Music Memorization for the Classical Guitarist

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MUSIC MEMORIZATION FOR THE CLASSICAL GUITARIST

By

Federico Musgrove Stetson

A DOCTORAL ESSAY

Submitted to the Faculty
of the University of Miami
in partial fulfillment of the requirements for
the degree of Doctor of Musical Arts

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A doctoral essay submitted in partial fulfillment of
the requirements for the degree of
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MUSIC MEMORIZATION FOR THE CLASSICAL GUITARIST

by

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The purpose of this essay is to research all music memorization techniques used by classical guitarists, and identify the most successful ones in order to create an efficient music memorization method for the classical guitar. Musical performance from memory is now commonplace among solo classical musicians. This concept developed from the rise of the Romantic era instrumental virtuoso, and since then, hundreds of studies and articles have been written to analyze and provide efficient memorization techniques, the oldest of which dates back to 1857. Although most of the data gathered in these studies and articles can apply to the classical guitar, there is a lack of research on the subject referring to this specific instrument. The research questions to be discussed are the following:

1) How do elite classical guitarists memorize music? What techniques do they use? Are there any differences with the previously researched techniques?

2) What is their opinion on playing from memory vs. having music on stage?

3) Has their memorization approach changed over the years?

4) Do they teach their students how to memorize?

5) Do their students use different techniques?

6) Do they use kinesthetic/motor visualization at all?
7) Have they ever dealt with memory slips? Why do they happen? How do they solve them?
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Chapter One

INTRODUCTION

Memorization is an aspect of musical performance that sparks the attention and interest of musicians and non-musicians alike. The first group is always looking for techniques that will permit them to better memorize music in the least amount of time. The latter group is often impressed by the amount of notes that a musician can recall on stage while making it seem effortless.

There are stories of extraordinary feats of memory such as Mozart writing out Allegri’s Miserere from memory after only two hearings,¹ and there also are documented instances of the origin of performances from memory. For example, in 1808, during a concert in Leghorn, the virtuoso-violinist Niccolò Paganini had an experience that would have upset solo musicians of his day: as soon as he began to play, both candles fell out of the music stand and had to proceed from memory.² In 1837, eighteen-year-old Clara Schumann performed Beethoven’s Piano Sonata No. 23 in F minor, opus 57 from memory.³ In the 1840s, Franz Liszt performed more than half his recitals from memory.⁴

A century later, playing music from memory became the common practice, but early in the nineteenth century, performing without a score was viewed as arrogant,


² Lilias Mackinnon, Music by Heart (London: Oxford University Press, 1938), 1.


drawing attention on the performer, and away from the composer and the music. By the
beginning of the twentieth century, it was expected for instrumentalists to memorize
certai and solo recitals. Audiences viewed performers playing from memory as having
almost super-human powers.5

In 1922, the Italian pianist Ferruccio Busoni showed his favoritism towards
playing from memory, as it “…gives an incomparable greater freedom of expression. The
player who is dependent on his notes, finds this not only limiting, but actually an
interference.”6 In that same interview, Busoni acknowledged the existence of stage-fright
and how it can the prevent the retrieval of memorized material. 7

Students and professional musicians have to deal with the process of memorizing
their music. Many are successful; however, most have experienced a memory slip – or
more – at one point in their careers. In 1983, pianist John Browning voiced concerns in
memorizing music when he stated that “I don’t care what anybody says, every performer,
no matter how secure, always thinks about the possibility of memory slips… Everybody
has to work at memorizing.”8

Although there are many books and articles that discuss performance anxiety in
music, most fail to recognize that in general, musicians do not have an actual anxiety of

5 Jennifer Mishra, “A Century of Memorization Pedagogy,” _Journal of Historical Research in
http://access.library.miami.edu/login?url=http://go.galegroup.com/ps/i.do?id=GALE%7CA288538149&sid =summon&v=2.1&u=miami_richter&it=r&p=EAIM&sw=w&asid=af47a88e36cd6918e155d7c7dbced491

6 Mackinnon, _Music by Heart_, 2.

7 Ibid, 3

8 Chaffin, _Practice Perfection_, 52.
performing, but anxiety of forgetting music, or performing badly. Part of the existing literature suggests using techniques such as concert visualization, where a musician visualizes a successful performance with a satisfied audience, or centering, a meditation-like exercise to mitigate self-criticizing voices. These techniques are of great value as long as the musician possesses a clear understanding of the music.

There are four types of memory: muscle memory, auditory, visual, and analytical. Each one stores information in the brain as different images. These images allow musicians to recall or anticipate how a piece of music sounds, how it looks on the score, and how the hands look and feel while playing the instrument. Muscle memory is developed by repetition of physical practice on the instrument. This type of memory is the one that allows a musician to perform a skill, such as a musical passage, without paying attention to the action itself or while performing a different activity (reading, talking, etc.). Auditory memory refers to the ability to remember a melody, a harmonic progression, and in some instances the starting pitch of a composition. Visual memory helps a performer remember how a score looks like, or to visualize the placement and movement of the hands while performing. Conceptual memory stores a performer’s analysis of harmony, form, sequences, dynamics, and other compositional elements.

Memorization quality varies for each individual. While one performer may be able to recall a piece after hearing or playing it for the first time; another may take weeks to

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9 Chaffin, Practice Perfection, 58.

memorize the amount.\textsuperscript{11} Some musicians claim that they memorize naturally, but in reality, they possess one or more highly-developed types of memories.\textsuperscript{12}

There are a few ways to quickly assess if a composition has been memorized or not. First, a student or performer should be able to identify and describe the tempo and overall structure of the piece. This will allow to create a “blueprint” of the composition and facilitate information storage and retrieval.\textsuperscript{13} The student may then proceed to the following checklist:

- Can the performer begin at any part of the composition?
- Can the performer play the piece with confidence at half tempo (or even slower)?
- Can the performer play the piece hands separately? This step is not applicable to all instruments, but very popular on keyboard and string instruments.

After successfully completing the previous steps, the performer can then add the element of external stress by performing for an audience. This final step will give the musician a final diagnostic of the memorization process.

Musicians tend rely the most on motor or muscle memory, such as repeating a passage for hours; however, this approach by itself is not enough to prevent forgetting music during a performance. In fact, some artists, such as Rudolf Serkin, and Alicia de Larrocha, claim that muscle memory is the least reliable type of memorization, describing

\textsuperscript{11} Mackinon, \textit{Music by Heart}, 6.
\textsuperscript{12} Chaffin, \textit{Practice Perfection}, 36.
\textsuperscript{13} Shockley, \textit{Mapping Music}, 5.
it as “irritating and dangerous.”\textsuperscript{14} The American pianist and conductor, Leon Fleisher, argued that ideally a musician should use a combination of aural, visual, and tactile memorization, given that muscle memory on its own is not reliable during a performance as “it is the finger that deserts one first.”\textsuperscript{15} When something does go wrong on stage, a performer must use conceptual memory and find a place in the composition to restart motor memory. A beginner might have to go back to the beginning of the piece, while an experienced musician will be able to start anywhere, using retrieval cues strategically placed during their study.\textsuperscript{16}

Finally, musicians favor physical practice over mental practice. This can be explained by the interpretation that the popular motto “practice makes perfect” only applies to muscle memory and hours of repetition; however, research supports the idea that mental practice, and visualization more specifically, activate the same areas of the brain as kinesthetic practice.\textsuperscript{17} Kinesthetic or motor practice is vital to a performer’s career. Nothing can replace the benefits of our motor skills training and refinement, but visualizing movements, such as a left-hand or right-hand passage for a guitarist, can prove a significant benefit.\textsuperscript{18} First, mental practice will only add to the kinesthetic one, since the same area of the brain will be engaged. Second, visualization will help prevent

\begin{footnotesize}
\begin{enumerate}
\item Chaffin, \textit{Practice Perfection}, 37.
\item Ibid, 39.
\item Chaffin, \textit{Practice Perfection}, 198.
\end{enumerate}
\end{footnotesize}
memory slips during performances by forcing the mind and ear to recall structure, tonality, patterns, and shapes.  

**Need for Study**

Today’s society is used to listening to perfect recordings. Soloists have started to use over-dubbing techniques with more frequency. As a result, they produce better recordings, and achieve their musical ideal as if there were no technical limitations. In consequence, audiences expect the same level of performance when they attend a concert.

Although most concert-goers might not understand appropriate period musical phrasing, and other musical concepts familiar to advanced musicians, they will most likely be able to recognize wrong/missed notes, and will definitely be able to tell if a performer stops playing due to a memory lapse. Audiences tend to be more receptive to memorized performances, describing them as more expressive, more communicative, and superior in overall quality over performances with scores on music stands. Additionally, in 1938, Lilias Mackinnon leaned in favor of memorizing music from an aesthetic point of view when she claimed that “in America, where the public not only prefers performance from memory but demands it, soloists consider memory a necessary part of their technique; and all should bear that television is coming, and to stay.”

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There are several aspects of a performance that musicians cannot control, such as weather conditions, concert halls’ temperature, lighting, noisy seats, etc.; however, the one aspect performers have control over is their preparation and how well they know their music. Forgetting music onstage can sometimes be devastating for a performer’s confidence. Some recover faster than others, but in general it affects the demeanor of the remainder of a performance.22

The necessity of playing music from memory is a source of tremendous anxiety for modern musicians.23 In fact, researchers suggest that more than half of all performing musicians suffer from some degree of performance anxiety.24 Many authors such as Green, Gallwey,25 and Maisel,26 suggest several psychological and mental solutions to stage fright, such as: centering, awareness promotion, visual and physical cues, and confidence-boosting exercises. However, these techniques will be useful as long as the musician knows the music well. Great confidence will never compensate for poor memorization strategies.

All artists, even the most-seasoned performers will suffer a memory slip during their careers.27 For this reason, and all the mentioned above it is necessary to be able to identify a successful technique for memorizing music.

22 Chaffin, *Practice Perfection*, 197.
23 Ibid, 49.
Purpose of Study

The purpose of this study is to create an index of all music memorization techniques used by classical guitarists, and identify the most successful ones in order to create an efficient music memorization method for the classical guitar. Musical performance from memory is now commonplace among solo classical musicians. This concept developed from the rise of the Romantic era instrumental virtuoso. Since then, hundreds of studies and articles have been written to analyze and provide efficient memorization techniques, the oldest one dating back to 1857. Although most of the knowledge in these studies and articles can apply to the classical guitar, there is a lack of research on the subject referring to this specific instrument.

Research Questions

1) How and/or when do classical guitarists know if they have properly memorized music?
2) What techniques do classical guitarists use to memorize music?
3) How often do classical guitarists employ physical visualization during their practice sessions?
4) How do elite classical guitarists memorize music? What techniques do they use? Are there any differences with the techniques previously mentioned?
5) Is it possible to create an effective memorization plan for classical guitarists?

Chapter 2

LITERATURE REVIEW

This chapter will review the literature available on music memorization techniques in general, and also specifically for classical guitar.

Memorization

Musicians are generally not interested in the psychology of memorization, and in some instances they do not have a clear strategy for memorizing music. However, researchers have been studying how students and professional performers memorize music for the last hundred years.

In 2010, Jennifer Mishra compiled and analyzed 185 articles on memorization written by musicians and music teachers and published in English language periodicals or as book chapters, the earliest one, dating back to 1872. More articles had been published since 1984 ($n = 109$) than in the entire preceding century ($n = 76$), and sixty percent of them focused on keyboard memorization. A number of journals demonstrated a repeated interest, publishing more than five articles on the memorization, including The American Music Teacher, Classical Guitar, Clavier, The Etude, Music Educators Journal, Music, and Musical Times.

In 1927, Roberta Brown conducted an experiment comparing three methods of learning: whole, part, and combination. In the first method, a piece is played from

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beginning to end without stopping or repeating any measures where a mistake took place.
In the part method, the score is divided into units and each one is repeated an equal
number of times. In the combination method, the piece is played from beginning to end
but adds an equal number of repetitions for any measures where a mistake occurred. This
study failed to identify a most effective technique between the three methods, and
recorded different results depending on the difficulty of the selected compositions.

Grace Rubin-Rabson published a series of studies on keyboard memorization and
learning between 1937 and 1950. During her research, she demonstrated that keyboard
repetition alone does not produce solid memorization or retention. This only occurs if the
repetitions are preceded by an analysis of the score. In 1939, Rubin-Rabson published
the first of a series of six studies called “Studies in the Psychology of Memorizing Piano
Music.” The first one compared the security of learning by memorizing both hands
separately before coordination, against learning both hands coordinated from the
beginning. She concluded that memorizing each hand separately before coordination
provides better stability and clarity but does not translate into faster learning.

The second study published in 1940 tried to verify if distributed practice offered
any benefits over massed practice. She concluded that the advantage of distributed
practice in in inverse relation to the ability of the individual, and therefore recommended

Comparison of the Whole and the Part Approach," Journal of Educational Psychology 31, No. 6 (1940): 463.

for less able students.\textsuperscript{34} In the third study of the series, Rubin-Rabson compared the whole vs part method for music memorization. In agreement with Brown, she concluded that there is no evidence supporting the superiority of the whole method compared to part method when memorizing music.\textsuperscript{35} In 1941 her research concluded that incentives, such as verbal exhortation or cash rewards, did not trigger any advantages in retention.\textsuperscript{36} Finally, Rubin-Rabson argued that the intent to memorize must be present during the first reading of the composition.\textsuperscript{37}

Edgar Ross tested the possibility of using guided analysis to increase the efficiency of memorization in college wind instrumentalists. He concluded that memorization techniques must be tailored to each individual and no one method will work effectively for everyone.\textsuperscript{38}

In 2002, Jennifer Mishra conducted an efficiency study comparing four different memorization strategies: holistic, additive, segmental, and serial.\textsuperscript{39} Although all techniques were successful in memorizing the music, more efficient participants used a

\begin{itemize}
  \item \textsuperscript{34} Grace Rubin-Rabson, "Studies in the Psychology of Memorizing Piano Music: II. A Comparison of Massed and Distributed Practice," \textit{Journal of Educational Psychology} 31, No. 4 (1940): 283.
  \item \textsuperscript{37} Edgar Ross, "Improving Facility in Music Memorization," \textit{Journal of Research in Music Education} 12, No. 4 (1964): 269.
  \item \textsuperscript{38} Ibid, 278.
  \item \textsuperscript{39} Jennifer Mishra, “A Qualitative Analysis,” 83.
\end{itemize}
holistic, where the piece is repeated from beginning to end, and additive approach, where
the focus is on a large segment of the composition and then adds the remaining measures.

Five years later, Mishra and William Backlin studied the effects of altering
environmental and instrumental context during performance of memorized music, a
theory first advocated by John McGeoch in 1932.40 Their findings agree with Stephen
Smith’s conclusions from 1982 and suggest that musicians should practice in different
environments to reduce their context dependency under performance stress.41

In 2014, Dakan and Dvorak created a survey of memorizing techniques in string
studios."42 Their findings – applicable to most instruments – showed numerous techniques
that may be divided into different categories:

A. **Analysis**
   - Analyzing patterns
   - Analyzing form
   - Analyzing harmony
   - Analyzing notes
   - Analyzing melody
   - Analyzing accompaniment
   - Analyzing musical details

B. **Aural**
   - Aural Imitation
     - Playing by ear
     - Playing with recording
   - Listening to model

C. **Segmental**
   - Difficult passages
   - Sections
   - Phrases

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40 Jennifer Mishra and William Backlin, "The Effects of Altering Environmental and Instrumental

41 Ibid, 466.

• Measure by measure

D. Repetition
• Whole piece repetition
• Repeating phrases or sections

E. Self-Evaluation
• Alternating music and no music
• Closing eyes
• Finishing the phrase

F. Additive
• Chunking
• Adding Measures
• Adding sections
• Work backwards
• Adding a note
• Adding melody

G. Singing
• Singing Melody
• Singing fingering
• Sing then play

H. Kinesthetic
• Finger patterns
• Muscle memory
• Left Hand and Right Hand Isolation

I. Instructional Activities:
• Modifying music
• Color coding
• Erasing notes
• Flash cards

J. Visualization:
• Picturing music in the mind

K. Mental Practice:
• Visualizing finger movements away from the instrument

In 2011, Rebecca Shockley published a method book on the analytical technique of mapping. The concept of mapping refers to “studying a score away from the
instrument, jotting a few notes on paper to help remember the main features of the work (melody, harmony, or other elements), and using this “map” to improvise on the music and build your own mental blueprint of the score.”

The author claimed that the technique of mapping, promoted fast learning and secure retention while contributing to the development of reading skills by enhancing the recognition of musical patterns.

**Visualization**

Playing a musical instrument poses great demands on the human brain. Musicians must coordinate small movements at tremendous speed and accuracy while analyzing and manipulating minimal changes in pitch and rhythm to achieve a desired artistic outcome. Musicians are arguably challenged by no other profession in their expertise of the auditory and motor domain, and for these reasons, they have been the subjects of several research studies in the last century, even more so since the availability of functional magnetic resonance imaging (fMRI).

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44 Ibid, page 5.


Since the 1930’s there have been over 100 research studies on mental practice. The main objective of these studies addressed whether a given amount of mental practice (MP) or rehearsal prior to performing a motor skill will enhance the subsequent performance.\(^47\) Mental practice, defined in 1990 by Coffman as “a covert or imaginary rehearsal of a skill without muscular movement or sound\(^48\),” is an important rehearsal technique for professionals such as musicians, athletes, dancers, pilots, surgeons, and in the field of stroke rehabilitation.\(^49\)\(^50\) While all these professions require the coordination of fine motor skills, musicians engaging in MP do not have access to the final result of their rehearsed motion, the production of sound.

