

MEL BAY PRESENTS

MB20394

THE ART OF TREMOL

A Comprehensive Analysis
of the Tremolo Technique

for
Classical,
Flamenco,
&
Fingerstyle
Guitar



BY IOANNIS ANASTASSAKIS

MEL BAY PUBLICATIONS, INC.
#4 INDUSTRIAL DRIVE • PACIFIC, MO 63069



MEL BAY PRESENTS

THE ART OF TREMOL

A Comprehensive Analysis
of the Tremolo Technique

BY IOANNIS ANASTASSAKIS

author of *The Art of Rasgueado* (MB98405)
and *Guitar Journals - Flamenco* (MB20925DP)

Includes chapters on 4-note tremolo, 5-note flamenco tremolo, 5-note extended melody tremolo, 6-note tremolo, 8-note tremolo and the continuous extended tremolo

Cover photo © Stavros Tsoupas



1 2 3 4 5 6 7 8 9 0

© 2008 BY MEL BAY PUBLICATIONS, INC., PACIFIC, MO 63069.
ALL RIGHTS RESERVED. INTERNATIONAL COPYRIGHT SECURED. B.M.I. MADE AND PRINTED IN U.S.A.
No part of this publication may be reproduced in whole or in part, or stored in a retrieval system, or transmitted in any form
or by any means, electronic, mechanical, photocopy, recording, or otherwise, without written permission of the publisher.

Visit us on the Web at www.melbay.com — E-mail us at email@melbay.com

Table of Contents

Introduction	4
--------------------	---

Chapter 1: Tremolo Practice Techniques

Building a Technical Foundation	6
Rest Strokes	8
Thumb – Ring Finger Scales	9
Scales with Middle-Ring Finger Alternation	16
Variable Accents	19
Scales Using a-m-i Alternation	20
Using All the Bass Strings	26
Single-String Tremolo	38
“p” and “a” Playing Simultaneously	42
Tremolo on the Inside Strings	43
Quasi-Chromatic Scales	54
Speed Bursts	59
Rhythrical Tricks	60
More Rhythm Tricks	61
Even More Rhythm Tricks	63
Final Rhythm Trick: Triplets	66
Advanced Right Hand Finger Independence	67
Rasgueados	69
Continuous ami Rasgueados	70
Continuous Rasgueado with a-m	70
Continuous Rasgueado with a-i	71
More Single String Scales	72
Middle Finger Rest Stroke	74
Tremolo Arpeggios!	75

Chapter 2: Variations on Traditional Tremolo

Variation #1 – The p-i-m-i Tremolo	79
Variation #2 – The p-i-a-i Tremolo	80
Variation #3 – The p-i-m-a Tremolo	81
Variation #4 – The p-m-i-a Tremolo	82
Variation #5 – The p-a-i-m Tremolo	83

Chapter 3: Extended Tremolo Techniques

Flamenco Tremolo – Traditional	84
Flamenco Tremolo – Advanced	94
“Angelika” – Easy Version	104
“Angelika” – Regular Version	106
“Angelika” – Advanced Version	108
Six-Note Flamenco Tremolo	110
Eight-Note Flamenco Tremolo	114
Continuous Tremolo	116

Index Tremolo	117
Thumb Tremolo	119
Contemporary Tremolo Innovators.....	120

Chapter 4: Repertoire

Tremolo Repertoire	121
Flamenco Tremolo Repertoire	123
Segovia and the Tremolo	124
Nail Talk	125
Nail Length	125

Chapter 5: Conclusion

Bibliography	126
Acknowledgements	126
Conclusion	127

Appendix

Soleares	129
Farruca.....	132
Malagueña.....	136
Granadinas	140
About the Author	149

Throughout the whole book the following symbols and conventions will be used:

- e* – little finger
- a* - ring finger
- m* - middle finger
- i* - index finger
- p* - thumb
- ↑ - Upstroke
- ↓ - Downstroke
- LH - Left Hand
- RH - Right Hand
- BPM - beats per minute

Introduction

The tremolo is one of the most interesting and expressive fingerstyle guitar techniques, whether classical, flamenco or acoustic. Tremolo technique seems to rise above the physical limitations of the instrument, creating a seamless illusion of continuous, seemingly endlessly sustained sound on nylon or steel strings. Some of the most beautiful music written for the guitar uses this technique as its primary vehicle of expression and it has fascinated composers since it first appeared.

