



## F. Chopin's *Barcarolle* op. 60: Learning Strategies

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At the beginning of the new century Clarke stated: "musical performance represents a striking human achievement and is the result of a massive investment of time and effort" (Clarke, 2004, p. 59). Huron (2007), on the other hand, invites us to go beyond the primary aspects of sensations and perceptions so that we can invest in the dimensions of creativity and imagination of actual music making. Therefore, I chose a demanding work known for its pianistic and musical challenges as my starting point. This paper presents a partial report of some of the steps taken during the initial phases of learning, memorizing and performing Chopin's *Barcarolle* op. 60.

Commissions and premieres of new works measure the success of a composer, whereas that of an instrumentalist is based on the rendition of a particular composer or even a select group of pieces. At any rate, the measure of success can be assessed from the number of repeated performances during one's career. This is due to a paradox; the performer is expected to read the score with absolute faithfulness and reliability while at the same time reaching new creative heights, that is, going beyond explicit notation in order to establish innovative and compelling interpretations. Furthermore, communication with the audience through clear, intense and expressively designed intentions is also one of the main expectations. How can someone overcome this multifaceted challenge? Some would affirm: with ambition, talent and good luck. As a pianist and researcher, however, I can attest that the "massive investment of time and effort" mentioned earlier can be strengthened by an alliance with the new studies

in music psychology and the findings of "practice based research" (Hallam et al, 2009). Deliberate or effective practice based on planning and objective results places the performer as the main partner and collaborator in the field of cognitive musicology. In terms of instrumental practice, the tenets of deliberate practice discussed in the literature by various authors (Ericsson et al, 1997; Weisberg, 1999) have been showing different perspectives while at the same time preserving common attributes found in the performance of the professional and the expert as a unique source for the study of relevant procedures.

Recent literature points to an exponential increase in the number and quality of works discussing interpretation and performance from the perspectives of practice-led and practice-based research.<sup>1</sup> Based on this assumption, I have been involved in a longitudinal research of my own study since 2008. This paper presents a summary of how I learned the *Barcarolle* op. 60 written by Frederic Chopin (1810-1849) in 1845 and published in 1846. I employed the following learning strategies: 1) comparison of editions; 2) analysis for performance; 3) comparison of analysis; 4) the initial study sections recording and analysis of results; 5) deliberate practice and memorization strategies; 6) performance analysis and comparison of recordings.

### **Comparing Editions**

Following the practice of his time, and seeking among other expedients to escape copyright taxes, Chopin sent manuscripts with significant textual discrepancies to publishing houses in France, Germany and England (Rink, 1988). By trying to circumvent emergent nineteenth century copyright laws, he produced enough variance in order to make modern editors perplexed by the discrepancies found between sources. In addition to the manuscripts and fair copies, there are at least "three" first editions for most of his compositions, each showing significant differences and currently available at (Fig. 1):

<b>Online Resources for Chopin's works</b>
<a href="http://www.chopin.pl/edycja_1999_2009/recepcja/edytorstwo_muzyczne/wydaw_nut_en.html#11">http://www.chopin.pl/edycja_1999_2009/recepcja/edytorstwo_muzyczne/wydaw_nut_en.html#11</a>

<sup>1</sup> <http://www.creativityandcognition.com/research/practice-based-research/differences-between-practice-based-and-practice-led-research/>. Accessed on 23 Apr. 2013.

<a href="http://www.cfeo.org.uk/apps/">http://www.cfeo.org.uk/apps/</a>	<a href="http://chopin.lib.uchicago.edu/">http://chopin.lib.uchicago.edu/</a>
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Figure 1. Sources of Consultation to Chopin's online manuscripts and first editions

In addition to variations in his texts, Chopin incurred in some intentional copying alternatives which turned out to be problematic, as the case of the return to theme A' in measures 84-92, or in his own attempts to correct the following example (Rink, 1988, p. 208-209), as outlined below (Fig. 2 and 3):

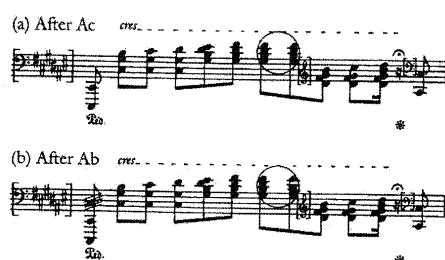


Figure 2. Divergence in the left hand m. 92.