Several musicians, including Vladimir Horowitz, and Arthur Rubinstein have discussed the benefits of using MP for several reasons, such as avoiding the feedback of a piano other than their own, or to conduct more efficient practicing sessions.\(^51\) Research studies have now proved the benefits of employing MP for musicians on a daily basis, not


only to facilitate motor planning, and to enhance memory, but to increase control of other musical elements such as timing and timbre due to the boost of cognitive behaviors.\(^{52}\)

There is clear evidence that supports the use of motor imagery during a musicians learning period. Jacobson was the first author to reach the conclusion that muscle activity took place as a result of motor imagery, and that those responses coincided with the muscle group associated with performing that task.\(^{53}\) In 2004, Meister identified motor imagery as the main component of MP and claimed that “motor imagery denotes a mental simulation of action which involves most of those parts of the visuomotor system which are active during execution.” Functional imaging studies show that a group of subjects engaged in both motor imagery compared to a group engaged in performance activate essentially the same areas of the brain.\(^{54}\) Therefore, musicians engaging in motor visualization will be reinforcing their motor skills while boosting their cognitive understanding of the music being performed. This translates into a more confident performance accomplished in shorter amount of time.

There is also evidence to believe that mental practice will prove more effective for subjects with a higher level of skills for the task on hand. This is due to functional plasticity, defined by Bauman as “any kind of altered neuronal activity evoked by an invariable stimulus due to a history of training or experience.” For example, a 2007 study of brain imaging scanning showed a much more focused activity pattern areas involved in finger movements in pianists compared to more unspecific and distributed brain activity


\(^{53}\) Don Coffman, “Effects of Mental Practice,” 188.

\(^{54}\) Meister et al., “Playing Piano in the Mind,” 220.
in non-musicians controls. The same result was obtained by Lotze in 2003 proving that fewer brain areas are activated in professionals compared to non-professionals performing the same task. Additionally, Mumford and Hall found senior figure skaters to be better kinesthetic imagers than junior or novice skaters; and in a 1987 study of over 700 athletes, Mahoney, Gabriel, and Perkins concluded that elite athletes rely more on internally focused and kinesthetic imagery than their non-elite peers.

Mental practice (MP) is not meant to replace physical practice (PP), in fact, the exclusive use PP is generally superior to the exclusive use of MP. However, the combination of MP and PP can be as effective or more effective than PP alone. Additionally, in some cases, such as the overlearning stage of memorization, MP appears to be superior to PP.

Memorization and the Classical Guitar

There are no studies on memorization exclusively for the classical guitar and the subject has only been briefly mentioned in guitar journals and some other publications.

In a 1983 article about Baroque guitar, Michael Lorimer states that instead of memorizing per se, he only works toward reading a piece perfectly. His argument implies

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58 Don Coffman, “Effects of Mental Practice,” 188.
that memorization is not an individual stage in the learning process, but something that happens as a result of practice. When a “sound picture and a tactile sense develops, memorization follows naturally.”

During the 1980’s Richard Provost published a series of articles on “The Art and Technique of Practice.” In the fourth part of this compilation, he identifies mental practice, the ability to see and hear the piece away from the guitar, as “one of the most important techniques that can be used and that should be part of daily practice.”

Provost also published a book on The Art & Technique of Practice where he devoted an entire chapter to memorization. In this publication he states that in order to memorize a piece, guitarists need to know the different sections of the composition, right-hand fingerings, left-hand fingerings, harmony, dynamics, and sections as isolated units. Additionally, they must be able to sing the melody, bass line, and middle voice, and play the piece from beginning to end. Additionally, he states the following facts about memorization:

- Divided practice sessions are more effective than one long session to learn and retain a selection.
- Practicing with hands together is more efficient than hands alone with music of similar difficulty.
- Score analysis/study before practice improves learning efficiency.
- Once the guitarist has learned and memorized a selection, they will need only occasional practice for retention.
- Visualizing a score by closing your eyes improves memorization.
- Familiar patterns in new music to be memorized aids memorization.
- Awareness of related and altered patterns in the music eases memorization.

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61 Richard Provost, The Art & Technique of Practice (California: Guitar Solo Publications, 1992)
• Compositional and structural awareness aids memorization.\(^{62}\)

Between 1990 and 1994, Sharon Isbin contributed a column named “master class” in every issue of *Acoustic Guitar* where she answered different questions from readers. Fifty of these columns were published in 1999 in a book called *Classical Guitar Answer Book*. This compilation of master classes covered the most frequently asked questions regarding classical guitar, and one of them dealt with memorization.

Isbin starts the column by saying that the more a performer understand the structure of a piece, the easier it will be to memorize it. She believes that “one’s ability to remember a musical score is enhanced by a clear understanding of the phrasing and the melodic, rhythmic, and harmonic structure of the work.”\(^{63}\)

The memorizing method offered in this column consists of three parts: analysis, motor repetition, and visualization. Before starting the motor repetition phase, the guitarist must first pick the left and right-hand fingerings. Then, the piece must be practiced in small segments or phrases.

The last stage of the method consists of inner visualization, imagining the hand movements as seen by the performer. Isbin prefers this type of visualization where she can see each finger placed on the frets compared to a score visualization, because “these are the last images sent by the brain before a sound is produced.”\(^{64}\)


\(^{64}\) Isbin, classical guitar, 50.
Alicia Kopfstein-Penk wrote an article on the “Art of Memorization” for *Guitar Review* in 1992. In this publication, she believes that “one of the differences between great performers and mediocre performers is their method of memorization.” Kopfstein-Penk argues that lesser performers use a limited memorization system relying solely on muscle memory. In order to achieve perfect memorization, she suggests a five-part method to strengthen all the memories:

A. Physical kinesthetic memory, or muscle memory.
   - This is the result from playing and polishing music through regular practice and rehearsal.

B. Mental kinesthetic memory.
   - This is the memorization of the physical sensations of playing the piece and happens as a result of paying attention to those sensations during practice.

C. Visual memory.
   - This refers to the visual memorization of the motor execution, how the fingers look while performing, how do they move, and where they go.
   - This stage can also include the photographical memorization of the score, but that will vary from player to player as some might find it distracting while performing.

D. Aural memory.
   - The memorization of how the piece sounds like.

E. Structural memory of the composition.

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Kopfstein-Penk also argues that the most effective memorizing occurs right before going to sleep as “the mind retains information better if it is memorized immediately before sleeping rather than at the beginning of waking period.”

David Russell, briefly mentioned kinesthetic visualization in a 1995 interview as the ultimate memorization test. He claimed that muscle memory is the “first thing to go” when the performer is nervous, and that visualizing finger movements on a fretboard will improve confidence.

Denis Azabagic devotes a chapter of his book, On Competitions, to mental preparation and memorization. He acknowledges he paid more attention to memorization during his participation in competitions than for his concerts. In order fully memorize a composition, he engages in visualization. Just like Isbin’s, his visualization technique consists of mental imagery of his hand movements, especially the left hand. He explains why:

Let’s say we need to remember one note: F (the one on the first string). In order to memorize how to play this note we have to remember the note (its pitch), the finger with which we press, and the string on which the note is played. This particular note we can play on three different strings (even four), so just knowing that we have to play F is not enough.

Azabagic hints that visualization is the most efficient way to memorize music. He argues that after motor repetition, the fingers become the leaders and the brain takes a secondary role, when in reality, it should be the opposite, the brain should have the lead,

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and the fingers should follow. The author ends the chapter by stating “this is what I do when I want to make sure that I memorized the music well.”

Richard Perry provides a methodology for learning a new piece of music. He briefly mentions memorization, and although he does not specify how exactly it is that guitarist memorizes music, he implies that it happens automatically by working on small segments of music. Perry suggests that it requires at least thirty minutes of intense concentration to properly memorize about eight bars of music.

In 2012, Carlos Bonell described forgetting music on stage as the “greatest fear of all performing artists.” His memorization method consists of three parts: Reflex, visualization, and association. Reflex refers to muscle memory, which happens automatically after motor repetition. The visualization stage is the same as the ones previously described by Sharon Isbin and Denis Azabagic. The third phase, association, is designed to reinforce the analytical memory. It entices finding relationships, patterns, and harmonic connections between the notes.

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69 Azabagic, On Competitions, 11.


Chapter 3

METHOD

This study is aimed at classical guitarists that have spent a reasonable amount of time in the practice room and yet experience a memory slip when performing for an audience. It is important to find an effective system to memorize music. To do so, it is necessary to first categorize the techniques used to memorize music by guitarists and compare them to the ones used by other instrumentalists. Then, I will analyze the strategies employed by elite classical guitarists and identify common practices.

Description of Participants

The subjects were chosen based on their reputation in the performance world, and on their willingness to participate. They have at least twenty years of professional performing experience and have national and international reputation. The list of subjects with their biographies can be found in Appendix A.

Data Gathered

The data gathered consists of either audio-taped phone or in-person interviews, as well as e-mail exchanges with the subjects. The subjects answered questions that pertain to the research questions of this study, which are:

1) How and/or when do classical guitarists know if they have properly memorized music?

2) What techniques do classical guitarists use to memorize music?

3) How often do classical guitarists employ physical visualization during their practice sessions?
4) How do elite classical guitarists memorize music? What techniques do they use? Are there any differences with the techniques previously mentioned?

- What is your opinion on playing from memory VS having your music on stage?
- How do you memorize music? Do you have different techniques?
- Has your memorizing changed over the years?
- Do you teach your students how to memorize?
- Do your students use different techniques?
- Do you use kinesthetic/motor visualization at all?
- Have you ever dealt with memory slips? Why do they happen? How do you solve them?

5) Is it possible to create an effective memorization plan for classical guitarists?

The interviews were conducted at the subjects’ convenience at a location that they chose or over the phone, or e-mail. The basic questions for the interview were designed from the research questions mentioned earlier and pertain directly to the purpose of this study. A sample of the initial interview questions can be found in Appendix B.

The answers from all the subjects were compared to find similarities and differences. The study results are discussed in chapter 4, and a copy of the interview transcripts can be found in Appendix C.
Chapter 4

STUDY RESULTS

After completing the interviews and reviewing the transcripts of the study, a clear comparison is presented on the following pages. Each question answered by the participants will be addressed under a separate subheading, and some ideas might overlap from one section to the other. The full transcripts for each interview may be found on Appendix C.

Memorized Music vs. Non-Memorized Music

When asked for their opinion on performing with or without music, none of the participants objected to performing with a score. Only one participant described performing with music on stage as feeling there is “a barrier between the audience and the performer while making the performance more casual.”  

While Meng Su agrees that performing from memory gives a professional stage presence, she claims that the main reason to do so is that it makes the performer really know the music.

All participants except two mentioned the term “freedom” or “feeling free” while describing performing music from memory. Denis Azabagic believes that a performer should do what feels best but that sometimes performing from memory allows our mind to be free “to go somewhere where your imagination takes you without having to think too much.”

72 Gohar Vardanyan, Interview by Author, 6 March 2017, E-mail, 83.
73 Meng Su, Interview by Author, 19 March 2017, E-mail, 82.
74 Denis Azabagic, Interview by Author, 3 March 2017, E-mail, 56.
On the contrary, Irina Kulikova, while she still memorizes her solo repertoire, prefers to have the score on stage more and more often. The reason she gives is that when she was memorizing all her music during her competition years and early career, the high number of repetition that went into her practicing to retain all the information, would make the music lose its edge and she would, in some instances, stop enjoying the music altogether. By having the music on the stand, the music is fresh and she feels more freedom while performing.75

Pablo Sáinz Villegas takes the concept of freedom a step further and suggests that his perception of music changes when performing from memory:

I always prefer to play by heart because, somehow, I’m able to connect with myself in a different way. My perception is within myself. All the music that I’m playing comes from within, to the surface, and outside, all the way to the audience. Somehow, it’s like having all the music in a package, inside yourself, and then you actually reveal that passage through the instrument. That allows me, emotionally speaking, to be more connected with the music… The message and my intention I put into the music can be more present.76

Most participants mention time and preparation as variables that will dictate if they will memorize music or not. Jason Vieaux memorizes all his solo repertoire except the three to five world premieres he performs every year.77 This is just because of time constraints since he has to maintain eight hours of music that he performs every year. Łukasz Kuropaczewski and Irina Kulikova agree that they will use music if they have to play music without enough time to memorize it. Kulikova also adds that she will not try

75 Irina Kulikova, Interview by Author, 20 March 2017, Phone, digital recorder, 60.

76 Pablo Sáinz Villegas, Interview by Author, 13 March 2017, Phone, digital recorder, 80.

77 Jason Vieaux, Interview by Author, 3 March 2017, E-mail, 85.
to memorize a piece she knows will perform only once.\textsuperscript{78} Both of them also claim that the performer must know the music “by heart” even if playing from the score, since there are passages that one must know very well in order to properly execute.\textsuperscript{79}

Finally, none of the interviewees think that performing music from the score should hinder the musicality of the performance. Kuropaczewski acknowledges he may feel less nerves if he has a score in front of him. He also admits that when he was younger he used to think that the presence of music on the stage meant the performer did not know the music. He recognizes he was completely wrong and points out how some of the best artists in the world such as Itzhak Perlman, Anne Sophie Mutter, and Yo-Yo Ma always perform from the score.\textsuperscript{80}

Pablo Sáinz Villegas had a unique answer regarding using a score for a performance. He now makes a decision and he either plays everything from memory, or reads every single note from the score. In the past, when playing in chamber settings, he would use a score but would also have sections memorized. He noticed that his perception and musical output changed when switching from a memorized passage to one he was reading from the score. Now by sticking to one method, he feels the musical connection is stable throughout the performance.

\textsuperscript{78} Irina Kulikova, Interview, 60.

\textsuperscript{79} Łukasz Kuropaczewski, Interview by Author, 19 March 2017, Miami, phone recorder, 73.

\textsuperscript{80} Ibid, 74.
Memory Lapses

All seven participants have experienced memory slips at one point of their careers. Some of them were more affected by these lapses than others, and all of them accept them as part of being a musician.

Azabagic finds that memory slips happen because we are human and can get nervous or distracted. In order to solve them on stage, he finds a familiar spot and continues playing, without paying too much attention to it. He affirms that memory lapses do not bother him as an audience member, that the most important thing is to hear something musical form the performer.\footnote{Azabagic, Interview, 56.} Vardanyan feels that memory slips “are the worst.”\footnote{Vardanyan, Interview, 83.} She finds their origin in lack of concentration during performance or during practice. If they student/performer does not pay attention while practicing and relies on muscle memory, memory slips are prone to happen during a public performance where the performer is under pressure. Meng Su never had any memory problems before age 18. She simply was not afraid of mistakes nor negative feedback.\footnote{Su, Interview, 82.} While she is now fully aware that muscle memory is not enough for a solid performance, this indicates that there might be some psychological factors unrelated to simply lack of concentration during practicing sessions.

Vieaux did not suffer from memory lapses during the early years of his career when he was playing only two hours of solo repertoire, a couple of concertos, and a duo program per year. However, some problems began to arise every now and then as the
repertoire increases. He suggests that in those cases the “performer has 3 options: stay the course, reduce the repertoire, or work harder.” Sáinz Villegas does not remember suffering from memory problems, but he makes a point to differentiate them from regular mistakes, which he thinks musicians make due to human nature, and can happen even if we know every single note in the piece. He considers a memory lapse has occurred when the performer stops playing and does not know where to go. These problems affect the overall artistic product that is offered to the audience and “are very dramatic, because the audience feels bad for the performer.”

Although Kulikova considers the practice method to be crucial in preventing memory lapses, she believes these can still happen due to several reasons beyond distraction such as lack of sleep, personal matters, noisy environments, extreme temperatures and even how the air conditioning might change the feel of the nails on the strings.

**Visualization**

All participants except one identify motor visualization as one of their memorizing techniques. Both Sáinz Villegas and Kulikova use visualization as part of their method that will be discussed later. Kuropaczewski argues that visualizing has not been effective for him because it is done away from the instrument, and he needs to have the guitar in his hands when practicing.

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84 Vieaux, Interview, 85.

85 Sáinz Villegas, Interview, 74.

86 Kulikova, Interview, 67.

87 Kuropaczewski, Interview, 69.
Azabagic remembers using visualization during his competition years. He used this technique as a backup system in case his muscle memory failed on stage and he described the experience as giving “him more confidence, allowing his fingers to work and worry less.” Azabagic used this technique exclusively for his left hand, being able to visualize his fingers, knowing where they were, seeing what frets and strings he was playing, and where the fingers were going to for the next notes or shapes.

Vardanyan uses the same type of visualization, although sometimes she only pays attention to the location of the fingers and not so much to the movements in between notes, depending on the passage she is working on. Meng Su reinforces her visualization practice by simultaneously listening to her own recordings.

Pablo Sáinz Villegas describes music visualization of music as extremely effective but a very long process. However, he agrees with Vieaux that the more a performer engages in visualization, the easier it becomes. Additionally, in Kulikova’s experience using motor visualization has allowed her to learn new music much faster compared to physical practice alone.

Sáinz Villegas was the only participant that identified a specific moment for engaging in motor visualization, right before going to bed because “at night, all the information...somehow integrates into his brain in a different way.” While Vieaux has

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88 Azabagic, Interview, 57.