But what exactly is the tremolo technique? Well, the traditional classical guitar tremolo involves a combination of movement of all the available right-hand fingers (minus the little finger). It is a 4-note sequence performed as follows:

1. Pluck a bass note with **p**.
2. Perform a free stroke with **a** on a treble string.
3. Perform a free stroke with **m** on the same treble string.
4. Perform a free stroke with **i** on the same treble string.
5. Repeat Steps 1-4 many, many, many times!

However, there are very significant technical variations developed by various pioneers, which we will examine in the course of the following chapters.

So, **why a whole book dedicated to tremolo?**

The answer is simple: The tremolo technique gives rise to one of the most frequently asked questions at masterclasses and guitar seminars: it happens virtually all the time! This clearly illustrates that the guitar-playing world has a very keen interest in the specific technique and its numerous variations.

On the other hand, tremolo is a technique that exists in various permutations in all styles of guitar playing (classical, flamenco, acoustic, and even jazz and rock)!

The tremolo technique is not a “static” technique that has remained unchanged. In the following chapters we will examine the beautiful, lyrical 5-note flamenco tremolo and its 6-note and 8-note variations, as well as the continuous tremolo and a multitude of other related tremolo techniques pioneered by many diverse players and teachers.

While researching the materials for this book I consulted over 100 classical and flamenco guitar players, both teachers and professional performers, as well as a few quite gifted amateurs!

Before starting with the instructional part of this book, I’d like to thank my teacher and mentor, the great flamenco *maestro Juan Serrano* for his help and support. Also, the countless people on the Internet and the Classical Guitar mailing list that freely share their ideas, experiences and techniques with the rest of the world. There are too many to mention, but they helped immensely in broadening my perspective of the tremolo technique, its application and execution.

WARNING: In the following pages of this book you will find exercises ranging from almost simplistic to wickedly difficult: Be careful! Use your common sense and intelligence to guide you. If you feel any kind of pain while practicing, stop and take a break! **DO NOT** try to tackle the very advanced materials, especially the 6-note, 8-note and the continuous extended flamenco tremolos, if you have not taken the time to slowly and surely build a solid technical foundation. This is extremely sound and solid advice and you should follow it in all areas of your instrumental practicing, not just for this specific book! You have been officially warned!

A note about numbering of the exercises: I have opted to number the various exercises by chapter. I’ve also grouped some of them together, depending on the technique/concept behind them. Therefore, for example, if there are three different exercises that utilize the exact same technique, they will be notated as Exercise 1a, Exercise 1b and Exercise 1c, instead of using the usual Exercise 1, Exercise 2 and Exercise 3, which would give no clue to the connection between the origins and the performance of the exercises.

Tremolo Practice Techniques

In this section of the book I will illustrate an ample assortment of different practice techniques I have found to be very beneficial in both the primary creation and the subsequent continuous development of superior tremolo technique. Before we get started, let me clarify that I am not taking credit for most of these concepts! Although some of them are my own creations or variations, the vast majority of them have been offered to me during literally hundreds of lessons and masterclasses by some of the most important classical and flamenco guitarists of our time!