Figure 3. Erasures in the left hand, m. 97.

Inconsistencies or errors found in Chopin's scores haunt both printed and electronically accessible editions. The practical result is that each pianist, after consulting the available sources, can prepare his or her own edition, thus revealing a number of possible choices given the textual alternatives. Each pianist may have the privilege of producing an authentic version, being the result of textual research or, following the composer himself, may offer alternative readings that will consider pedaling issues, room resonance and above all, his/her imagination. During the most critical period of learning, I used the edition offered at: 1984 Institut Fryderyka Chopina, Warsaw, Poland, ISBN 83-224-2212-1.

### **Analysis for performance and comparison of analyses**

The engaging sway of boats in the water defines the ternary movement of barcarolles in sharp contrast to the markedly quaternary accents of the horse's

paws of most *Allegros*. Chopin's *Barcarolle*, a close relative of *Berceuses* and other nocturnally inspired works, is closely related to some of the most characteristic genres found in the nineteenth century musical literature<sup>2</sup>. Its obligatory figuration in triplets had already been evoked by Beethoven (*op. 81a*, third movement), in Rossini's *Otello* as well as in numerous vocal and instrumental works. *Barcarolles* may signal the passage between this life and the next, being it a momentary trance or an eternal dream. The genre often evokes a fluid albeit inexorable withdrawal, a transposition to some unattainable realm, a voyage to the eerie lands of *La Bayadère* (Mincus, 1877), *Giselle* (Adam, 1840), and *Sleeping Beauty* (Tchaikovsky, 1890).

A product of Chopin's full maturity, the *Barcarolle* op. 60 combines the principles of repetition with continuous variation and, contrary to the *Ballads* and *Scherzos*, it has not been the subject of numerous analyses. Marked as *Alegretto* in its 116 measures in compound meter (12/8), it is distinguished by a sophisticated contrapuntal treatment and by a deliberate control in the delay of dissonance resolutions. The harmonic framework that clearly establishes F# as the main key in the two outer sections (m. 4-39 and m. 86-116) creates a contrast with the tonal region centered on A of the middle section (m. 39-83). This chromatically embroidered lowered mediant creates a seductively powerful narrative. In addition, both the Coda, described by Rink as an apotheosis (Rink, 1988), and the transitions from the middle section, especially the *dolce sfogato* section (m. 78-83), weave some of the most attractive pianistic passages in all of the instrumental literature. It is not a work of flashy virtuosity, on the contrary, it demands from the pianist an absolutely distinct level of subtle artistry.

Although Chopin uses an overall ternary design, the *Barcarolle* fails to fit into a pre-set mold and, considering that the music exists as a sound manifestation at the time of its performance, I chose to examine the work following schenkerian guidelines. I consider that this approach encourages the understanding of the presentation, maintenance and eventual resolution of highly active dissonances in contrast to the stability of the tonal background.

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<sup>2</sup> In 1786 during his well-known trip to Italy, Goethe described how Venetian gondoliers sang verses of Ariosto and Tasso adapted to the *melody*, a record of the *barcarolle* as a vocal genre (Edgecombe, 2001, p. 254).

Chopin's *Barcarolle op. 60*

First draft, 02/10

Schenkerian reduction by  
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Figure 4. *Barcarolle op.60, Graph of middle ground and fundamental structures.*

As shown above (Figure 4), the schenkerian graph presents my own synthesis of the *Barcarolle*; the ternary scheme is represented by the three triads on the top line, F# Major, m. 4; A Major, m. 39, F# Major, m. 84. These triads are linearly projected in order to prolong a long-term stable structure through intervening short-term local dissonances. In addition, the graph shows the permanence of the fifth melodic degree, C#, established at m. 6 as the main melodic tone which remains active until the beginning of the final descent (m. 101). The transitions with the highest level of invention in instrumental figurations give rise to some novel and extraordinary musical effects. Just as the music of Bach, each one of Chopin's returns marks a consolidation of plots and a significant increase in the complexity of the discourse and his indisputable compositional virtuosity.