89 Vieaux, Interview, 86.

90 Sáinz villegas, Interview, 77.

91 Kulikova, Interview, 63.

92 Sáinz villegas, Interview, 76.
been using this technique lately on planes and in airports, Kulikova admits she has realized she also engages in visualization unconsciously while performing other activities, such as cooking.\(^{93}\)

**Memorization Techniques and Methods**

Some participants do not recall using a specific memorization technique and claim that they remember their repertoire as a result of repetition. Others, while agreeing with the previous statement provide a deeper insight into what they think might be the reason. Participants mentioned the following techniques for memorizing music: muscle memory through repetition, phrase analysis, fingering analysis, musical structure analysis, switching from playing with music to playing without music, motor visualization, singing the notes (solfege), isolated right-hand practice, segmental practice, performing in distracting/noisy environments.

Azabagic believes that music is memorized automatically by sheer repetition and is aware that some sections might take longer than others. These passages might require the performer to pay closer attention to them and more time working with the score. But he states that by “just repeating, repeating, and practicing, things just sink in.”\(^{94}\)

Vardanyan feels that memorization happens naturally as a result of the practice sessions. However, she admits that if she analyses the music closely, by paying attention to what her fingers are doing, the memorization process is much faster. She describes this as “treating it like memorizing a poem or a sentence by understanding it’s meaning rather

\(^{93}\) Kulikova, Interview, 63.

\(^{94}\) Azabagic, Interview, 57.
than mouthing the words and hoping my tongue muscle remembers how to move to produce the sounds for those words.”

She also believes that breaking difficult passages down and practicing them for technical purposes has also helped in memorizing them. While the initial goal is to perfect them in their execution, the side effect is that she also memorizes them. Finally, she has discovered that playing something very slowly helps with memorization as well. “When something is painfully slow, you lose the ability to use muscle memory and you’re forced to use your brain to be able to recall what comes next.”

Kulikova’s memorization strategy is embedded in her practicing routine. She first likes to analyze the structure of the composition. Once all the major elements are identified she proceeds to find the right fingering for each section. This is a crucial part of the stage and requires extreme concentration. What fingerings she will pick depends on how the music should sound like, her musical intentions. By paying close attention to this process, to each decision regarding fingerings, she believes she is able to retain all the information.

This process is then reinforced by muscle memory during high amount of repetition. She likes to work in small segments, not comprehending more than three lines of new music per day. The segments she practices might have no relationship to each other and she frequently spends more time with the end of the piece during the early stages of the learning process.

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95 Vardanyan, Interview, 83.

96 Ibid, 84.
Kulikova knows when she has successfully memorized a piece, and tries to test herself by performing under distracting environments and by performing for others and recording herself. The last part of her method consists of visualization, away from the instrument, and sometimes while doing other activities such as cooking.

Jason Vieaux’s practice strategies are extremely organized and thorough, with lots of repetitions - "divide and conquer." Initially he works with very small segments of music, and then eventually combines them into larger bits of music, with great volume of repetitions. Alongside that, he is doing big sweeps of reading major structural sections for his ear and intellect.

Vieaux argues there is no substitute for repetition when it comes to the initial “goals of clarity, comfort, and consistency (‘the 3 Cs’) if you want precision first and right away, which one should.” In the end, he never has to worry about memorization, because the rigorousness of the early stages almost guarantees memorization.

Pablo Sáinz Villegas has developed a method that he has been using since he was 14 years old. It consists of four phases and he is completely confident in this method for his performances. While he recognizes that mistakes are part of performing and being human, he does not suffer from memory lapses if using this strategy.

The first phase consists of music analysis. He identifies the structure of the piece, not only to understand the different parts, but also the musical idea he wants to convey through his interpretation. At this point in the learning stage, he decides what fingerings he will use for each passage, and he outlines the musical phrasing. This process might

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97 Vieaux, Interview, 85.

98 Sáinz Villegas, Interview, 78.
take a few weeks depending on the composition, and it will sometimes require to revise some fingerings or phrasings, but he will absolutely pick a specific fingering for each section and will leave nothing to chance.

Once he has decided what fingerings he will use, the second phase begins. This stage involves high amount of repetition to engage and reinforce muscle memory. Sáinz Villegas is aware that performers might think that the piece is completely memorized at this point, but he believes that relying on muscle memory is very dangerous, and is in fact the cause of most memory slips. When the environment changes and the performer is under stress, meaning any other condition other than a private practice session, musicians will not be able to rely exclusively on muscle memory.

He solves this problem with the third stage of his method, visualization. Sáinz Villegas practices this technique away from the instrument, with the lights off so that he has better concentration, and right before going to bed. He has found that at that time of the day, his retention rate is higher.

He visualizes two things, the actual score, including all the markings, dynamics, etc., and how his hands look on the instrument. He performs these two tasks simultaneously. He must be able to “see” what notes his hands are playing, what fret and what strings he is stopping. As soon as he finds a spot where the information is not clear, he goes to the score and finds the passage in question. Once he knows the score, he goes back to the visualization exercise and “plays back” the passage to make sure he can clearly see all the notes and all the movements. Sáinz Villegas also works on the

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99 Sáinz Villegas, Interview, 76.
100 Ibid, 76.
memorization of his right-hand movements. A guitar player can only know the right-hand movements by knowing all the notes the left hand is playing, since string skipping and left-hand slurs have to be taken into consideration.

This stage is revisited a week before a performance, and the night before as well. Although he recognizes this is a very long process that requires a high level of concentration, he believes that the more a performer engages in this type of exercise, the easier it becomes.

The last phase of this method reinforces the analytical information from the first one. This stage consists of visualizing a mental canvas where all the sections of the piece are laid out. He can zoom in and out from all the sections and he can even assign different colors linked to their emotional content or intention.

Sáinz Villegas truly believes in his method, which gives him an immense “pleasure and tranquility,” a feeling of security, because he knows that both his brain and his muscles know every single note. Additionally, by analyzing the structure of the piece he feels he possesses a sense of unity with the piece that would be hard to reach otherwise.101

Łukasz Kuropaczewski has a completely different memorization technique that he developed as part of his practicing routine. He has never been concerned with memory slips or mistakes, he explains that “as human beings we make mistakes, and that is completely fine.” However, he was obsessed, and still is, with getting rid of any fret buzzes while performing. He describes them as “the worst thing ever, almost like musical

101 Sáinz Villegas, Interview, 78.
In order to achieve his goal of buzz-free execution, he started practicing in the following way:

For every single piece I practice, I set metronome at 60BPM, and it’s not just for the eighth note or for the quarter note, it’s for every note. So, I play without rhythm.

Every note gets a beat at 60. And it’s not just about the tempo, but it’s about the time for me to prepare every movement. So, my left-hand finger has to be on the string in the position before I pluck the string. I always make sure that I first, and this is the process, I prepare the right hand, put it on the string where I play the note, then I place a left-hand finger on that note, but just placed on the string without pressing. I put it there, it’s prepared. Then, I press with the left hand and only then I pluck the string. So, it’s right hand, left hand, left hand, right hand, that’s how it goes. 

Although the metronome is set at 60 beats per minute, he takes more time to prepare position shifts. When practicing these shifts, he lets go of the pressure of his left hand and slowly moves his hand to the next position without moving his fingers. Once he arrives, he sets up the fingers on the new notes or shapes, prepares the right hand, adds pressure to the left hand and then plucks. He consciously takes more time to practice big switches on the fretboard so that he is fully aware of both finger and arm movement.

This method requires a lot of time. When, for example, he practices the Sonata by Antonio Jose, it takes him forty minutes just to cover the first movement. A collection of pieces such as Manuel Ponce’s 24 Preludes takes him three hours and thirty minutes to practice.

In addition to this practicing approach, he repeats every measure five times. At this point he is not thinking about any musical aspects of the composition, he prefers to work on that separately. This part of his method he describes as “training his hands, like

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102 Kuropaczewski, Interview, 69.

103 Ibid, 60.
going to the gym.”\footnote{Kuropaczewski, Interview, 69.} He separates all musical content from this stage of practicing because he believes that working on dynamics, phrasing, etc., will create some type of tension, and this stage of the method is exclusively about being physically relaxed.

He believes in the efficiency of this method for two reasons, first, because he can time exactly how long it takes him to practice a composition, or a section. Second, because it teaches the player to make very small and slow movements, and according to him “playing guitar is about small and slow movements.”\footnote{Ibid, 70.} As a result of this methodology the chances of making mistakes on stage goes down drastically and will increase the confidence of the player:

Your brain tries to understand while you practice at home that every time you play, it is perfect. It is always clean, it is always clear… And then you perform, and don’t remember missing notes at home…If you are used to playing everything perfectly every time you are not so scared anymore.\footnote{Ibid, 70.}

When developing this method, Kuropaczewski experienced something he was not expecting, perfect retention of the music. He believes that this approach is extremely efficient for memorization purposes because the performer remembers every single movement in slow motion. Additionally, everything is repeated five times a day. So in a week every note gets played, perfectly, 35 times, in a month, 140 times, and so on. By preparing a piece for three months using this method, every single note is played 420 times. While Kuropaczewski accepts that mistakes might still happen due to lack of concentration on stage, he believes a performer will never have memory slip again.\footnote{Kuropaczewski, Interview, 70.}
Finally, Kuropaczewski argues that trying to memorize music away from the instrument and not during practice sessions feels artificial and does not work for him. He strongly believes in his method, and thinks it only takes two days to notice how well it works. He has been using this approach for ten years and it is the method he teaches his students.
Chapter 5

SUMMARY

It was noted in the opening chapter of this paper that there is no universal method for memorizing music. Several techniques exist and students have to find which one works for them by trial and error. Students sometimes resign to the idea that some people memorize music better than others, and while this may be true, everyone can work on their learning and memorization techniques and achieve successful results. On this subject, Manuel Barrueco said that “if you are the type of player that will be doubting your memory during a performance, then you can better prepare yourself by making sure you have things extremely clear so that, when the doubts come in, you have the answers.”108

The findings in this study coincide with most of the literature reviewed. It seems apparent that everyone interviewed made valid arguments for their beliefs and methodology. I believe that although several participants used different words to describe their process, most of the memorization techniques are similar or overlap.

All musicians work differently and the same applies for the memorization techniques they might employ. When asked for what memorization techniques they used, all participants referred to muscle memory by repetition as the most important one. However, they made it clear that they do not mean mindless repetition. On the contrary, the success of their muscle memory depends on their concentration level during practice sessions. All participants mentioned the need to practice slowly. It is extremely important to be aware of all the movements we make while playing music. How we practice will

dictate how we will perform. Nerves, tension, and mistakes can be avoided by
consciously monitoring how we practice. Kuropaczweski believes that if you play enough
times without making mistakes, that is all the brain will remember during a concert, to
play perfectly clean. Richard Provost agrees with this sentiment and explains the
consequence of doing the opposite, “if poor playing nine times out of ten becomes the
norm, you now have successfully practiced to fail.”

Several participants talked about how important it is for the guitarist to study the
score and select which fingerings they will use during performances. Irina Kulikova even
referred to her past experiences as a judge when very well-known guitarists made
mistakes or had memory lapses during competitions because they had changed their
fingerings the night before the performance. Participants also discussed the benefits of
studying the isolated right-hand movements. In order to do so, a guitarist must know all
the notes the left hand is playing, when to pluck, and when to wait for a left-hand slur.
This only reinforces the knowledge of the piece and translates into an even more secure
execution.

Additionally, all participants argued that musicians must understand the
compositional and harmonic structure of the pieces being studied. By analyzing a
composition intellectually and by closely studying how the fingers operate, a guitarist is
creating a network of associations that will increase the capacity and the speed of music
retention.

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109 Kuropaczewski, Interview, 70.

110 Richard Provost, “Performance Anxiety: A Different Approach to Performance for Classical

111 Kulikova, Interview, 65.
All the guitarists interviewed except Kuropaczewski engage in visualization exercises to reinforce their memory. Motor imagery seems to be the ultimate test against memory slips and its results might have psychological implications as guitarists experience a decrease of anxiety while performing.\textsuperscript{112}

**CONCLUSION**

Based on this study’s findings and previous publications mentioned in chapter two, I strongly believe it is possible to create a successful memorization method for classical guitar. Music memorization not only entails the capacity to absorb and retain information, but also to retrieve it during a performance, therefore, a successful method should include effective learning techniques and measures to cope or to avoid distractions while performing.

This is a research-based methodology for practicing and memorizing music in five stages: score analysis, motor analysis, muscle repetition, visualization, and environmental variation. The first stage consists of analyzing the score of the composition being studied right before a practice session. There are several ways to study a score, and while traditional harmonic or Schenkerian analysis will prove useful in understanding the nature of the composition, this stage deals specifically with structure and phrase analysis. The objective of this step is not for a guitarist to actively think about the structure of the piece during a performance, but to create the associations and mind maps needed for faster learning and deeper understanding of the composition. The

\textsuperscript{112} Sáinz Villegas, Interview, 78.
effectiveness of this analytical part of the method is supported by Rubin-Rabson’s early studies between 1937 and 1940.\textsuperscript{113}

The second stage of the method only applies when the student is learning a new piece. This step consists in analyzing the music and deciding what fingering is most appropriate for each section. Finding a logical reason for each fingering will further reinforce the associations created during the previous step. The student should also place anchors in key sections, for example, knowing exactly which left and right-hand fingers play the beginning of a challenging scale or passage. All fingerings should be analyzed before engaging in muscle repetition and not after making repeated mistakes due to awkward fingerings in a section.

It is imperative to understand that the muscle repetition phase refers to a very focused practice session where both hands are completely analyzed and controlled, leaving no movements to chance or intuition. The goal of this part of the method is not only to play sections several times, but to play them perfectly several times. Although conscious attention can be given only to one thing at a time, the subconscious mind is able to direct several tasks at once. Therefore, when a student is repeating a musical passage, no impression is lost by the subconscious, everything is registered, even the mistakes. This is the reason that all the guitarists interviewed for this study mention slow practice, and the reason why Kuropaczewski practices the way he does.

During this third stage, a student will find extremely beneficial to practice both hands isolated. In 1939, Rubin-Rabson concluded that separating hands during keyboard

practice translated into better stability and clarity.\textsuperscript{114} This is also true for the classical guitar. When practicing the left hand, the student should focus on small, efficient movements, as well as how the hand and fingers look when jumping from one position to another. Right-hand isolation serves as a memorization reinforcement for the classical guitarist; in order to know what strings to pluck, the guitarist must have a clear picture of how many notes are played on each string, including any slurs that will result in a left-hand movement while the right hand waits for the subsequent note.

The fourth stage of the method deals with motor visualization, the mental visualization of both hand movements while away from the instrument. This stage should be practiced before going to bed while the brain assimilates information more efficiently. Science has shown that engaging in motor imagery facilitates motor planning, increases control of musical elements such as timing and timbre, and enhances memory. Kulikova has found out that by visualizing music she is able to learn more music in less time, which is supported by studies concluding that the combination of mental practice and physical practice can be as effective or more effective than PP alone, with instances of MP being superior to PP during the overlearning stage of memorization.\textsuperscript{115} The visualization phase of this method is essential to effectively retrieve information during a performance. By being able to create a mental picture of all hand movements, the performer’s brain will always be one step ahead, sending orders to the fingers, and not trying to find out what the next movements are.


\textsuperscript{115} Don Coffman, “Effects of Mental Practice,” 188.
Finally, both Kulikova and Kuropaczewski mention that context might affect a performance, agreeing with the findings from Backlin and Mishra mentioned in chapter two. For the last stage of this method, it is suggested for students to practice in different environments to reduce or eliminate any distractions caused by environmental changes while performing.

I believe this method would be successful for most students and professional classical guitarists. The challenge that arises is that it is impossible to monitor how concentrated students are during their practice sessions. All participants mentioned concentration as a crucial aspect of their learning methods. All the musical analysis that goes into the process, all fingering selections, and motor repetition will only translate into memory retention if the student is completely concentrated during the practice sessions. The other challenge that surfaces is the inability to follow this method properly by beginner students; some of the stages, such as the first and second one can be properly supervised by a teacher, however, the visualization stage will prove hard and not as efficient to a beginner as opposed to an experienced player.

None of the studies mentioned in chapter two were able to find a specific time of the day for efficient practicing, outline how long a practice session should be, or how many breaks it should include. However, I am confident that a student following this five-part method will be able to successfully memorize music and retrieve it during a performance.
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APPENDIX A

Biographies

Denis Azabagic

Denis Azabagic (Bosnia and Herzegovina), is one of the most compelling classical guitarists on the international concert circuit today. He performs concerts around the globe, maintaining a balance between his solo recitals, chamber music with the Cavatina Duo, and engagements as soloist with orchestras.

Azabagic’s flawless performances have set a standard for the new generation of guitar players. He has won twenty-four prizes in international competitions and Mel Bay has published a book based on his experience and insights on the subject of competitions.

Azabagic has recorded 12 CDs for international labels such as Naxos, Cedille, Opera Tres, Bridge records and Orobro, as well as two DVDs for the Mel Bay Company. His recordings and live performances are highly praised by music critics, for his elegant approach to music and his unique way of communicating and reaching the audiences’ hearts.

As a guest instrumentalist and soloist Azabagic has appeared with the Chicago Symphony, Chicago Sinfonietta, Tallahassee Symphony, Illinois Symphony, Sacramento Chamber Orchestra, Madrid Symphony, Traverse Symphony, Monterrey Symphony, L’Orchestre Royal de Chambre de Mons, among many others. He has also collaborated with the Casals Quartet, Civitas Ensemble and the ensemble Music Now.

Azabagic has performed at such venues as Chicago’s Symphony Center; the Royal Concertgebouw in Amsterdam; Radio France in Paris; Aix-en-Provence Festival; El Palau de la Musica in Valencia, Spain; Savannah on Stage; Omni Foundation (San Francisco); Ravinia Festival; National Chang Kai Shek Cultural Center, Taiwan; and the National Center for the Performing Arts in Beijing, China. Azabagic’s performances have been broadcast live on NPR and WFMT radio, and on television in Asia, Europe and the United States.