I have always had a personal fascination with the sound of tremolo, so I would always ask “the tremolo question” during lessons and masterclasses. In this section, you will find excellent tremolo building advice by some of the most celebrated classical guitarists and excellent teachers (*Andrés Segovia, John Williams, Sharon Isbin, Christopher Parkening, Pepe Romero, Scott Tennant, David Russell, Narciso Yepes, Stanley Yates, and Stepan Rak*). You will also find guidance by some of the great flamenco guitarists of our time (*Juan Serrano, Paco de Lucia, Serranito, Gerardo Nuñez, Paco Peña Manolo Sanlucar, Jose Antonio Rodriguez, Paco Serrano, Manolo Franco and Juan Martin*) who were kind enough to share their experience with me and offer invaluable advice.

Important Note: Most of the examples used to clarify the various technical and fingering concepts will be based on VERY simple chords, usually in the first position! **This is done on purpose!** *The aim is to keep the left-hand fingerings, as simple as possible*, therefore keeping most “resources” available to concentrate on the right hand which will be performing the tremolo! Of course, when the time comes to learn a complete piece or an etude, the student has to deal with the added problem of left-hand fingering. Until then, the basic examples will be kept as simple as possible, usually no more difficult than simple 1st position major and minor chords! So, keep in mind that this is NOT a tremolo repertoire collection! At the end of the book you can find a list of available tremolo pieces for both the classical and the flamenco guitar.

So, without further delay, let's jump right in!

Chapter 1

Tremolo Practice Techniques

Building a Technical Foundation

Whenever you attempt to learn a new technique on the guitar, keep in mind that you should strive to establish a strong, solid foundation upon which you will be able to continuously build for years to come. If you cannot play a tremolo (or any other guitar technique, for that matter) perfectly and in total control at a slow tempo (e.g. 60 bpm), you cannot possibly expect it to be even and controlled at 140 bpm, which is a very common performance speed for many tremolo pieces. Keeping an even tempo at all performance speeds is possibly the most important, as well as the hardest part of developing a professional-sounding tremolo technique.

The **most important tool in our tremolo-building arsenal is our trusty metronome!** I tend to favor the contemporary digital metronomes over the traditional, spring driven ones, for two distinct reasons.

1. With a digital metronome, you have **MUCH** better control of your practice tempo. It is possible to play anywhere from 30-300 beats per minute, in increments of one beat per minute (bpm)
2. It is possible to make the metronome accent different parts of the beat, or play eighth notes, triplets, or 16th notes.

The first thing we will try to achieve is to make the p-a-m-i finger alternation become a thoroughly natural motion for the right hand. Start by setting the metronome to a slow speed, around 50 bpm. Persevere with this tempo or an even slower one for as long as it takes to be totally comfortable. Take **extreme care** to make sure the tremolo is not only rhythmically even, but also that the volume of each finger stroke is the same.

Here is an exercise that demands minimal effort from the LH, allowing the student to concentrate on tremolo technique.

Exercise # 1

Basic Tremolo

$\text{♩} = 50$

The musical score consists of two staves. The top staff is a standard musical notation staff with a treble clef, a key signature of one sharp, and a time signature of 4/4. It features a continuous tremolo pattern of sixteenth-note pairs. The bottom staff is a tablature staff for a six-string guitar, labeled 'TAB' on the left. It shows the strings being plucked with alternating fingers, indicated by 'p' and 'a' above the strings. Below the tablature, the letters 'T', 'A', and 'B' are repeated four times, corresponding to the 'p' and 'a' markings above. The tablature shows the strings being plucked at the first, third, and fifth frets.

The continuation of the musical score starts with a measure number '3' at the beginning of the second line. The top staff continues the tremolo pattern. The bottom staff (TAB) continues the plucking pattern, starting at the first fret and moving up to the fifth fret. The 'TAB' labels 'T', 'A', and 'B' are repeated four times below the tablature, corresponding to the 'p' and 'a' markings above.

Try your best to be as accurate as possible from the very beginning. I would suggest recording yourself to hear the results! Each pluck of the string must be made with the same part of the nail. Failure to do this will result in an irregular rhythm.