Having performed this step, I consulted other analyses, Rink's meticulous and detailed (Rink, 1988) and Schmalfeldt's review of Rink's (1990). As a result of the comparison, Schmalfeldt draws particular attention to the importance of the events included among the m. 39 and 51, i.e., the analyst values the chromaticity that results in the thickening of the dissonant content of this specific passage built on the lower mediant. As far as my own investigation is concerned, I could then see that my intuitions were basically correct, but I could also verify that every analysis is an act of interpretation. Following schenkerian principles, all three analyses confirm the primacy of the tonic, the importance of the fifth degree as the main melodic tone and the ternary scheme organized in beginning,

middle and end. As for the pianist, the Introduction (m. 1-4) and the final apotheosis A + Coda (m. 84-116) mark the remarkable boundaries of the work.

An analysis of the performance of the *Barcarolle* may aggregate the principles of periodicity which also aggregates discontinuity and disruption, some of Chopin's preferred compositional resources; the high points that convert the work into a pianistic celebration, and last but not least, the interweaving of song, dance and narrative. These categories overlap and, in this process, the range of interpretive choices is multiplied (Agawu, 2009). I took these categories into consideration when planning the transformation of the text into musical sound.

### Initial study sessions

I started reading the work on March 17, 2008; and recorded on video the initial sessions of the study transcribed and converted into graphs (<http://musicpsym.uconn.edu/>). In a manner quite similar to a beginner, it shows trials and errors, frequent pauses and restarts.

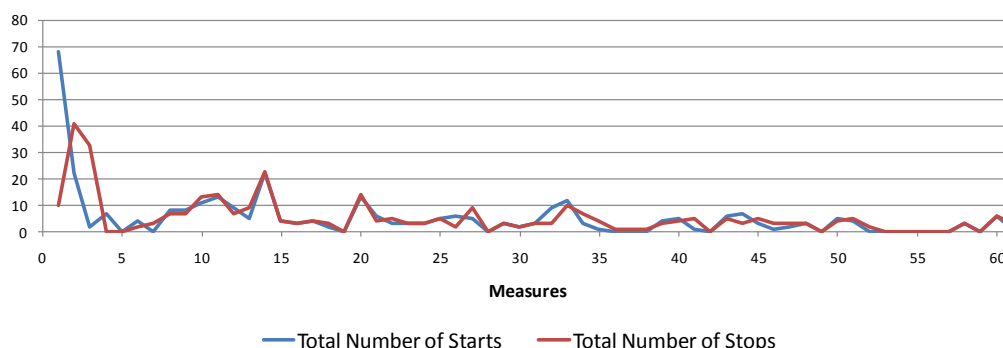


Figure 5. Graph featuring stops and starts on all practice sessions.

As shown (Fig. 5), the beginning of the work caught my attention. Later, this picture was modified, and in due time I came to devote detailed attention to the middle and final sections.

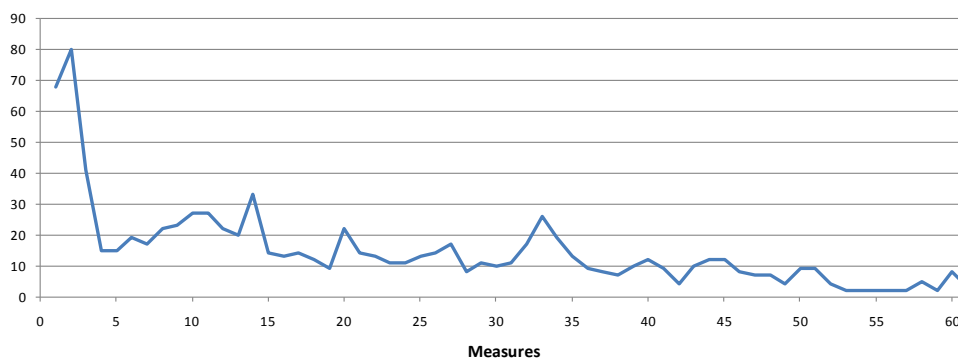


Figure 6. Graph featuring number of repetitions in all practice sessions.

A compilation of the graphs (Figure 6) shows that the initial phases of my study resembles that of beginners, in other words, it is laborious and repetitive. Contrary to expert behavior, I found myself stuck at the first few measures. However, at the end of two weeks, I could play the work from start to finish with some mistakes, but I had absorbed the general idea. At this point, I began analyzing the work seeking to understand the complexity of the contrapuntal plots and sub plots as well as the harmonic results. Recent publications confirm the existence of two important variables in relation to the practice and its role in achieving the proposed goals, that is, the quality and quantity of the study, especially in interaction with the acquired knowledge and previously developed skills. I concur with Sloboda (1996, p. 308) that the quality of time spent in an informed and relevant way during practice is by far the decisive variable in the acquisition of highly developed musical skills. Thanks to the partnership with the Performance Music Lab (<http://musicpsym.uconn.edu/>) and above all, thanks to the interest of researchers in understanding how a musician learns, I transposed the initial stage of repetition and sought more effective learning strategies, as described below.