His repertoire includes solo and orchestral music from the Baroque era to the present. As half of the active Cavatina Duo (with Eugenia Moliner, flute), he has performed a vast repertoire including many works written expressly for the duo. His chamber music activity is expanded with recently formed quartet Fandango!.

Azabagic’s love for performing extends to sharing with others his knowledge of music making. He frequently offers master classes while on tour, teaches at the University of Illinois and is the head of the Guitar Department at Roosevelt University in Chicago.

Highlights of his upcoming season include concerts tours in the US, Canada, Spain,
Denmark, etc…With the Cavatina Duo he has released a new CD entitled the Sephardic Journey, featuring new commissioned music based on old Sephardic melodies.

Irina Kulikova

With the rare beauty of her tone and her enchanting presence on stage, Irina Kulikova catches the hearts of audiences across the globe. She belongs to that class of musicians that have something pure and special to say with their instrument. Her secret, in life as in music: It’s about the touch. ‘If you take special care of everything and everybody that is dear to you, if you show love and devotion in those little details that make a difference, then you may touch the lives of other people in a way that they will cherish.’

Irina Kulikova tours far afield, with appearances at leading festivals in Europe, North America and Asia and in concert halls such as the Amsterdam Concertgebouw, the Tchaikovsky Hall in Moscow, the Academic Capella in St. Petersburg, Schloss Mirabell in Salzburg, the Palau de la Musica in Valencia, the Musashino Hall in Tokyo and the Oriental Arts Center in Shanghai. She received over 30 awards for her artistry, including 1st prizes at the highly prestigious competitions of Michele Pittaluga in Italy, Guitarra Alhambra in Spain, Forum Gitarre Wien in Austria and Iserlohn in Germany.

Irina Kulikova graduated with distinction at the Mozarteum University in Salzburg (Austria), the Conservatoire of Maastricht (The Netherlands) and the Gnessins Academy in Moscow (Russia). She recorded four solo CD’s, three of which are distributed worldwide by the Naxos label. Today, Irina Kulikova resides in Los Angeles (USA), Salzburg (Austria) and The Hague (The Netherlands). Her concert career as a solist and with a variety of ensembles and orchestra’s, she combines with a personal dedication to teaching, touching the lives of promising students of all continents.

Łukasz Kuropaczewski

Guitarist Łukasz Kuropaczewski is well on his way to becoming a major figure on the worldwide classical music scene. Born in 1981 in the small Polish town of Gniezno, Łukasz began studying guitar at the age of ten. At 13, his early talent brought him to the attention of the distinguished guitar teaching Piotr Zaleski with whom he studied from 1994-2003.

Upon receiving a Master’s degree from the Academy of Music in Wroclaw, Poland, he traveled to the U.S. on a full scholarship to study with Manuel Barrueco at the Peabody Institute, where he was awarded an Artist Diploma in 2008. During this time, he performed concerts in his native land and around the world, demonstrating his remarkable passion and precision to enthusiastic audiences.

Always in great demand as a recitalist and as soloist with orchestras, he has been invited to perform in numerous festivals in countries including France, Spain, Germany, Hungary, Slovakia, the Czech Republic, Iceland, Greece, Bulgaria, Japan, China, Canada, Mexico, Panama, and the United States. Highlights of his solo recitals include
appearances in London’s Royal Festival Hall, the Concertgebouw in Amsterdam, Warsaw’s National Philharmonic Hall, Tchaikovsky Hall in Moscow, and New York's Carnegie Hall. An avid chamber music collaborator, he frequently works with musicians from his native Poland, as well as the Orion String Quartet, Avi Avital, Chen Reiss, and Richard Galliano.

He premiered Concertos by A. Gilardino, K. Meyer, M. Gorecki, A. Tansman (Polish premiere), K. Penderecki (guitar version of Viola Concerto premiere with Sinfonia Varsovia and Maximiano Valdes). K. Meyer and A. Giardino dedicated their guitar Sonatas to Kuropaczewski. In 2015 Kuropaczewski premiered a guitar quintet „Acequias” by M. Neikrug at the Santa Fe Chamber Music Festival and his “Three Pieces for Guitar” at the Baltimore Museum of Art in Baltimore, MD.

Mr. Kuropaczewski was a guitar faculty at University of Pennsylvania from 2008-2010. Currently, he is on the faculty of the Academy of Music in Poznan, Poland, holding a doctorate degree in performance. He is also the artist director of the Polish Guitar Academy Festival held in Poznan every year. He has recorded six CDs to date.

**Pablo Sáinz Villegas**

Praised as “the soul of the Spanish guitar”, Pablo Sáinz Villegas has become a worldwide sensation known as this generation’s great guitarist. With his “virtuosic playing characterized by irresistible exuberance” as described by The New York Times, his interpretations conjure the passion, playfulness, and drama of his homeland’s rich musical heritage. Pablo Sáinz Villegas is known for his passionate, emotive and open-hearted playing, whether he is performing at intimate recital halls, or playing with beloved tenor, Placido Domingo, to an audience of over 85,000 at Santiago Bernabéu Stadium in Madrid, where Mr. Domingo hailed him as “the master of the guitar”. Routinely drawing comparisons with such legendary exponents of his instrument as Andrés Segovia, he has already appeared on some of the world’s most prestigious stages as Carnegie Hall in New York, the Philharmonie in Berlin, and most recently at the Concertgebouw in Amsterdam. Known for a sound so rich and full that it does not need amplification, his concerto performances regularly inspire new invitations and immediate reengagements as a featured soloist with orchestras in more than 30 countries, including Pittsburgh, Bergen and Israel Philharmonic, as well as Cincinnati, Spanish National and Denmark Symphonies. He made a series of important debuts under the baton of Frühbeck de Burgos, and has enjoyed fruitful collaborations with conductors including Juanjo Mena, Miguel Harth-Bedoya, Carlos Kalmar, Micheal Francis, Gustavo Gimeno and Cristian Macelaru.

**Meng Su**

2015 Parkening International Guitar Competition Gold Medalist Meng Su is the first guitarist to have won both youth and the main Parkening Competition, she is also the first female guitarist to both make it to the final round of the main competition and win the Gold Medal.
Meng Su has performed throughout Europe, Asia and United States giving solo, duo, trio, and quartet concerts. She has collaborated with various orchestras such as the Baltimore Symphony Orchestra, the Mid-Atlantic Symphony Orchestra and the Knights Chamber Orchestra. She gave her Carnegie Hall debut with Yameng Wang her duo partner in the Beijing Guitar Duo in 2010, which launched the duo’s international concert career. This season will take them to countries such as Spain, Portugal, Italy, Switzerland, Denmark, Poland, Serbia, China and the United States. Meng Su has also toured extensively with her mentor Manuel Barrueco performing in trio in Europe and United States.

Meng Su’s performances and recordings have impressed the public with “an ability and artistry that exceeds her years.” Her debut duo CD Maracaípe, received a Latin-GRAMMY nomination for the titled piece, which was dedicated to the Beijing Guitar Duo by renowned guitarist/composer Sergio Assad. Their second CD, Bach to Tan Dun, a "Must-listen" praised by composer Tan Dun, has been widely noted for the world-premiere recording of Tan Dun’s Eight Memories in Watercolor. A recording in trio, China West, with Maestro Barrueco was released in May 2014 to critical acclaim. In July 2016, Meng released her first solo album Meng.

Born in Qingdao, China, Meng Su began studying the guitar at the age of 5. She showed her talents from an early age and won first-prize in numerous international competitions, including the 5th Vienna Youth Guitar Competition, the 48th Tokyo International Guitar Competition, the 1st Christopher Parkening Young Guitarist Competition and the 2nd Iserlohn International Guitar Competition in Germany. In 2006, Meng Su came to the United States to study with the world-renowned guitarist Maestro Manuel Barrueco. She obtained her Master's degree and Graduate Performance Diplomas in both guitar and chamber music from the Peabody Conservatory in Baltimore, Maryland, where she is currently completing her Artist Diploma.

Gohar Vardanyan

Widely admired for her technique and artistry, Armenian guitarist Gohar Vardanyan has performed throughout the United States for numerous guitar societies, universities, and arts organizations, including the Smithsonian Institution in Washington, DC, Alice Tully Hall at Lincoln Center, and guitar societies in Seattle, San Francisco, Houston, Miami, and New York City to name a few. She has appeared on National Public Radio in the United States and Radio Nacional in Argentina. Ms. Vardanyan has performed with the Juilliard Opera Center and as a soloist with the Great Lakes Chamber Orchestra and Panama National Symphony Orchestra. She has also been a guest artist at the “Encuentro Internacionnal de Guitarra” in Panama and the Hamilton International Guitar Festival in Canada. Guitar International Magazine has described her as “the complete package,” “with a musicality and emotional quality . . . that one would expect from someone much older than the young wunderkind. Not only is she able to draw you into her performances with engaging musical interpretations, but she has the technical facility that is required of any concert level guitarist.” Her playing has been described as “passionate,” “evocative,” and “virtuosic.”
In addition to her performing career, Ms. Vardanyan is an avid teacher. She frequently teaches master classes and guitar technique workshops during her concert stops. Ms. Vardanyan is an author of three books from Mel Bay Publications. She’s a frequent writer on Mel Bay’s Blog and instructor on Strings by Mail’s YouTube Lessonettes, a series of mini video lessons.

Ms. Vardanyan began studying the guitar in her native Armenia at the age of five under the careful guidance of her father, Vardan Vardanyan. At the age of eight, she gave her first public performance and also appeared on Armenian National Television. She was the first prize winner in the Armenian National Music Contest “Amadeus” and was accepted into the prestigious group, “New Names,” for talented young musicians. She performed in numerous concert venues in Armenia, including Komitas Chamber Music Hall and the Small Philharmonic Hall. She went on to study with Antigoni Goni at the Pre-College Division of the Juilliard School. In 2001, Ms. Vardanyan studied with John Wunsch at the Interlochen Arts Academy. She was awarded the Young Artist’s Certificate from Interlochen Center for the Arts and the Harold Randolph Prize in performance from the Peabody Conservatory.

Ms. Vardanyan holds a Master of Music Degree from The Juilliard School where she studied with Sharon Isbin, and a Bachelor of Music degree from the Peabody Conservatory of Music where she studied with Manuel Barrueco. She is also an alumna of the Aspen Music Festival and School.

**Jason Vieaux**

Grammy-winner Jason Vieaux, “among the elite of today's classical guitarists” (*Gramophone*), is the guitarist that goes beyond the classical. *NPR* describes Vieaux as, “perhaps the most precise and soulful classical guitarist of his generation.” His most recent solo album, *Play*, won the 2015 Grammy Award for Best Classical Instrumental Solo. In June 2014, *NPR* named “Zapateado” from the album as one of its “50 Favorite Songs of 2014.”

Vieaux has earned a reputation for putting his expressiveness and virtuosity at the service of a remarkably wide range of music, and his schedule of performing, teaching, and recording commitments is distinguished throughout the U.S. and abroad. His solo recitals have been a feature at every major guitar series in North America and at many of the important guitar festivals in Asia, Australia, Europe, and Mexico. Recent and future highlights include returns to the Caramoor Festival, Philadelphia Chamber Music Society, and New York's 92Y, as well as his Ravinia Festival debut and performances at Argentina’s Teatro Colon and Oslo, Amsterdam’s Concertgebouw, and Norway’s Classical Music Fest. Vieaux’s appearances for Chamber Music Society of Lincoln Center, Bard Music Festival, Music@Menlo, Strings Music Festival, Grand Teton, and many others have forged his reputation as a first-rate chamber musician and programmer. He collaborates in recitals this season with Escher Quartet, acclaimed harpist Yolanda Kondonassis, and accordion/bandoneón virtuoso Julien Labro. Vieaux’s passion for new
music has fostered premieres of works by Avner Dorman, Dan Visconti, Vivian Fung, Keith Fitch, Kinan Abou-Afach, David Ludwig, Jerod Tate, Eric Sessler, José Luis Merlin, Jeff Beal, Gary Schocker and more.

Jason Vieaux has performed as concerto soloist with over 100 orchestras, including Cleveland, Houston, Toronto, San Diego, Ft. Worth, Charlotte, Buffalo, Grand Rapids, Kitchener-Waterloo, Richmond, IRIS Chamber, Chamber Orchestra of Philadelphia, Chautauqua Festival, and New Hampshire Music Festival. Some of the conductors he has worked with include David Robertson, Donato Cabrera, Miguel Harth-Bedoya, Jahja Ling, Stefan Sanderling, Michael Stern, David Lockington, Steven Smith, Edwin Outwater, and Gerard Schwartz. During the 2016-2017 season, Jason Vieaux will make appearances with 11 symphony orchestras throughout the US and Canada, including return engagements with the Santa Fe and Edmonton Symphonies, Piazzolla’s Double Concerto with Julien Labro and the Arkansas Symphony, and engagements with the symphonies of Niagara, Stockton, Illinois, and West Virginia. Vieaux will also be performing Dan Visconti’s new guitar concerto, *Living Language*, which he premiered with California Symphony in May 2016, with the symphonies of Reading, Fort Wayne, and Richmond.

Vieaux continues to bring important repertoire alive in the recording studio as well. His latest album, *Infusion* with bandoneonist Julien Labro, was released in October 2016 on Azica Records and features Vieaux and Labro in Labro’s arrangements of Leo Brouwer’s *Tres Danzas Concertantes* and Piazzolla’s *Escualo*, his arrangement of Radamés Gnattali’s *Suite Retratos* with bassist Peter Domínguez and percussionist Jamey Haddad, Pat Metheny’s *Antonia*, and Vieaux’s arrangement of iconic 1980s British rock band Tears for Fears’ *Everybody Wants to Rule the World*. Vieaux recently recorded Alberto Ginastera’s Sonata for Guitar Op. 47 for a Ginastera Centennial album produced by Yolanda Kondonassis, which was released in October 2016 on Oberlin Music and features additional performances by Kondonassis, violinist Gil Shaham, and pianist Orli Shaham. His duo album *Together*, with harpist Yolanda Kondonassis, was released in January 2015. Of his Grammy-winning 2014 solo album *Play*, *Soundboard Magazine* writes, “If you ever want to give a friend a disc that will cement his or her love for the guitar, this is a perfect candidate,” while *Premier Guitar* claims, “You’d be hard pressed to find versions performed with more confidence, better tone, and a more complete understanding of the material.”

Vieaux’s previous albums include a recording of Astor Piazzolla’s music with Julien Labro and A Far Cry Chamber Orchestra; *Bach: Works for Lute, Vol. 1*, which hit No. 13 on Billboard’s Classical Chart after its first week and received rave reviews by *Gramophone, The Absolute Sound*, and *Soundboard; Images of Metheny*, featuring music by American jazz legend Pat Metheny (who after hearing this landmark recording declared: “I am flattered to be included in Jason’s musical world”); and *Sevilla: The Music of Isaac Albeniz*, which made several Top Ten lists the year of its release. Vieaux’s albums and live performances are regularly heard on radio and internet around the world, and his work is the subject of feature articles in print and online around the world, including such magazines as *Acoustic Guitar, MUSO, Gramophone*, and
on NPR’s “Deceptive Cadence.” Vieaux was the first classical musician to be featured on NPR’s popular “Tiny Desk” series, on which he made a rare repeat performance in 2015 with Yolanda Kondonassis.

In 2012, the Jason Vieaux School of Classical Guitar was launched with ArtistWorks Inc., an unprecedented technological interface that provides one-on-one online study with Vieaux for guitar students around the world. In 2011, he co-founded the guitar department at The Curtis Institute of Music, and in 2015 was invited to inaugurate the guitar program at the Eastern Music Festival. Vieaux has taught at the Cleveland Institute of Music since 1997, heading the guitar department since 2001. Vieaux is affiliated with Philadelphia’s Astral Artists. His primary teachers were Jeremy Sparks and John Holmquist. In 1992 he was awarded the prestigious GFA International Guitar Competition First Prize, the event’s youngest winner ever. He is also honored with a Naumburg Foundation top prize, a Cleveland Institute of Music Alumni Achievement Award, and a Salon di Virtuosi Career Grant. In 1995, Vieaux was an Artistic Ambassador of the U.S. to Southeast Asia.
APPENDIX B

Initial Interview Questions

1) How and/or when do classical guitarists know if they have properly memorized music?

2) What techniques do classical guitarists use to memorize music?

3) How often do classical guitarists employ physical visualization during their practicing sessions?

4) How do elite classical guitarists memorize music? What techniques do they use? Are there any differences with the techniques previously mentioned?

   • What is your opinion on playing from memory VS having your music on stage?

   • How do you memorize music? Do you have different techniques?

   • Has your memorizing changed over the years?

   • Do you teach your students how to memorize?

   • Do your students use different techniques?

   • Do you use kinesthetic/motor visualization at all?

   • Have you ever dealt with memory slips? Why do they happen? How do you solve them?

5) Is it possible to create an effective memorization plan for classical guitarists?
FEDERICO MUSGROVE: What’s your opinion on playing from memory vs having music on stage?

DENIS AZABAGIC: My opinion on playing from memory versus having music on stage, I simply think that one should do what feels best. There are instances in, you play something from memory, maybe your mind is more free to go somewhere where your imagination takes you without having to think too much. What is it that you’re doing or to think of the notes. On the other hand, if I find, especially lately that having the music on the stage, it does not diminish the, the involvement that I have. It does not hinder the musical depth that I am, find myself going into and, and also it, especially with the chamber music, it gives me this cushion of security that if anything goes wrong, music is there for me to get back in quickly and to catch ourselves. You know? With my other colleagues. So, definitely the chamber music, I rather have it and as I said, with a solo, it just depends. If I feel a piece is memorized enough, sort of comes as a natural process that it, you know, I don’t look at the music any more.

