than giving anatomically based instructions about opening mouth cavity. Another exemplary work can be found in a piano method book titled “A Dozen A Day.” In the book, short finger exercises are named according to its resemblance with physical actions. For instance, steady quarter notes in scale motion are referred to as walking and sixteenth notes in similar scale motion are representations of running motion. (See figure 4.1) Similarly, piano method books, such as piano adventures series by Hal Leonard, always include a variety of images and that each exercise has a title which represents the story of the work. Thus, figurative language is pedagogically

³⁶ *Ibid.* 216.

effective because it helps students to understand the music or desired actions at a concrete and functional level.

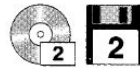
Group I

1. Walking and Running



1st time—*legato* (smooth, connected)
2nd time—*staccato* (sharp, detached)

2. Skipping



legato—staccato

3. Hopping



staccato

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Figure 4.1 - A Dozen A Day book 1 page 1 by Edna-Mae Burnam

Through examining a variety of similar analyses, Woody extracts additional findings from his experiment to expand on his argument of the effectiveness of imagery in performance practice.³⁷ In an experiment with college music instructors, Woody discovers that imagery using terms such as “flowing” or “bouncy” are crucial in bringing forth the emotions needed to play expressively.³⁸ Moreover, he discusses in detail the pool of shared imagery and metaphors used among advanced musicians. (See figure 4.2) This is because the established theories along with his study show the positive reinforcement that imagery brings to expressive playing. Additionally, he suggests that this technique be introduced to students as an effective way to make connections between music and emotion. More specifically, since he concludes that emotional aspects of music, including verbal descriptions of emotion, mood and motion, and physical gestures, are crucial in learning expressive performance, he encourages educators to include related exercises in music lessons.

List of metaphors examples used by musicians

- flowing
- bouncy
- bigger
- serious
- weighty
- heavy
- brooding
- pensive
- happy
- expanding your sound as though you were evolving into a tower of strength, growing into a giant weightlifter (Haack, 1982)
- For beginning flute students - imagine a hot potato in the mouth
- Play with sadness and intensity as you would when expressing the loss of a loved one. There’s a bittersweet remembrance of great tenderness and great loss.

³⁷ *Ibid.* 222.

³⁸ *Ibid.* 213.

Figure 4.2 - examples of commonly used metaphors by musicians, derived from Robert H. Woody's

Emotion, Imagery and Metaphor in the Acquisition of Musical Performance Skill

Since the model presented in this thesis provide ways in which imagery can be used to enhance the expressiveness in piano playing, pianists should be encouraged to use imagery and the imagery framework as part of their performance practice. By using this framework and understanding how imagery functions and influences physical movements, performers could have better control of the sound quality they want to produce. In terms of piano injury and treatment, correct use of imagery might contribute to injury prevention, pain reduction, and recovery from injury.

Furthermore, this study might impact fields outside of piano performance and piano education. The research result of this study could be applied to other disciplines, such as psychology, sport performance, and dance injury, as their researchers may be able to adapt findings in their interests and to expand on their arguments. Although research has yet to adequately explain the cognitive processes of expressive performance, it seems that imagery is inevitably an important component in piano performance.

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