### **Deliberate practice and memorization**

The study (practice) is a central and common factor to all aspects of musical development (Jørgensen and Hallam, 2009, p. 265). Human activities depend on stages and degrees of learning, on goals to be achieved, on the organization of expenditure of time, and on the degree of satisfaction with the results. In this sense, my understanding of practice does not relate only to the mechanical study of the instrument, but to the development of a set of skills required for a professional performance such as the acquisition of interpretative tools according to stylistically refined codes, the ability to perform by memory, the ability to

handle the musical parameters in order to intentionally manipulate the projection of structural and expressive elements, as well as the development of a superior hearing acuity. Reflecting on my behavior and on the results, I aimed at the highest level of control so that adaptations and modifications could occur from moment to moment in the memorized performance. As far as the retrieval of musical data is concerned, there is not enough memory to rescue note-by-note, event-by-event, during the course of a performance. Memorized performance demands the subsuming of smaller events into longer ones in order to create larger and more meaningful segments. Thus, the schenkerian analysis<sup>3</sup> leverages the organization of long-term musical discourse in its linear path, while the analysis for performance contributes to closely monitoring feelings, affections and intentional resolutions related to dynamics and articulation in the medium and short term. During any given practice section, these strategies can be and are constantly combined and recombined, so that instant decisions become readily available.

This type of study differs from the initial sections, in which I found myself involved with the mechanism of repetition while trying to decipher the musical code. Had I stayed longer on this course, I would eventually memorize the work as a series of **associative chains**. In this type of memorization, each segment activates the next. This rudimentary mechanism works but it is very frail, one broken link and the retrieval may be compromised. Deliberate memorization, on the other hand, is based on a hierarchical scheme of organized recovery anchored on consciously implemented cues. These cues activate the retrieval of information through **content addressable memory**.

Insofar as the memorization was consolidating I could create specific questions such as: What are the differences and similarities between measures 32 and 92 of the *Barcarolle*? (Chaffin et al, 2009). Seeking to develop a content addressable memory, I established a course of studies according to Chaffin's Performance Cues protocol known as PCs (Chaffin, Imreh, Crawford, 2002). From June of 2008 practice sessions onwards, I consciously observed characteristics and peculiarities of the musical text in order to establish categories designated as Basic, Structural, Interpretive and Expressive Cues.

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<sup>3</sup> Heinrich Schenker, Austrian analyst and musicologist (1868-1935), proposed a unified theory of the tonality, and his analyses are in fact summaries of the progress of the musical discourse.



These cues are personal and nontransferable as they are the result of choices, and its application followed my own needs and goals. Structural Cues refer to the understanding of the score organized into sections, subsections, sentences, phrases, endings and cadences as well as changes in the design. These formal aspects generate both regular and irregular patterns, interruptions or discontinuities.

Simultaneously, I tried to understand the text of the *Barcarolle* taking into consideration the design of the larger sections and the phrasal content. This category includes what has been designated as **switches**, i.e., very similar passages with different continuations (Chaffin et al, 2002). As a general rule, a live memorized performance may contain moments of tension specifically in the continuation of similar but not identical passages; the study of switches, frequent as they are subtle in the *Barcarolle*, received a great deal of my deliberate attention during the learning process. In the two examples below, I demonstrate two instances of switches, both define moments of the highest and most expressive structural significance (Fig. 7 and 8).

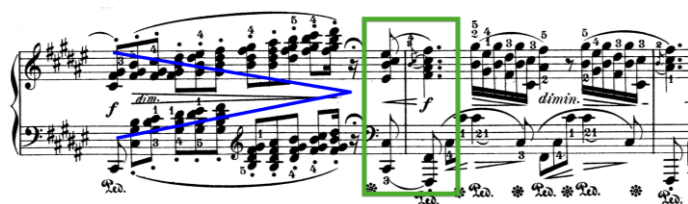


Figure 7. Switch at ms. 32-33.