FEDERICO MUSGROVE: Have you ever dealt with memory slips? Why do they happen? How do you solve them?

DENIS AZABAGIC: I have dealt with memory slips. Why do they happen? Because we are humans, so mind is not a machine, so we get those slips because we become nervous and we think of other things and the stress gets to us and so on. And if I have a memory slips in the concert, I solve them by, you know, either continuing trying to find, you know, a place for which you pick, pick on and to move on and I try not to give them too much of an importance because I’ve been in the audience myself and, and if the performer gives me enough music and has a memory slip, it’s just a tiny little glitch that, if it’s left at that level of just being a simple glitch and the performer can get back to music, then it doesn’t really matter to me so much. It’s important that I feel musically something, that I listen and also when I perform.

FEDERICO MUSGROVE: How do you memorize music? Do you have different techniques?

DENIS AZABAGIC: When it comes to memorization, how, in the question of how do I memorize music? I don’t really ever fell that I have put an effort to memorize it. It’s always simply came, the music became memorized by the sheer repetition of, you know, during the practicing process. Maybe more than memorizing the music was maybe a process of reinforcing the, the fact that what I’d memorized and tried to make sure of what I have. Of course, there are certain places what one has to pay a little more attention, the passages that are similar, but yet they take a different turn, and so on. So, maybe I spend more time with them looking at the music, playing with the music, playing
without the music, doing, doing visualization. You know, thinking even maybe photographically, like what notes are there. So, those are the things I’ve been doing.

FEDERICO MUSGROVE: Has your memorizing changed over the years?

DENIS AZABAGIC: It has changed in a sense that I’m not trying to memorize again. I play a lot from the score. I take my music stand with me to the concerts and those pieces that I don’t feel that have been memorized, I simply play them from, from the score. So, in certain way, yeah. My, my memorization is not as good as it used to be and as I said, I don’t, I don’t worry about it too much. I simply play from the score.

FEDERICO MUSGROVE: Do you teach your students how to memorize? Do they use different techniques?

DENIS AZABAGIC: Yes, I do. I do tell them and I go over, you know, pieces in the, in the lesson and I say, you know, play this section, repeat it or without the score. See where the differences are, but that really happens simply rarely when they have some students that have a problem with, with memorization.

But I do think that, you know, mind memorizes if it repeats something sufficient number of times and usually students do not ask me how to memorize. There are just some of them, questions like that and the more they practice, the easier they memorize. I just explained about what I show them. I do not know, in their case what different techniques that they use. If they come in with a question, that means that they need help, so whatever they are doing is not working and, and then they’ll ask me a question. Then, I think it’s the same as it has been for all of us. Just repeating, repeating, practicing and things simply sink in.

FEDERICO MUSGROVE: Do you use motor visualization at all?

DENIS AZABAGIC: I mentioned motor visualization before and I’ve done a really, a lot of motor visualization during the years when I was competing and when I had to check my memory and to make sure that I have a backup system, so to speak. That if I rely on my muscle memory and it’s working, but if it comes one of those moments that we’ve all experienced like, oh what, what passage comes next? What, what note is coming? And what is coming in next? I did use visualization to have that backup system and it’s a long process, but it was worth doing it because it has given me more confidence that in a case my muscle memory doesn’t work, I have this other maybe, what would you call it? Cognitive memory or, or, you know more conscious way of knowing where, what is the next note and simply having that backup system actually relaxes you more, I think. And you can let your, your fingers work and worry less. And then you can do more music and as you mentioned in, in, in the records, I was imagining my fingers for each fret, where do they go? Hearing the piece inside, not for both hands. Mainly for, for my left hand, away from the instrument definitely and then if, if I would find those, what I call holes, you know, those parts that I do not know what is coming next, then I would take the score. Not the instrument and through the score, visualize what is it I have to play so that all that memorization or that backup system, visualization backup system would work without the instrument.
IRINA KULIKOVA

FEDERICO MUSGROVE: Okay, so this is the idea, what I am doing I am researching music memorization techniques for classical guitar, all right, and what I want to know is not everything that I can find in books or different articles. I want to know what the elite players like yourself are doing, to see if there is anything different that you do to what students in general might do, and if possible, is there a way to create a method so that we know that if I do steps 1, 2, 3, 4 and 5 I know that everything will be memorized and there will be no memories slips. That’s pretty much it.

IRINA KULIKOVA: Okay, let’s do it slowly, slower, slow. One thing is I have to really kind of put it in a right order because I don’t know for me it’s different when I’m teaching and when I’m talking to a friend like you, you know. I don’t know, it’s like I have to get it out from another part of my brain. I’m really different when I’m teaching and when I’m on stage, everybody tells me you’re so different. So, when I just have a talk and am just like another part of my mind is off.

FEDERICO MUSGROVE: Let me ask you one question so we can warm up.

IRINA KULIKOVA: Hey, one thing, I was reading your questions and I basically have like a system how to answer them but I am backwards. So, that questions that were last, they were better to start with but now you can start with your first question.

FEDERICO MUSGROVE: The first one is what do you think about playing from memory compared to playing with music on stage, is there any difference as a performer or as a member of the audience, does something change when someone plays from memory or not?

IRINA KULIKOVA: You see the thing is the whole topic is pretty sensitive, at least for me, so everything when I’m talking is from my own experience and they are me being a child, a wunderkind, me going through a phase in life when it took all kinds of other work and not practice but then studying music but then also doing competitions so going through the student phase. Then going through my career, with many concerns and traveling, and jet lags and tiredness and dealing with all of that. That teaching experience and also teaching students and seeing the results and through years also seeing that the benefits from my advice and which really helped them, what it did to take what was different for them, and for me in all of this topic what you have, many things related too.

So, when we talk about stage and the scores, like a very simple answer would be it’s how it’s best for person because some people they absolutely cannot play with a score. Then there’s some people that just absolutely don’t feel comfortable using the score, they just cannot have that connection watching your fingers and having the music and things like that, but personally what I’m using is for my solo pieces I learn pieces by heart, I memorize them and then I have scores for… to feel more freedom, especially now. When I was, younger and doing the competitions, I was playing everything without scores but because in the real life you have so much things to do and also what I experience when I
played everything by memory I was practicing it too much, because of the practice I could not enjoy the piece anymore. I played it too much so I wanted to keep it fresh and keep a surprise for myself and this is for me easier to do when I use the score on stage, so then I practice the piece but with less time, but score helps me to kind of feel secure on stage, but I have to know the piece by heart.

FEDERICO MUSGROVE: Okay.

IRINA KULIKOVA: So, when I’m at home I can play piece completely by heart or by memory and there is a certain moment when I don’t want to use the score. When the piece is already so free, with each piece it takes a different time of course, it depends how difficult a piece, how often I play it, how long is the piece, how much I love it and then as certain moment I just let go of score and I just play it by memory. And now the situation is I sometimes have to play music that it feels right to play on the concert and I want to prepare it but I don’t have time to memorized it like a hundred percent. And so this is one example, another example is when I have to play an obligatory piece and I have to learn it but I will never play it again, but it just for special occasion, and another situation when I have to play chamber music. And then there is again a question like at certain point, like when I play with cello, duos with cello, and the connection is so strong between us when we play, when we’re so much in the music, in the connection to each other when we practice we like to look at each other and this interaction is missing when I’m on stage and we use the score, but it feels good because we are in the music and through all the rehearsals, we aim for playing without the score, we want that. But if you play let’s say with a trio or more musicians, quartet, then it also depends but most of the time you will use the score, and then the question is how to use the score and still feel free because when you play the chamber music the score is much easier so it’s easy kind of to be in the music but also follow the score. You have to of course practice kind of prima vista, actually teaching and giving master classes or privately helped me a lot to develop those skills that you can just read the score and feel very easy with that then when I’m working on figuring, so this is very important topic for me, about memorization. It’s when I’m looking for the right fingerings, I kind of even memorize the pieces of my students because you think about it and search for the most effective ways, that you discuss a lot, you discuss many things and the piece just gets in your head by itself.

FEDERICO MUSGROVE: It makes sense, so you mentioned that it depends, let’s say you don’t have the time to memorize something, so the next question how do you know or when do you know if you have memorized a piece?

IRINA KULIKOVA: How do I know? When do I know? I definitely know if the piece is not ready and it is on the program it will be out of the program. And I’m a very responsible person, I don’t like to play on the edge, like putting something on the program and then at the last minute, “oh I put the piece on the program now I have to practice that all day and night and then starting and go and play.” I’m not this kind of person, I really like security, I really like to prepare in advance. I don’t like this kind of surprises myself and when actually I give the program to organizers for printing and if I put a piece that I’m still working on, it depends of course when I give the program. So, I’m reasonable also to myself and I’m the kind of let’s say, have to be at least 90 percent sure that I will play it or even a hundred percent sure, of course it depends if they ask for
program 3 weeks before or if they ask for program I don’t know, 2 months before. And I put any of these and I’m working on it but I don’t know it yet, but for me it’s a kind of motivation if I give the program and motivation to learn it and to be sure that it’s ready but I will never go on stage with a piece I’m not 100 or 200 percent sure. This is one thing I prefer them to change the program to a piece that I know, so when do I know, that is again it’s a whole premise on how we practice so maybe we have to go back to the question.

FEDERICO MUSGROVE: Or how you memorize, if you have a specific method that you follow and then as part of the method you know when you memorize it. Is there anything, in your experience how you work with this?

IRINA KULIKOVA: Let me put it this way, so when I take a piece of course it depends how difficult is the piece, how big is the piece, and is it a sonata number 4, it’s it just a small piece for 4 minutes with an, ABA form, or is it a variation form, if it is a suite. So it’s very important to realize what piece we are dealing with, what piece we have to learn in concert or share it with an orchestra. Then important if this is a very famous piece that you already know it by ear, by singing it, by listening to the piece many times by other players, or is it completely unknown piece. That makes a big difference because there are some pieces like Aranjuez, that when I realize I don’t play it for a while, sometimes I want to pick up and I play it by ear just because I know every note in the piece. In those cases, I realize for me to memorize pieces much easier but there is a danger there because how to know exactly that you know the piece if the piece is well known, how do you know if you know the piece really well or if your ear knows the piece, but your fingers don’t. So, this is what is very important to understand on the first stage when you just start working with the piece, and also how you practice the piece, so while I’m practicing the piece I already know if I have memorized the piece well or not. For me in practicing what is important is the fingerings, of course, this is the first thing, how I want the piece to sound, so if I don’t know the piece then it takes a little bit more time but of course you figure it out, the whole concept, right? Or you can have a recording and then from there you kind of create your own concept, how you want this piece to sound in your hands in performance. Then I start working with the fingerings and pretty fast I know where the difficult blocks and what blocks take a lot of time for me, it depends if it’s technical issues like something uncomfortable for the right hand, for the left hand, or is it truly very tricky to memorize and actually while I’m working I memorize the piece. There was like one question that comes into another question, help me a little bit. Because you had some questions in between, so let’s put this question on hold and then there was some other questions.

FEDERICO MUSGROVE: Okay, for example if you remember having any memories slips in the past, if you know why they happened, how you solved them, how you memorize music, have your memorizing techniques changed over the years, do you work on memorizing with your students?

IRINA KULIKOVA: Oh yes, this is easier to answer, this I answer later. So how your memorizing changed over the years, I will cover that one, how you memorize the music and different techniques, this is what I will cover together with how and when do I know if I have memorized a piece.
FEDERICO MUSGROVE: By the way, these are just guidelines, you don’t have to answer all of them, this is just a basic idea.

IRINA KULIKOVA: So, the thing is how and when I know that I memorize a piece and how I work on that. So first of all is knowing the musical form of the piece, this is number 1. It’s very important, so I immediately just want to hear an example of how other people play. I know where’s repetition, where it’s development and things like that, so this is the first thing, I divide and then I start working with the piece. On day 1, I first divide all of the repetitions where it’s the same and where is the transition, where it’s different, then I start working on fingerings and I work in different blocks and when I’m working on those blocks it can be like maybe 2 lines of music, 3 lines of music and I just don’t take more in a day. I just go to another piece. While I’m working on the fingers this kind of memorization comes and over the years it gets faster and faster, and when you teach students and actually working a lot with fingerings, finding the best solution it’s kind of also helping you and training your memory. This is what I’ve realized when I start teaching on a regular basis, the same student for a longer time, we work on the piece and we come back to the same piece and realize it all so have developed very much to my own practice and to memorize their piece, that I remember what finger goes and when and why we did it like that, so it’s all kind of very good signals for the brain. So then I work for different blocks, I don’t do it all in one day so, while I’m let’s say, working on day 1 on 3 lines of music, I probably can play it but tomorrow I will be not able to play it, but after tomorrow it’s there, so I always judge the result on the second day. And I try to work for small sessions and of course if the piece I know well by ear the memorization of the piece can go very fast. Then I work on the piece and I never play it through and maybe I play it sometimes through but like looking a little bit at the score and then if I can musically play it well that gives me a nice freedom. So from that point I can judge how soon I can go on stage, like if let’s say I worked and I memorized everything in small blocks but I cannot play it through from the beginning to the end but I can play it through with the score then from that moment I can put it in the program and say okay, that is okay for the concert and then the question is of course if it’s in 2 weeks or if it’s in a month then I will divide my practice up in different ways to speed up one piece and work less with another piece.

And of course, if I play it and I record myself, if I can do this from the beginning to the end it means I know the piece because I notice that for me to play while recording takes away a lot of concentration, like also talking to you I realize that I’m pretty nervous. I feel that there are certain walls, certain nerves, something that makes me not very comfortable but I have to deal with it, I have to go over this and the same with my playing. When I just play for myself without any recording, without anybody in the house I don’t really count it as truly knowing the piece. So, when I do the recording, when I play it for somebody I have a friend who is coming over and I tell her, yeah do you have 5 minutes I want to play for you a new piece I’m working on, so when I can play for her and when I can play for a second person some other time and both times went well that means the piece is ready, ready for a bigger audience. I have very good photographic memory, I use it a lot so everyone has to know their strength, mine is, I have a lot of associations, even with words, even when I practice the piece I sometimes can, oh this is like from that piece or this is like from that piece, so I have a lot of that and very
important when I'm on stage to think about it, because otherwise I will start playing another piece. While I’m practicing those small blocks, I take a moment that I don’t play and I visualize it in my mind with how the fingers move, which one and where, and while I’m working on the small block I give myself some guidance like I have to focus on a certain finger and the connecting finger and I tell myself second or second or second or i finger. There are places where I know a tricky part and I know my fingers don’t want to play this way but it has to be this way. So, while I’m practicing a certain passage for example and I start with m and I realize I’m repeating i finger, I have to tell and it’s not good to repeat the i finger so I tell myself m. So, every time I focus on the new task and all the robot right hand and robot left hand while I’m working on those small sections and I kind of really give it a very strong focus then I have a little break, and without an instrument I have to play through in my head. Then I go to and I play something from my old repertoire and then maybe I go and I’m cooking and while I’m cooking I realize that I’m still practicing the new piece, the three new lines of music. I’m still in it, I’m still kind of visualizing it, I’m feeling it. That for me is a very interesting process, like I’m cutting tomatoes and cooking the pasta, the pasta is boiling I’m suddenly looking at the pasta and I realize I’m in my piece, I’m practicing it, so this practice actually helps me a lot and I start trusting this practice. Before I put too much time in playing, just play, play, play until it’s perfect, I’m not doing it anymore. I wait until a certain moment so my fingers can coordinate and play it through and then I don’t play and I just see it and visualize it in my head. Then I can play it maybe again 1 time through or once small bar and then I change and I do something else. I have realized that this way, using visualization helps me learn music much faster, so as more it goes in my brain even without practicing physically, I realize that my practice and learning the piece is much faster than when I played and played and played. Yes, and I learned to trust the moment, when to let go of the piece and when to pick it up again, it comes of course with time.

FEDERICO MUSGROVE: Let me ask you for visualizing because that’s the technique that works for me. So just to clarify when you visualize you mentioned about photographic memory, you’re not visualizing the score, but you’re visualizing your movements right, so if you could walk me through that process. How is it that you visualize, what is it that you see?

IRINA KULIKOVA: Both. I feel like when I don’t have a guitar with me I have a feeling like I see the score in front of my eyes and my hands I feel them, they’re not moving. I’m not moving them like some pianist you know playing in the air, you know some guitarist can give an interview in the meantime and they are kind of practicing something and they know exactly what they’re practicing, I don’t have that. And I used to have also a lot, when I was in the airplane and I looked like I was sleeping but actually I’m working through the program, and this is what I tried to do and I did before the competitions as well, and this is how I actually help myself to avoid all of those memory lapses. So, we come to the point on the day of the concert I don’t really want to play anymore a lot, the day before it’s okay, but on the day of the concert I realize a lot of energy you put into the practice and then in the evening you’re very tired. What I like I can just lay down and I visualize my program, just to go through and it is most of the time I see the score and I feel my fingers. I think even if you ask me I can tell what note was which finger, so like this, but I don’t remember like bar numbers, some people know the bar number.
FEDERICO MUSGROVE: Interesting.

IRINA KULIKOVA: Yes, and I think it’s all about practice, how I practice it and how and when I know the piece. Do you have any question?

FEDERICO MUSGROVE: No, so your memorization technique is part of your practicing method, it’s not that you do something different to memorize music. That’s just part of your learning process, right?

IRINA KULIKOVA: Yes, and fingerings are very important, so while I’m working on fingerings I’m thinking, I’m asking myself a question. Why I want these fingerings, how the music should sound, what do I want, what color I want, what do I imagine with the piece. So, from all of these questions comes the decision why I want these fingerings, not because it’s necessarily comfortable or because it’s written like this and I have to play how it’s written. I never look how it’s written in the score. Sometimes what I do, I orchestrate the piece, I think about it like an orchestra piece, what instrument is playing this, what instrument would be playing that, what is this piece about, how do I want this to sound and then I have reasons, do I want to play the same or not? So, all of this, it’s a long process with a lot of questions to myself and only then I put the fingerings but there’s a lot of things behind that. So while I’m thinking about all of that I’m looking at the score, I’m looking at all of those chords, I’m trying different sounds, I’m trying it here, here, there and of course with years you get experience to do it faster than at the beginning and certain forms are much easier to memorize because they’re so many repetitions coming, the theme is coming back so then I know for the concert I have to focus on the development part because it’s new material. I also work a lot with the end of the piece and the transitions. I work on that, I build up on the fastest way and the most logical way, and the logical way is from the end to the different transitions, so it goes really with blocks and then to the development part it doesn’t matter, like even if it’s a short piece the middle section is always different. If it’s the variation forms of course we’ll go the most difficult variations to the finale, to the end of the piece because it’s usually the most difficult, the combination isn’t there, so I work on this first and then I go to the beginning of the piece. It’s usually the last thing and that usually helps to speed up the whole process of learning the piece and actually one that I’m know in the end of the piece and the middle of the piece I can be pretty sure the piece is ready, because the first 2 pages are always the easiest to learn.

FEDERICO MUSGROVE: Do you think this is something that changes for every player or do you think what you use as technique you can apply to your students and it would be a successful memorizing technique as well?

IRINA KULIKOVA: Yes, it is a very good method. It’s a very secure method and pretty fast. The most important is that it’s a secure method, but the question again is how you practice those small blocks, are you practicing in it in just one very slow tempo and you never play it in the tempo or are you practicing everything in the fast tempo and you never play it slow, or when you’re practicing those blocks mean time you’re checking Twitter or Facebook. It all depends on this and what I realize is that the students, they receive from me all of this information but they don’t do a proper work with that, they put too much on the mind and do it. They think “oh I’m doing it on the slow tempo is not
for me, that is not working.” You see it’s very important how the student is listening and to find a very good adult who can listen well, it’s difficult, children listen better.

Sometimes what I realize also with my daughter, is she can do something else, but at the same time she listens and she remembers but if you look in her eyes and you tell it in her eyes she will remember it forever. It’s very important, yes, with students that the best success comes when they listen very well and when they can ask the right question. With the right question, I can adjust my method to their specific situation, with a technique, with how for them it’s easier to memorize and I realize that students that don’t have a talent for languages, for them it’s very hard to memorize the piece. Then if the students have a different background, if a student used to play guitar by ear, then it’s very difficult for them to follow the score and play exactly what is on the score. I meet some really talented students that played a lot of pieces but with many mistakes because they learned a lot of pieces just by ear or looking at the score once or twice and then they have a lot of mistakes and afterwards for them it’s very hard to relearn it.

I was not following the score in a proper way while I was studying in Moscow and then I came to Marco Tamayo’s class, and it was actually before I was in competitions but it was a very good preparation for the competitions. I was also memorizing pretty fast, like form the beginning to the end, just like how it goes with my photographic memory and then I was never really studying with the score, so I just got it all into my head and just played, played, played many times and don’t really look at the score, and then Tamayo would be mad at me because I was playing lots of wrong notes, and then they I had to go and play at a student concert or competition and only had 24 hours to change everything, all of my wrong notes. That was pretty tough, and then I developed my method because I had only 24 hours to change many wrong notes. So, then I developed a method preparing for competitions as well, also how to look at the score and how to sync with the score and that’s the thing about playing, using the score on stage. I assumed I know the piece well and I can play it well, when I need to get to the piece back like for the concert I again started with the score. So, all the time I work with the score because there can always be a wrong note. But now, the first thing I do is to find the right fingerings and always practicing one fingerings for a section. This is also very important, not to use 4 different options, all good ones, and then you play one fingering one night and a different one on another occasion. This is not good and I’ve been a judge in very big competitions and I know those players, they’re very famous, and they had very unlucky performances and I know why, and later on they would share it with me. Because they decided the night before the performance to play with different fingerings and that’s why they had the memory lapse on the stage. And it’s a competition so any big memory lapse counts.

I cannot give a recommendation, let’s say for example, if I see musicians playing with a score but you clearly see that they’re really sight-reading, that they’re not really like things together and then I don’t like it. I don’t like to play like this on stage I don’t like to sound like this, I don’t want to hear pieces like this, when it’s really obvious that they’re reading it and they’re struggling with it and then things kind of falling apart or they’re losing their musical line. Then I don’t appreciate playing with a score, but when the score is more like just for some small support, but you’re in the music, then it doesn’t matter, like if you play by memory or you play with a score it sounds the same or even better
because you move free, then I think there is no problem using the score on stage. So that’s my opinion on that.

And one thing is I know also like when I played with an orchestra and I used the score for some pages and their I know some professionals that do the same, and also for my solo concerts, I know my tricky parts where it’s just difficult and I use sometimes, if I play with an orchestra I use a few pages, of the entire concerto and I don’t play everything with a score. So, it depends again on how often you play the piece like if you have to learn the piece very fast, let’s say I played once with an orchestra I had to learn the piece in 2 months. I had the score with me, I had it on stage because I thought it would be more secure for me because the music was new, I didn’t know it well and considering how many hours I had practiced in total, for me that was the safest way. I don’t want to stop somewhere in between or improvise and the thing is I’m not a very good improviser. I can’t create anything on any spot by ear, there’s some people who can do, but very few, and this is what I will tell you how I go over my memory lapse, I will tell you my trick. If I play the piece very often, like if I have few other performances sometimes when I have the whole score I don’t just look at the score but I know exactly where my tricky moments are so I will prepare my eyes and I will look in advance until that place that I have to play. Then of course if you have played many, many times it’s a certain moment you feel so free you like not to have the score. So what happens with the piece if you play by heart, for me it’s very important to also before going on the concert to really go through the score, so I look in the score and I just sing it, not out loud but inside and of course visualization also helps me because when I’m just visualizing it without even looking at the score and then I’m stuck, I have to really fix that place and remind me of what is next.

When I play I always have maybe like 4 bars ahead in my head. So, while I’m playing I know where to jump next so if I’m suddenly, because I don’t know the passage was too fast and I made a mistake and they forgot the rest of the passage, I just know where to jump next, this is how I trained myself, thanks to competitions. Sometimes when you jump in a very smooth way, the jury members don’t count your memory mistake. So if you have kind of missed two bars but nobody noticed that, no problem and this is what I trained myself and of course on concerts it’s a matter of experience playing for people. I think it’s very important before the competition or before a concert and especially before the very important concerts that you play for public, that you can accept those mistakes and if you don’t have the possibility then you have to play for the video camera and listen to your own performance because this also gives you a very different focus.

Another thing what I try to do as well is to turn on the TV or music, something that can draw my attention and try to place the piece as well. So, my daughter helps me of course a lot to train my concentration, I know as well if I can play a piece while she’s going under my fingers, she’s showing me a drawing, she’s doing something with my hair and I can play the piece through it’s okay, I can play it on stage. So, those distraction moments, actually are key for checking, for testing yourself. This is what I’m always doing exactly because I don’t like very spontaneous kind of surprises, I like to be prepared. I test myself all the time before I go on stage and I know that mistakes can happen on the concert even if you have the score but you know the piece, like everything is well prepared, you feel
comfortable, acoustics are beautiful, you have the score, you know the piece by heart and still you make a mistake, it can happen. Again, different reasons, one reason is something is wrong with a nail, like it’s not well-polished, it happened to me quite often in the US when we played a concert and air conditioner goes under your fingers it gives a very different touch to the strings and also what is very important, if you’re tired or not, how well are your conditions. because what I noticed, yeah the concentration so you need to feel very fit for the concert and if you have a jet lag and you have to play through a lot of tiredness, jet lag or you had stress or fight or quarrel, I don’t know, you got bad news and you have to play, this is another way of training.

It’s very important to respect your profession and it’s the same like motherhood, or parenthood, you have to be healthy for your child. You are responsible so it’s the same with music, you are responsible for going on stage so don’t exhaust yourself, don’t party until 5 in the morning and then go play an important concert, things like this, and some people don’t drink wine the evening before the concert. I can do this but you really have to know your body and before I could drink like 4 glasses, doesn’t matter, now it’s different, now it’s maybe a glass or 2 glasses because I want to have a good night but you have to know your body very well.

Also an interesting experience for me, I didn’t recommend my students to drink coffee before the competitions because you get shaky hands and even if you don’t feel shaky on stage you’ve got shaky hands but then there I realized through my own experience and very low blood pressure sometimes I need a coffee before going on stage, it doesn’t matter but you have to know an exact moment when you get a coffee and when your hands are trembling and when you get a coffee and then your hands are super stable. So, you have to know your body very well, you have to know exactly what is best to eat before a performance because for some people the banana makes them sleepy and they lose some concentration, they are too sleepy, for some people the banana is good for concentration and eating it before the concert or chocolate.

FEDERICO MUSGROVE: I think you covered everything.

IRINA KULIKOVA: I didn’t cover about the students, maybe yes.

FEDERICO MUSGROVE: Oh yes, because you talked over the fingering and how you worked with them with the process.

IRINA KULIKOVA: Yes, this is the most important and how well they listen because I have some really amazing results with students that they work exactly on the same system as I do and the system is working for different blocks is really focusing on the difficult places, the fingerings, the visualizations and practicing in a slow fast tempo, so when they do this and also what helps before the concert performance is playing not the whole program from beginning to end before the concerts people do so, I say no please don’t do that, but playing few difficult passages maybe on the day of the concert but not going through the whole program on the day of the concert, just keep and build up everything for the evening. That is very important because I notice some of my students played very well at home, they go on stage and they are very tired, and because of that
they lose concentration, some people have it more, some people have it less, so for some people it’s very important to build up all of the energy for the concert performance.

Then also what I find extremely important for me is to be in the concert hall before the concert, but not too long, not too short, but really just I guess for me it’s the atmosphere as a whole, the light, and the height of the chair, all together just right, to get the feeling and it is also a matter of practicing that. And you have to know again the right time when you should leave the stage before the concert and then when you come back, I try to come back with the same feeling, the feeling of comfort when I just tried the empty hall, and when you start with the feeling of comfort, the first piece you are not nervous anymore because I notice there are some, this is also I went through experience some nerves just the light is so strong, the hall is so big, it’s completely packed, you want to play well but here comes some good nerves and they can be quiet difficult also for the concentration, then you start thinking something is going on in your mind while you’re playing. It can happen and this situation, I just try to sing the peace, sing it or I just turn my imagination into a conductor and I just try to imagine that I’m conducting the orchestra while I’m playing the solo piece in front of the public. It helps me to switch off some other voices, like “oh no here comes the difficult moments now you can forget he part,” you know I have these dumb voices.

FEDERICO MUSGROVE: We all do, it’s not just you.

IRINA KULIKOVA: Yeah, so I try to give it different voices and this is what I train my students as well, what you think while you’re playing and of course playing a lot in front of hall audience because sometimes the right practicing is not enough. They are really experiencing the stage and some stupid thinking comes on stages, like “oh no you’re making a very funny face while you’re playing and everybody is looking at you,” or “what are you thinking,” you know just another voice telling. And you love the piece, you love the music but sometimes it comes especially if you’re playing like a tour with 10 concerts, and after 10 concerts you start thinking whatever nonsense. Now I know and I am experienced, if you have 10 concerts the best concert will be like 6 or 7 and then it comes down again, down the hill. I’m prepared for this now but before I was not and now I know for example how many concerts you should do per 1 tour because otherwise you get bored playing because your ear is not sharp anymore. If I have more concerts then I prefer to push myself, I like to have 2 or 3 programs, so this is for me a motivation because I know if I go with 1 program it gets so hard to play the last concerts, so difficult in your mind because sometimes you just don’t hear anymore what you’re playing, you don’t know where you are anymore in the piece and so then I just found the motivation to learn even more pieces and come even with some new pieces because it always keeps me at sharp concentration, so I give myself this kind of difficult tasks but it helps to feel the right balance.

FEDERICO MUSGROVE: Excellent, I think this is perfect.
ŁUKASZ KUROPACZEWSKI

ŁUKASZ KUROPACZEWSKI: Yeah. I mean I tried visualization but in general it didn’t work because I needed to have the guitar in my hand. I mean I need it. These 2 things have to be together. Mental memorization alone is just not enough for me. So, I noticed that the thing is that many years ago I started hating the fret buzzes on the guitar. Absolutely hated them. To me it was just lack of hygiene, really. Like when I hear buzzes, it’s the worst thing I can hear.

Now mistakes are a different thing. I don’t have a problem with that. I mean we are human beings, we make mistakes, that’s absolutely cool. Our memory slips are also not a problem, but the problem were the buzzes. So, I started practicing in a certain way to make sure that the buzzers are out. So, every single piece I practice, I use metronome on 60, and at 60, the beat at 60, it’s not just for the eighth note or for the quarter note, it’s for every note. So, I play without rhythm, without rhythm. Just every note gets a beat of 60. And it’s not just about the tempo, but it’s about the time for me to prepare every movement. So, my left finger has to be on the string in the position before I pluck the string. Yeah? I always make sure that I first, this is the process, I prepare the right hand, put it on the string where I play the note, then I put a left hand finger on that note, but just put on the string without pressing. I put it there, it’s prepared. Then, I press with left hand and then I pluck the string. So, it’s right, left, left, right, that’s how it goes. And the right at the end gives the note.

So, that’s the preparation. So, for that, sometimes I need some beats, you know, empty beats, because I need time to prepare. So, if there is a shift like from 3rd position to 5th, let’s say, I would play a note in 3rd position or the chord, I would release my left hand, but staying on string in this position, exactly in this position. Release the hand, then move slowly, and when I move to next position I always count to 3. 3 beats, just to make sure that the movement is not too hectic, not too fast. I arrive to the position, I prefer every single finger on the chord on strings without pressing, just put it in the position. I put the right hand first, then I put the left hand, I press, and then release the chord again. So, the shift is very important.

So, I do that, I practice like that. It takes a lot of time, let me tell you. For example, when I practice the Antonio Jose Sonata, on the first movement took an hour and 40 minutes, the 4th movement 50 minutes, while I do the 24 Preludes by Ponce it takes 3 and a half hours. So, basically, it takes so much time because the shift takes time, the preparation of both hands takes time. But, I also repeat 5 times every single bar like that. So, I do one bar, again, again, again, again, 5 times. I’m not thinking in phrases; I’m not thinking anything. This part of the exercise is absolutely away from the musical. It has nothing to do with musicianship, it’s just training my hands, like on the gym. I’m training my hands, that’s all I do. So, I forget about phrasing, I forget about dynamics a little bit, because all musical aspects create tension, and I don’t want that. I like to work on these 2 things separately. So, when I do that, as I said I do 5 times every bar, and then I make a plan. I look at the piece, I do that 5 times every bar, and I measure how much it takes me to do
that. So then, when I practice again, I make a plan with timing so I know that if I wanted to practice Tansman Prelude and Interlude, let’s say, it’s going to take me an hour and 20 minutes. So, when I have a plan, I know that if I start at 9, at 10:20 I will be done with Tansman. If I only have 3 hours on that certain day because I have to go teach or something, on that day I can plan exactly what I want to practice.

Why am I telling you this? Because all these, the methods that I did for myself, and I try to teach that to my students also, it teaches your hands to work very efficiently. It teaches you to make very small and slow movements. And I believe that playing the guitar is about small and slow movements. If the movement is fast, I mean the chances that you are going to miss are very high. Slow and prepared, there is no chance that you’re going to miss it. So, your brain tries to understand while you practice at home that every time you play is perfect. It’s always clean, it’s always clear. So, you also get used to your set brain perfectly clear, clean. And that, psychologically, also helps, you know. And you then perform then, you don’t remember missing things at home, really. If you remember missing things at home then it’ll drive you crazy and then those things, you’re just waiting for those places to, you know, to have a problem there. If you’re just used to playing everything perfectly you’re not so scared anymore.

But this exercise, I started practicing like this, just eliminating the buzzes. But what happened, and it’s something that I wasn’t expecting, was that this exercise was perfect for my memory because you remember every single movement in slow motion and you repeat every single thing 5 times every day. So, in a week, you play one note 35 times, right, perfectly. With preparation, you know exactly movement by movement where your hands go. In a month, 140 times, right? If you’re thinking that you need 3 months to prepare a piece, think that it’s 420 times you play every single note of the piece perfectly. Prepare every single movement ahead. The risk of mistakes goes down like crazy. I’m not saying you’re not going to make a mistake, but it goes down. I’m not just talking about the technical part, because that of course, but the memory, you will never have a memory slip anymore, never. Because look, the best exercise if you have a young student, you play something, he or she plays something, ask them to play the same thing super slowly again. They can’t. Mistakes all the time. They don’t remember the slow motion, they just remember fast. Now if you learn something extremely slowly and know exactly movement by movement, you’ll never have a mistake, never.