Figure 8. Switch at ms. 92-93.

Since the first readings, I have sought to highlight the switches, a prominent characteristic of tonal music, be they musical segments with identical or similar content that lead to different sections such as in the example above, or very subtle changes in the accompaniment.

## Performance analysis and comparison of recordings

The different types of analysis were supplemented by hearing recordings, a routine I consider as important as reviewing the literature on a given subject. Hearing is fundamental for my way of learning and memorizing musical works, this knowledge of my learning preferences results in efficiency and time saving. Moreover, musical taste is a cultural construct, which develops through familiarity with a given repertoire (Becker, 2001, p. 129). Musical performance in advanced levels of excellence depends on refined technical skills characterized by subtle differences in handling time (micro-temporal variations, REPP, 1988, 1997) and distinguishing the artist. These variations are responsible for the individual profile of each performer and can be analyzed with the aid of specialized software (Gerling, 2008; Matschulat, 2011). In fact, after more than a century, the collection of recorded works opened a new field of musicological research, that is, analyses of performances (Clarke, 2004). Since the appearance of the first phonographic registers, significant comparative studies aimed at understanding the development of musical aesthetics have contributed to the understanding of the art of musical performance (Bowen, 1993). Even without knowing how Chopin played,<sup>4</sup> I can analyze the performances of renowned pianists recorded since the early twentieth century. The number of phonograph recordings of the *Barcarolle* counted by the hundreds is inversely proportional to the paucity of analyses. It has been one of the favorite works of the competitors in the Warsaw Chopin Competition since 1927. As part of the deliberate study, I compared more than 40 recordings. The following is a comparison of the tempos used by nine pianists of different generations; the younger ones are recent winners of the Warsaw Chopin Competition. The comparisons are based on the measurements of tempo changes requested by Chopin (Fig. 9):

m. 1 Introduction	m. 4-6 <i>Allegretto</i>	m. 34-40 <i>poco piu mosso</i>	m. 62 <i>poco piu mosso</i>	m.71-74 <i>meno mosso</i>	m.93 <i>piu mosso</i>	m.111 <i>Calando</i>
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Figure 9. Tempo Indications in the *Barcarolle*.

<sup>4</sup> There is a description of Chopin already debilitated by the disease, playing the *Barcarolle*. On this occasion Chopin reversed all dynamic signs, and began playing at m. 84, which contains explicit indications of *f* and *ff*, he chose instead to play with extraordinary delicacy and nuances of *p* and *pp*.

Pianistas	m.1-3, 4-7	m.28	40	m.88-96
Antonietta Rudge	60-70	90-40	62	100+-88+
Leff Puishnoff	44-48	86-46	80	72-112
Heinrich Neuhaus	64-70	72-55	70	66-100+
Alfred Cortot	67-70	66-40	60	66-82
Arthur Rubinstein	65-70	64-40	60	70-92
Vladimir Horowitz	55-60	62-45	102	66-84
Rafal Blechazc	58-64	62-38	62	62-114
Lukas Geniusas	58-61	60-48	72	60-100+
Daniil Trifonov	54-66	81-59	56	80-92

Figure 10. Selected pianists and approximate tempo measurements (bpm).

The comparisons of tempos chosen by pianists in the previous table (Figure 10) can be explained in the following charts.

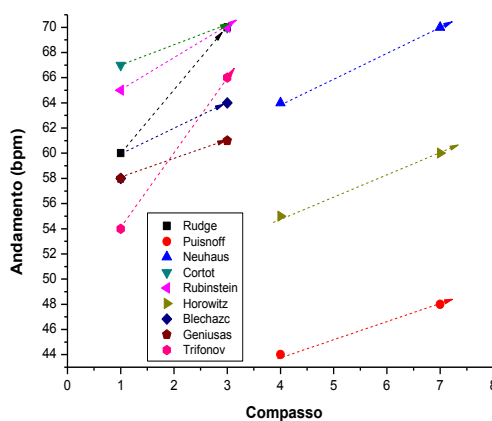


Figure 11. Tempo Variations, ms. 1-7.

As exemplified in Figure 11, all pianists, without exception, effect an increase in the speed of the opening measures of the *Barcarolle*, even Puishnoff who starts at a slower pace in both segments (m.1-3 and 4-7). The forward impulse seems to be a common choice for all. This is a jarring and intensely dramatic beginning. The impact of the first dissonant chord needs time to resonate and die down, but the musical discourse eventually needs to be resumed, the barcarolle requires constant undulating propulsion.