Also, practicing like this, you will never have to practice to learn things by heart. Today, I’m learning this by heart… This doesn’t exist anymore to me; it just gets stuck in your head without you noticing it. You practice, practice, practice, and one day you just remember, and that’s it. There’s no process of thinking and learning things by heart. Because I absolutely believe that this, when you want to sit down and learn things by heart, it’s very artificial. It has to get in naturally. If it doesn’t, you will always be thinking, you will always be worried. But, if it just gets synced in on your hard drive there won’t be a problem. So, me practicing super slowly and doing all this routine, the thing that I got was the memorization, so that’s actually my thing now. Now when I teach my students, when I work myself, I just work like that, and it doesn’t take me a very long time to prepare things because this exercise, this way of practicing takes a lot of time, I mean daily. As I said, 24 Preludes by Ponce, 3 and a half hours. And then you have to
play a recital that has 5 pieces like that, or more, then of course, I can’t do everything every day. Because of that, I write a plan, a week’s plan. And then I notice that I need 2 weeks to play all the 24 preludes, I mean I knew 10 before so I had to learn 14. These 14 preludes in 2 weeks, I was able to play clean and without and problems, really. Not ready performance, of course, but I was ready to play. So, I noticed that you actually, the process was much tougher, much more boring, much more frustrating sometimes. So slow, nothing happens, you don’t enjoy that much. But there is a big difference between practicing and playing, huh? If you play slowly, very slowly, you still play. And practicing is something completely different.

Practicing is not really fun but it’s teaching your hands to work. That’s what Barrueco, told me, always. First you teach your hands and I learn this time, teaching your hands. So this is the whole process, arriving at plan and things like that. And I strongly believe that this really works. I mean I strongly believe it. And, it works, you need 2 days to see the difference, I swear.

I just gave a class last week in south of Poland at the Academy of Music, very good class, very good students. One girl was having problems. I showed her this technique, and I practiced with her. And her teacher called me the next day, that she practiced after my class, she ran to the practice room, she practiced next day before her lesson with him, she practiced and said he couldn’t believe what happened. From like close to nothing, she became, I mean the performance was really good, and he was shocked. But the challenge is to stay focused and keep doing it. Because, as I’m telling you, it takes a lot of patience and a lot of time, so it needs a plan. If you have to, if you have a teacher that wants you to play everything every week, then it’s going to be hard. But, if you have a teacher that understands that you want to focus on one thing and do it well, then do another thing, then that’s the best way to do it. I think that everybody should let students do one thing well then move to the next thing, move to the next thing. It’s all about planning. It’s like “oh I have a competition,” well, then plan. You know you have a competition at least a couple months before. 3 months before, 6 months, right? So, write a plan and do that. So, then you don’t have to practice every day. That is the whole thing of practicing but that is about organization, you know?

FEDERICO MUSGROVE: When did you start with this, when did you discover this?

ŁUKASZ KUROPACZEWSKI: About 10 years ago.

FEDERICO MUSGROVE: Ten years ago?

ŁUKASZ KUROPACZEWSKI: Yeah. And then I practiced like that.

FEDERICO MUSGROVE: And do you notice any differences in your memorization?

ŁUKASZ KUROPACZEWSKI: Oh yeah, of course. That’s what I’m saying, I mean I don’t.

FEDERICO MUSGROVE: So you discovered this…
ŁUKASZ KUROPACZEWSKI: And here’s another thing now, it’s another thing also. If I wanted to play everything by heart, I know it wouldn’t be a problem. But I play a lot of chamber music and I notice all the musicians that I play with, the violinists, the cellists, they don’t necessarily are crazy about playing by heart. They just use music. And I asked a violinist that I play with. He’s phenomenal, I mean it’s incredible what he does, it’s incredible. He’s a genius, that guy. And I asked him why do you use music for some of these, and he told me you know, if I had the music in front of me there’s so many things I don’t have to worry about anymore because I can express myself better. And I started thinking about it, why do I stress out? I prepare 40 minutes of new rep every couple of months, let’s say, and I feel comfortable playing with the music, why would I stress out to play without it? I just, sometimes I read music and that’s it, and some things like contemporary stuff, I use music for that. So, I thought if I want to learn something by heart, it will get stuck easily with practice.

FEDERICO MUSGROVE: Your practicing method doesn’t change, right, it’s always the same?

ŁUKASZ KUROPACZEWSKI: It’s always the same, always the same. It’s just, you know, if I pick up a piece that is long, like 30 minutes or 25 minutes, I want to play it in 2 months, that’s probably not enough for it to get stuck really. I would probably need 3 months. So, if I have only 2 months, I will use music.

FEDERICO MUSGROVE: So, let me ask you, how do you know if, let’s say you need to know if you have memorized a piece? How do you know, when do you know?

ŁUKASZ KUROPACZEWSKI: I feel it when I practice, I feel that I know exactly what to do. And if I’m not so sure, some places I know, some places I don’t, I know there is, no, it’s still not there. But I’m telling you, it’s very difficult to catch the moment when you’re practicing and you just don’t need music anymore. It’s amazing, really. I mean I so believe in this method, it’s my religion, it became something that I believe in, like believing in God, really. Because I also noted, whoever does this the way I tell them, I have 5 students, right, they’re all good players, but some work harder than others. So, the hard working ones, if they do what I tell them exactly, they follow that, the results are fabulous, you won’t believe it. I gave one of my students the Grand Overture by Giuliani on Tuesday and we had a lesson on Saturday, yeah, it was Saturday, and I asked him to practice like this. He came on Saturday and it was perfect.

FEDERICO MUSGROVE: And one more thing, do you, let’s say you’re playing with music, or without music, does anything change? Are there any changes in musicality? What’s your opinion on having music on stage or not having music on stage?

ŁUKASZ KUROPACZEWSKI: When I was younger I thought that when somebody puts music in front of them it meant that they didn’t know the piece. Right now, I know that I have been stupid, you know. Of course it’s not true. You look at it, I mean look at the biggest musicians in the world, Itzhak Perlman or Anne Sophie Mutter, Yo-Yo ma, they are playing sonatas with music in front of them.
Maybe I’m a little less nervous when I have music in front of me, maybe. And also, when I memorize, I don’t know to be honest, if there is a big difference, maybe, maybe, maybe. For example, there are some passages that you can’t play with music, you have to learn those. They’re so difficult that you can’t just look and play. So, putting music doesn’t mean that you’re reading it, you just have it there for some spots or some that feel more comfortable, but it’s not like… you have to know the pieces by heart, really. If you just put music and read out of it, then people will notice that you just put it there because you don’t know the piece. That shouldn’t be the case. It has to be that you know the piece very well, you just put it there to be more comfortable, that’s it.
PABLO SAINZ VILLEGAS

PABLO SAINZ VILLEGAS: Well, in my process, the process I’m going to share with you, it’s a feeling that, after going through the method, like after reviewing the last 5 of each, you have the feeling that you know it, so it gives you a very beautiful feeling of confidence, that the brain knows the music, because the element for me. Our hands don’t have brains. Our muscles don’t have brains. Our fingers don’t have brains. But, our brain has the capacity, I mean our head and our memories have the capacity to memorize, and to go through every single detail, so whenever you are able to go through the whole score, and visualize it without any mistakes, then you know that whatever happens a mistake, your brain knows it. Your brain is so smart. If you’re on a stage, the adrenaline is so high, that the brain will ask for answers whenever you have a mistake, and the brain will know where to find it, because it has the information.

FEDERICO MUSGROVE: Okay, so the next question that I was going to ask you was, if you dealt with memory slips in the past, why do they happen? But, I think you already discussed it, talking about muscle memory against knowing it in your brain, knowing the music.

PABLO SAINZ VILLEGAS: I discovered this method, I was probably 14 or so, 14, 15, and I always was very confident with my memorization on stage, so I don’t remember having memory slips often. If I had, that’s part of performing. If I make some mistakes, I don’t call them memory slips, I call them mistakes. They’re human errors. Then, in all of them, my brain and my hands were able to continue the flow of music, and that’s the key in this, is the music to keep flowing. For me, memory slips for example, I’m thinking right now, out loud, but if I have to stop in the middle of the piece suddenly, it’s like, wow, where am I? What’s the next chord? I just stop, and that’s very dramatic, because that’s, the music is affected by it, and that’s really, for me, a memory slip. It’s more than a human error, because it actually affects the artistic product that you are offering, the artistic experience you are offering to the audience, because it will be a very dramatic moment for yourself, on the stage, and for the audience, because they are feeling bad for you. They are feeling something really dramatic happened on stage, that will affect the whole performance, because after that, the artist will have more problems to roll back to an artistic, creative soul, of missing the connection with the audience, when you have such a dramatic moment, and the audience will feel that, will resonate with that.

FEDERICO MUSGROVE: That’s a great answer. So, to tell you a little bit about this series of interviews, what I’m interested in learning is what techniques are the elite guitar players using for memorizing music, because you’re really experienced, you perform all the time, so what I want to know, if you’re using any other techniques, other than the ones that guitar players use in general? So, what techniques are you using, and would it be possible to create a method that you could use with everyone else, when you teach students? That’s my main interest.

PABLO SAINZ VILLEGAS: Yeah. Definitely. I mean, in general, for me, guitar playing is based on a method. I think I, I shared with you, music is a pyramid. The base, the foundation of the pyramid is technique. For me, it’s an emotional commitment. For me, memorization is part of that foundation, it’s part of the technique. Sometimes, we think
technique is just playing notes and playing them fast. For me, it’s much more than that. It’s how you play them. It’s all the elements around the guitar playing that affects the music. That’s technique. For me, being able to phrase that technique, how to do a crescendo, a diminuendo, an accent, that’s technique for me. Memorization, for me, is also method. It’s part of that big method, of guitar technique. For me, everything revolves around changing dimensions. Music is based on a dimension of time. We need time to enjoy music, from the beginning to the end, from the first note until the last note. For me, it’s about changing the dimension of time into space. It can be done in a simple way, which is making it into 2 dimensions, or the advanced methodology, or for experts, they say, is going into 3 dimensions. So, for me, this is like the summary of it. It’s like visualizing a whole score, which demands time, put it on a canvas, which would be 2 dimensions, like a painting. You can visualize the whole movement, the whole score, the whole program at once, in the blink of a second. You can see all the elements of the movement, or of the score, on that canvas at once. Like, if you are in front of a painting, and you look at the painting for let’s say, 3 seconds or 5 seconds, and then you don’t look at it again, if I ask you what are the elements of that painting, you would be able to tell me, well, there are mountains in the background, there are clouds high above, it’s a cloudy day but the sun is shining, and then, there is a river and a lake, and a car, with some kids playing inside, and there is a house where a man is waving his hands. Whatever. I don’t know. Just in 5 seconds, you are able to get all that information, very much like photographic information. Like an image, if the image is very powerful to the unconscious parts of the brain. An image can have or can contribute a big amount of information. That’s basically what I do, the general description.

The first thing I do, of course, when you are learning the piece, you analyze the piece, and process it, where you try to understand the structure of the piece, and the structure is already an important word. Then, you know, what’s the structure the composer used, and try to understand the different parts, but also what the musical idea that you want to define through your interpretation, right from the beginning. In that process, you’re already giving structure to the piece, and defining sections and then also to defining fingering, the phrasings and everything. That’s the first stage, and of course, that’s going to be a process that will last, depending on the piece, a few weeks, or less. I mean, by using that process, little by little, the hand is going to learn the different fingerings, the different positions that you chose to play that piece in order to transmit the musical idea that you previously defined during the process. That can be a live process, so there might be changes, or there are changes through those weeks. The first week, I might change the musical idea, but the last week, I might change it because I saw a different link between different ideas, or I just changed my idea. And that’s fine. But, there is a moment where you feel that your piece is set, and the musical ideas that you are to transmit with that piece are set, and in that moment, starts part 2, which is, let’s start playing it more and more, and let’s identify where the weakest spots are, technically speaking, so I can isolate them, and I can play them, and practice it, in progress, and then you start making the whole piece flow, technically speaking, and muscular, like the muscles, they just flow through the music. That’s a process that the muscle memory is going to start to develop, because through repetition, the hands are going to start to learn the different moves.
In that process, the muscles are going to start to learn through muscle memory, the repetition of movements works well.

Of course, the muscles don’t have brains. The muscles respond to an order from “headquarters,” the brain. That doesn’t mean that you know your piece by memory. Of course, without pressure after a few weeks of repetition, you are able to play that piece by muscle memory at home, with no pressure. But, that’s very dangerous, because that’s what happens with too many memory slips when you are on stage. It’s like at home, you feel very confident that you could repeat your piece many times without mistakes, even watching TV, and playing the *Chaconne* from beginning to end, with no mistakes, but then you go on the stage, and your environment changes, and your brain, because of the pressure of going on stage, is going to ask you questions. It’s like, what’s the first chord, and you remember it, okay, that’s the first position, whatever. Then, you start playing, and the brain keeps asking you, what’s the next, what’s the next? Because there are under pressure and the brain is sending information, being fully aware of that moment. That’s the danger, that there are going to be moments where the muscles say, I don’t have a clue, and the brain is going to say, I don’t have a clue, either. I don’t know if I said it correctly. The muscle asks for answers from the brain. In those moments, the muscles are asking for information and the brain, if the brain doesn’t have an answer, then that is a moment when a memory slip takes place. To avoid that, in that stage where I already can play the piece with muscle memory, when I am at home, the next step for me in memorization is to put the guitar in the case, and do this exercise, where sitting on a chair, lights off so my concentration is better, and I usually like to do it before going to bed, because then, at night, all the information that I was visualizing somehow integrates into my brain in a different way. But, you can do it anytime. So, I have the score in front of me, and then I turn off the lights, and I start visualizing, imagining, in my brain, 2 things at the same time, and this is, I don’t know very well how I do it, but the brain can do so many things. I guess, if you train the brain, you can do it. If I can do it, anyone can do it. So, I visualize 2 things. First, the score, the actual notes of the score with the markings, the dynamic, the measures and everything. At the same time, I’m visualizing, as part of the image, how my hands are playing that chord. How my hands are playing the next move, the next melody, where it’s going. I start going through every single note and marking of that score. Of course, that process, especially if it’s the first time in a piece, I start finding passages, or notes, or chords, that I don’t remember. It’s like, wow, here. Oh no. And there is a blank there. There’s not a clear image of the notes, nor of your hands. That’s the moment where I turn on the lights, I go to the score, I identify the place where I went blank, and then I identify it. It’s like, oh, of course, it’s an A minor, and it’s the fifth string with the 1st finger, whatever. Then, once I identify it, I turn off the lights again, and I rewind, like it’s a CD player. I rewind a couple of seconds, a couple of measures, and I keep doing the same work, visualizing the music, and my hands moving through the fret board. The place where I previously had the memory slip, then it appears clear on my mind, it’s a B minor with the 1st finger number on the fifth string, for example. You solve that void, and then your brain somehow knows it, because you are able to teach the brain that that was a B minor, and then you keep going. More voids, more memory slips are going to happen, almost probably. That’s part of the process of how to teach the brain to solve the memory slips that the brain doesn’t have a clue what to play, and those are the memory slips that, if you don’t identify them, then, when you go on the stage, there is a big
probability that you are going to have a memory problem in those places, because the hands are demanding the information from the brain, and the brain doesn’t have a clue. In that process, probably the beginning will take me an hour or so, to go through every single aspect of the piece, visualizing every single move and note of the score. The more I practice it, the faster it gets. So, right now, a piece of 5 minutes, it can last probably 15 minutes or so, or 10 minutes. Depending on the difficulty, and how well I know that piece by memory. There are going to be elements also that you also want to integrate, for example, the right-hand into that memorization, because many of the errors that happen when you are playing guitar happen because we are not fully aware of what right-hand fingers we are using. There are scales, rasgueados, well, not so much rasgueados, but scales or arpeggios, or different movements for the right hand, where if you start with one finger or the other, it’s going to change tremendously. It’s going to change the nature of that scale. For me, integrating also, the right hand, especially in certain passages, is very, very important. I visualize this the same way. I visualize, it’s like a third image, taking into consideration the notes, and then there is the left hand, and at the same time, the right hand. So, I’m imagining, for example, a D minor scale, starting 4th finger on the fifth fret, then I’m starting that with 4 fingers on the fifth string, with the index finger on my right hand, and I start to play it. D, E, with one on the fourth string, and M, then 2 on the fourth string, and I, then 4 on the fifth fret, on M, and so on. At the same time, I’m visualizing each note on the staff. That’s basically how I do it, and then once I visualize the whole piece, or the whole movement, then, I visualize the canvas. So, I visualize all the sections of that piece, imagine there is an exposition, development, recapitulation, like a sonata form, when on the exposition, there is A, there is B, there is a transition between both of them. The elements, there are like 5 different elements that must go into consideration, from different material, from A and B, and then the recapitulation there is A, and B, but B is also in the tonic, for example, instead of going to the dominant. That’s already in a structure and a visual image of the piece, and then you can go smaller and smaller into the sections. You can define section A has 2 phrases, each phrase 8 measures long, and then the first phrase is 2 plus 2 plus 4, the second one is 4 plus 4, for example. So, you start from the big structure, to these details, more and more into the smaller sections, and then trying to visualize everything at the glimpse of an eye. Everything there.

FEDERICO MUSGROVE: Okay.

PABLO SAINZ VILLEGAS: This happens. Then, let’s say the more abstract way I visualize it here, and to give it even an intention, an emotional intention to the piece I’m playing for the movement I’m playing, you can give colors to each of the sections, because colors are very much linked to emotions, or it can be, so you can give colors to every section, how dramatic you want it, and then you can do that, also, with your whole program. Then, you can visualize with the whole program you’re playing in a recital all with different colors. It’s going to be more and more complex to visualize every single detail if you are visualizing many pictures, but you visualize the whole structure of the program, with the main sections of the piece. That’s how I do it. Then, to visualize where’s the climax of that recital. Where is the beautiful, intimate moment, and visualize the colors, and then to know it’s a beautiful abstract painting with very defined structure. The more advanced way to it, and more abstract, and this all very personal, nobody
taught me anything about it, but those were the conclusions I was arriving to when I was practicing it, is making this canvas into 3 dimensions. That means making sculptures. For me, those are abstract sculptures with shapes and colors. The piece, of course is a metaphor, is going to be 3 elements that are linked together, and the first one and the third one are similar shapes because that’s how they relate. The second one, usually, is going to be bigger, because of the drama of it, but at the same time, the whole sculpture is very much balanced, and it’s a sculpture that is floating in the air, and I can look at it in 360, going around it. Each section, like the A and the B of the exposition also represent into a different shape of this volume. Of course, it’s getting very abstract, but I truly believe that when you go into images and visualization, the more abstract you get, the more you’re going to the essence of the message you want to transmit, and the essence of what you want to accomplish. The unconsciousness communicates very, very much, and very powerful, with the abstract imaging. That’s my opinion.

Once I do that, before going to bed, I usually do it like a week before a performance, and then the day before, the night before. One week before, so the brain has time to assimilate all information that you didn’t know, and then the night before, just to make sure that all the information is in the brain. When I do that, and I go through this process that requires a lot of work and concentration, then there is a feeling of security. There is a feeling of being in command, and there is a feeling of that security, because your brain knows every single note, and your hands know where to play those notes. When I do this job, so far, I knock on wood, I have an immense pleasure and tranquility that my brain knows the music, and that, when I’m on stage, with pressure, and adrenaline kicks in, my brain is going to find the answers, and my brain is going to give the answers to the muscles when they ask for it. Most importantly, because this is the first goal, to play all the notes, but then by doing this, my head also has a beautiful feeling of unity of the piece, and that’s very important, because one thing that teachers told us or what great musicians think about is how do you get unity in a piece through our interpretation? How do you, in a piece like a Mahler symphony, an hour long, each movement is 20 minutes, how do you give unity in your interpretation to twenty minutes of music? Well, if you visualize the unity, because you see it at once, 20 minutes of time, you visualize that into space, into a canvas or into that sculpture, then your brain, somehow, has the unity. I mean, visualizes the unity. When you are starting to play the first note, you’re just going through the map, because your brain already knows what’s going on in the journey, and what’s happening in the end, even though you are just starting to play. Your brain is aware of where you are going. To have that sense of command, it gives, I think, a beautiful unity to the music you are playing, an emotional intention, and being aware of that is definitely very powerful. I don’t know, that’s very much a summary of how I do it. There you go.

FEDERICO MUSGROVE: Well, to be honest with you, you touched many different points there that I read in several different studies. So, it makes perfect sense, and you already answered many of the other questions that I had for you. Let me quickly ask you something else. Going back to your stage one, to the analysis of the score. Do you do this with the guitar, or without it?

PABLO SAINZ VILLEGAS: Usually, sometimes, I look at the score, the sections, and I start exploring it with my guitar. Yes, I have a look, and it’s like, okay, this is the section,
this is an arpeggio, but not very thoroughly. It’s very, not superficial, but exploring around the surface. Then, like an explorer with his machete in the jungle, I like to use my guitar to do that exploration, and then, that exploration, is for us to define one fingering or the other, one position or the other, is going to define that musical idea and that will affect the music. Sometimes it’s about trying different options, and listening, being aware of the challenges that represents the musical idea you want to represent.

FEDERICO MUSGROVE: Okay. Makes sense. One more thing. Let’s say you have to perform a piece, let’s say chamber music or a concerto, and you are able to use a score, so there’s no need for memorizing the score. Do you still go through the same process, with the 3 stages, and the visualization, or not?

PABLO SAINZ VILLEGAS: That’s a good question. Let me say something before I answer this question. What happens when you play with a chamber orchestra, or a chamber music group, or an orchestra, that’s very important to learn, and also memorize, what’s going on with the orchestra. In my case, I don’t go as thoroughly as with my part. I don’t learn everything, the notes of the violins, or the different instruments, but yes, I memorize what’s the melody on the orchestra, and how many measures, and when do I come in, because that’s really important. That’s part of the piece, so even though you are not playing, at some point, that’s part of the piece and you need to know their part, so you need to know when you enter. With orchestra, I visualize really, also the orchestra parts. It’s very important. And then with orchestra, sometimes there’s a lot of sound in the tutti and sometimes you have to play, too. I focus on those parts, also, because the sound of it has to be able to guide me in the process. It will be my brain and my fingers moving without having a clear sense of the perception of my sound, as when I’m playing by myself, or with a light accompaniment. Many of the memory slips in orchestra, in my opinion, happen in those moments happen because the sound perception changes so dramatically. I mean, like 60 people playing behind you, where you can barely hear yourself, and then everyone is asking for information. Their hands are asking for information, the ears are asking for information, and the brain is going to be super busy to get all that information, and it can break the concentration. Those moments are important to work very focused.

Answering your question now, when I play, when I know I’m going to be playing with a score, through my experience, the only danger that is important, and I’ve suffered, is when you know that you can play the music with muscle memory at home, so you feel half-confident. It’s like, I know I’ll have the score just in case, and I’ll look at it, but that’s one of the most dangerous moments for me. To have the perception, okay, there are passages, I know them by heart, and there are passages where I need to look at the score. That was very strange to me, because my perception had to change from being within myself, the perception of, I know this passage, and then you don’t, you are looking at your hands, and then the music is coming from within yourself. Then it’s not, oh, I know basically through the passage what is coming, if I don’t look, and then you look at the score, then changing the perception is not looking at the score, but is changing the perception of being inside you and playing the music by heart, and then going out to look for the information outside through your eyes. Sometimes, I couldn’t find the spot, or suddenly it was hard for me to start reading music to process the information of reading
the score, and then, that was feeling very insecure. Now, when I play with music, I really read the music, and if I play by heart, it’s because my brain knows the music. I don’t do halfway, because the experiences I had, were big insecurities on stage, and being insecure on stage is one of the worst feelings that a musician can have. Definitely, when I’m playing with a score, definitely I know the structure of the music, I know the tension, I’m very aware of the phrases and the musical ideas that I want to do, but I don’t go through the process, because otherwise, if I went through the process, I would play from memory.

FEDERICO MUSGROVE: Makes sense.

PABLO SAINZ VILLEGAS: That confidence is the issue. If you know the music, it’s like your brain knows the music, so I would play chamber music with no score. It’s a very demanding process, time consuming and a lot of concentration. If I’m going to play with a score, I read from the first note to the last note, the score, without any distractions. Of course, knowing what the musical idea is, and understanding the music. Something very important for me is to write every single fingering on each note, so I would write, always, left-hand fingers and right-hand fingers. So, on every note, and also the strings, there is a change. Now, if I start the scale with the fourth finger on the fifth string, or anything, important changes, I also write the string number. The more information on the score, the easiest it will be, for my brain, at least, to assimilate all that information, and to be the most specific as possible with all the information that you want your brain to classify and assimilate. The brain, in the end, there’s this part in the brain that very much loves structures, and numbers. You need to speak its language, which is numbers, structures, and there is this other part of the brain which is more about visualizing the shapes, and the colors, and the positions. But, finding a balance in these 2 sides, the rational brain is the one that really defines the first stage of visualization, numbers, and everything about every single number.

FEDERICO MUSGROVE: Fantastic. And one last question. Do you think, do you feel there are any differences playing with no music on stage, against having the score? Does anything happen to the musicality?

PABLO SAINZ VILLEGAS: It doesn’t have to, and this is very personal. This is really, entirely personal. I can share my experience. To me, I always prefer to play by heart, because, somehow, I’m able to connect with myself in a different way. My perception is within myself. All the music that I’m playing comes from within, to the surface, and outside, all the way to the audience. Somehow, it’s like having all the music in a package, inside yourself, and then you actually are revealing that passage through the instrument. That allows me, emotionally speaking, to be more connected to the music that I’m playing. The message and my intention, the emotional intention I put into the music can be more present, in my perception. That doesn’t mean that when you are playing with a score, that’s going to be diminished. It doesn’t have to. My own perception as an artist is that I feel more like I am part of the music in a more physical, deeper way. Auguste Rodin, the sculptor, the French sculptor, said, “I try to be the landscape I am sculpting.” Again, it’s this duality where you are in and you are out, and you are part of what you doing, the creation you are doing. When I think about this beautiful quote from Rodin, well, he’s looking outside the landscape and he’s trying to be that thing that he is sculpting. He’s out there, in his sculpture. That thing, that’s part of him. In the end, it’s
like becoming what you do. Becoming the sound I produce, and that’s my own translation to my music. Becoming the music I’m doing. Being vulnerable to the music I’m playing. That’s why I prefer to play without scores, by memory. On the other hand, when I am playing with scores, my perception of all the information comes from the score, comes from the music stands. First I have my eyes, I’m looking at the score which is outside of me, so the music, the information, comes from the music stand, through my eyes, into my brain, into my emotions, and then it comes out, into the audience. It’s a longer process. They are like A and B. Coming in from the score to me, and then coming out from me to the audience, whereas, by heart, when I play by memory, the music is just within myself, and it is more direct communication and dialogue with the audience.
MENG SU

FEDERICO MUSGROVE: What’s your opinion on playing from memory vs having music on stage?

MENG SU: I think it’s better to play from memory for solo and duo music. It requires us to know the music really well (by heart) and it gives a professional stage presence. For guitar ensembles and other chamber music settings, I think it’s ok to play with the score.

FEDERICO MUSGROVE: Have you ever dealt with memory slips? Why do they happen? How do you solve them?

MENG SU: Yes. For me it really matters how secure I am and how much effort I’ve put into memorization. Interestingly, I never had any problems with memory before age 18 (I guess as a teenager, I weren’t afraid or care of any mistakes or negative opinions!) When I got older, suddenly I became conscious that I didn’t memorize the music by brain, rather by the fingers, and the repetitions in my practice only built my muscle memories - it wasn’t secure enough at all!

I became more aware of what I’m doing in my practice. I make sure to go from memorizing a new piece of music by muscles, then be really clear of all the notes, voices, fingerings and interpretations by heart.

FEDERICO MUSGROVE: How do you memorize music? Do you have different techniques? Do you use motor visualization at all? (being able to imagine your fingers playing each note, for both hands, away from the instrument)

MENG SU: For me, muscle memory almost always goes first, so I decided not to fight against it. Then I would really make sure I do visualizations in my mind (without actually playing the guitar, sometimes I listen to recordings to help me focus on visualizations); I also solfège when I practice, singing the notes along and look at my left hand; another really great way is to practice right hand alone, especially for those fast passages!
GOHAR VARDANYAN

FEDERICO MUSGROVE: What’s your opinion on playing from memory vs having music on stage?

GOHAR VARDANYAN: I prefer to play from memory when performing. I feel like having music in front of you on stage, creates a barrier between the audience and the performer making the experience more casual and less special. Also, playing from memory gives me more freedom and makes each performance more special.

FEDERICO MUSGROVE: Have you ever dealt with memory slips? Why do they happen? How do you solve them?

GOHAR VARDANYAN: Absolutely, memory slips are the worst, they make me the most nervous. I found that they happen whenever there is a concentration lapse, either during practice or during a performance. If I haven’t been really focused when I’ve been practicing and I just let my fingers do what they will, slowly my brain forgets the piece and only muscle memory remains. When I’m on stage, because of the pressure, my brain is back on, but it hasn’t been while I was practicing, so it actually interferes by being on but not having the information. Visualizing the piece regularly, has helped with being more secure with the memory, which in term makes me more confident and less nervous, because I’m more certain that I know the piece, or that my brain knows the piece. Also, it depends on how old the piece is. If I’ve played something for 10 years, even if I don’t visualize, my brain knows the information because of years or repetition. But when we don’t have the luxury of ten years to prepare a piece, visualizing without the guitar, speeds up the process. I still feel that pieces need to mature and that can only be achieved by giving each piece its due time and due amount of public performances.

FEDERICO MUSGROVE: How do you memorize music? Do you have different techniques?

GOHAR VARDANYAN: When I’m learning a new piece, so far I’ve been lucky enough not to have a specific and short deadline by which I had to have it memorized. So I just let the memory process happen naturally. If I play something enough times, I do remember it. However, I do find that any time I make the memorizing process more deliberate, meaning I pick a phrase, or certain measures and make myself memorize them, it helps to analyze what’s happening in the passage and get my brain involved, rather than repeating the finger movements and waiting until I can do it without looking at the music. If I really concentrate on what’s going on, which fret I’m going, what chord I’m playing, what right hand fingering I’m using, it speeds up the memory process. Basically treating it like memorizing a poem or a sentence by understanding it’s meaning rather than mouthing the words and hoping my tongue muscle remembers how to move to produce the sounds for those words.

FEDERICO MUSGROVE: Has your memorizing changed over the years?
GOHAR VARDANYAN: I think when I was younger I remembered pieces very quickly without really giving it much thought. I just played something a number of times and it was memorized. As the repertoire got more and more complicated, and longer, and maybe my brain got older, I feel that I find myself being more deliberate in understanding exactly what I’m doing and memorizing that. Breaking difficult passages down and practicing them for technical purposes has also helped in memorizing them. Though my goal is to perfect them in their execution, the side effect is that I also memorize them. Playing something supper slowly helps with memory as well. When something is painfully slow, you lose the ability to use muscle memory and you’re forced to use your brain to be able to recall what comes next. Without certain speed, the music doesn’t have a flow and the muscles don’t have flow, so you’re left with the brain. That has helped.

FEDERICO MUSGROVE: Do you teach your students how to memorize?

GOHAR VARDANYAN: Depends on the student. Some people just have really good memory, especially the young ones. I try not to interfere with their natural way of memorizing. I feel that kids are more intuitive and have less insecurities. So I try not to give them any. However, if I see that they are struggling with something, then we break it down and try to understand what’s happening, that specific passage and memorize it that way. Concentration really is what matters the most. If you’re not paying attention to what you’re reading on the page, or what your fingers are doing, there is no way you’re going to memorize something and have it last more than 5 seconds.

FEDERICO MUSGROVE: Do your students use different memorization techniques?

GOHAR VARDANYAN: Everyone is very different. It’s hard for me to answer that question. I had a 13-year-old student who would memorize a whole piece in 30 minutes, by remembering shapes in her left hand. She never practiced, because she was so quick to learn something she would get bored if she repeated it more than twice. Needless to say, she didn’t accomplish much. I have other students, usually adults, who have a more intellectual approach to memorizing. So they try to understand what they are doing and memorize that way. What I’ve learned is that people are very different.

FEDERICO MUSGROVE: Do you use motor visualization at all? (being able to imagine your fingers playing each note, for both hands, away from the instrument)

GOHAR VARDANYAN: When I visualize, that is what I do. I don’t visualize the notes on the page, but rather what my fingers are doing on the fret board. Sometimes that include the actual motor movement, other times it’s just seeing exactly where my fingers are and where they are going. It depends on what exactly the passage includes.
FEDERICO MUSGROVE: What’s your opinion on playing from memory vs having music on stage?

JASON VIEAUX: I do anywhere from 3-5 world premieres each year, and I think it's ok to use music onstage in those situations. I just premiered a new guitar concerto by Dan Visconti, and it will be quite a while before I have an opportunity to memorize that, because of the other 8 hours of music I play each year. Solo recitals are memorized, unless I'm playing a premiere, which is usually with a score.

FEDERICO MUSGROVE: Have you ever dealt with memory slips? Why do they happen? How do you solve them?

JASON VIEAUX: Sure, a few times. It never happened in my first years as a professional, because in those days I was only playing about 2 hours of solo music, a couple concertos, and a duo program with Gary Schocker in a given year. After 2000 though, the per-year repertoire got more and more, and a memory slip once in a blue moon would creep in. You have three choices then: stay the course, reduce the repertoire, or work harder.

FEDERICO MUSGROVE: How do you memorize music? Do you have different techniques?

JASON VIEAUX: My practice strategies, if we can call them that, are extremely organized and thorough, with lots of repetitions - "divide and conquer". If my goal is memorization for a solo piece, then that goal is put last, along with "final tempo" goals, where they should be in the first 2-4 weeks (to some students surprise and/or chagrin).

All I'm initially working at first is very small segments of music, and then eventually combining them into larger bits of music, with great volume of repetitions. Alongside that, I'm doing big sweeps of reading major structural sections for my ear and intellect. Basically, the macro and micro side are working by side.

But there is no substitute for repetitions when it comes to the initial goals of Clarity, Comfort, and Consistency ("the 3 Cs", as I like to call them) if you want precision first and right away, which one should. It's a mindset in the end - I never have to worry about memorization, because the rigorousness of the early stages almost guarantees memorization, not to mention final tempo. I never worry about final tempo, only precision.

FEDERICO MUSGROVE: Has your memorizing changed over the years?

JASON VIEAUX: Not really. I do a lot more one-offs and chamber music the last 15 years, so standard repertoire concertos and solo recitals are all I memorize, unless it's Boccherini 4 or History of Tango, or something I've played over 200 times.
FEDERICO MUSGROVE: Do your students use different techniques?

JASON VIEAUX: Yes, sometimes, and I allow the different approaches, if they work for that individual. If they don't produce the desired results for that individual, then we have to work harder on finding the solution.

FEDERICO MUSGROVE: Do you use motor visualization at all? (being able to imagine your fingers playing each note, for both hands, away from the instrument)

JASON VIEAUX: Visualization is a hugely productive tool for memorization; one that I've used in a pinch, when needed. I've been using it a lot more on planes and in airports for certain passagework, and it's great. The more you do it, the easier it gets.