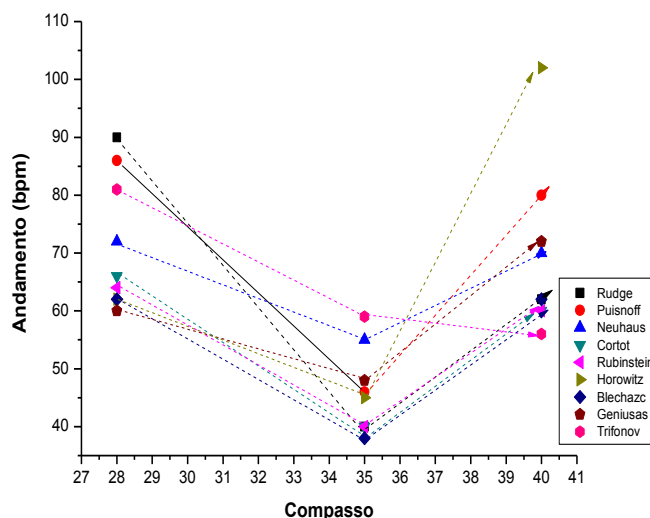


Figure 12. Tempo variations, ms. 28-40.

Chopin's request to *rallentando*, which precedes the "*poco piu mosso*" of m. 35, is satisfied by the selected pianists with a gradual but sharp loss of speed (Figure 12). Once past m. 35, Horowitz distinguishes himself by adopting a fast pace and, in the space of three measures, doubles the speed. All other instrumentalists in this group perform the *accelerando* with varying degrees of parsimony.

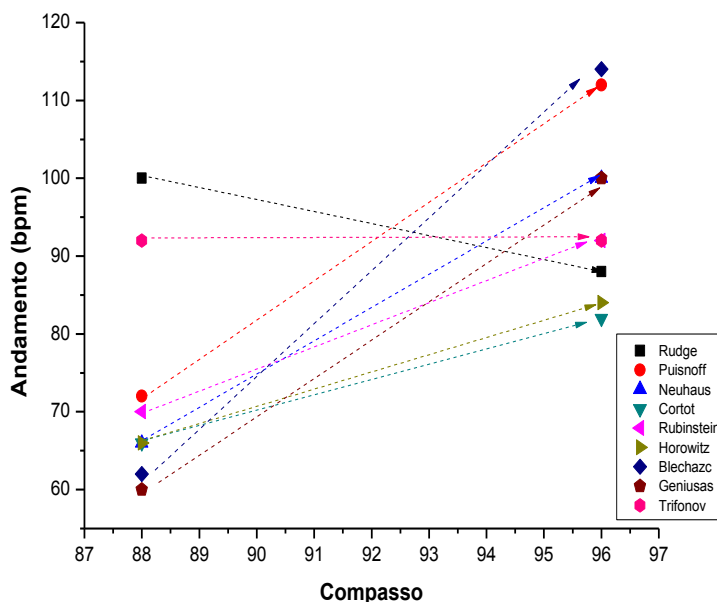


Figure 13. Tempo variations, ms. 88-96.

An epistemological aspect involved in musical performance is related to the fact that the instrumental performance does not deal with discoveries, but with

inventions and creations. Thus, Antonieta Rudge (1885-1974) innovated with a loss of speed at the moment that the other pianists chose an increase in this parameter (Figure 13). As for the total performance time, Rudge spends 8.18 minutes versus an average of more than 9 minutes for the remainder. Listening to recordings exponentially expands the range of possible interpretations not as means of copying but as an expansion of alternatives, a strategy that incites reflection on interpretative decisions (Lisoba et al, 2005; Freitas, 2013).

After the first forty hours of study, I presented the *Barcarolle* for the first time in February of 2009 to a restricted audience composed by experienced musicians. Each subsequent presentation brought new ways of thinking about my own interpretative decisions, my search for artistic growth. The memory or fluency in itself did not constitute a constraint since I have built in a kind of practice that allows for a fluid and yet controlled performance. I keep on searching for ways to capture the complexity of the whole and the sharpness of every detail. I still seek the ineffable, the magical and intangible, something to be achieved one performance at a time and in complicity with the audience.

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