After a while, you will have no trouble performing the motion exactly as described. The difficulty comes in playing it at 140 bpm while keeping all the aforementioned elements intact! In 4/4 time, there are 16 notes to a bar of music, and with 140 beats a minute; this is 560 individual string plucks a minute. Further, they must **all** be played with even timing, otherwise a jagged, galloping sound will be produced. Patience is the name of the game here. DO NOT speed up until you are ready!

Rest Strokes

A very helpful technique in developing accurate control on the intrinsic fingering motion of the classical tremolo is to *practice tremolo using rest strokes (apoyando)*. The famous flamenco guitar teacher **Juan Martín** illustrated this tremolo practice technique to me during one his masterclasses. This creates a more intense sound on the a-m-i part, making the transition to free-stroke later on much easier to undertake. It also makes the rhythm of the tremolo feel more natural and is a great warm-up exercise! Here's the example Juan Martín used to illustrate this technique:

Exercise # 2

Tremolo Rest Strokes

The musical score consists of two staves. The top staff is a standard musical notation staff with a treble clef, a key signature of one sharp (F#), and a time signature of 4/4. It features a continuous tremolo pattern consisting of sixteenth-note groups. Below the musical notes are the fingerings: 'p a m i' repeated eight times. The bottom staff is a TAB staff with four horizontal lines representing the strings (T, A, B, E from top to bottom). It shows the corresponding fingerings for each note: '0 2 1 3' for the first group, followed by '3 3 3' for the next group, and so on. The TAB staff also includes vertical bar lines and a 'CL' (Capo) marking.

Thumb – Ring Finger Scales

During my research, I found that the most common problem classical guitarists seem to have with tremolo is that it is uneven and seems to develop a “galloping” rhythm. The usual place in the tremolo pattern, be it classical, flamenco or any other extended form, that the unwelcome galloping takes place is the transition from thumb to ring finger (*p-a*). One of the hardest parts of perfecting tremolo technique is keeping **the transition from thumb to ring finger even**. The best way that I have found to help remedy this is to practice scales and single-note sequences using alternation of the thumb and ring fingers.

Here is a basic C major scale played in the seventh position using *p-a* alternation. Watch those string-crossings!

Exercise # 3

Thumb-Ring Finger Scales

VII

p a p a p a p a p a p a p a

p a p a p a p a p a p a p a

Here are a few repetitive rhythmic patterns to help you feel more comfortable using this kind of RH alternation. First, a sequence of groups of fourths based on the E natural minor scale.

Exercise #4

Thumb-Ring Finger Scales - Part II

4

p a p a p a p a p a p a p a p a p a p a p a p a p a p a

TAB

B 0-2-3-5-2-3-5 2-3-5 2-3-5 | 2-3-5 2 3-5 2-4 5 2-4-5 2-4-5 2

3

p a p a p a p a p a p a p a p a p a p a p a p a p a p a

TAB

B 4-5 2-4 5 2-4-5 2-4-5 3 4-5 3-5 | 5 3-5 2 3-5 2-3 5 2-3-5 5-3-2 5

5

p a p a p a p a p a p a p a p a p a p a p a p a p a p a

TAB

B 3-2 5-3 2 5-3 5 5-3 5-4 3 5-4 2 | 5-4 2 5-4 2 5-4 2 5-4 2 5-4 2 5-4 2 5

7

p a p a p a p a p a p a p a p a p a p a p a p a p a

TAB

B 4-2 5-3 2 5-3 2 5-3 2 5-3 2 | 5 3-2 5-3 2 5-3 2 5-3 2 5-3 2 0

Here is another sequence using three-note groupings, on the fifth position of the A natural minor scale this time.

Exercise #5

$\text{♩} = 100$

Thumb-Ring Finger Scales - Part III

V

1

T A B C

5 7 8 7 8 5 8 5 7 5 7 8 7 8 5 8 5 7 5 7 4 7 4 5

3

T A B C

4 5 7 5 7 5 7 5 6 5 6 8 6 8 5 7 5 7 5 7 8 8

5

T A B C

8 7 5 7 5 8 5 8 6 8 6 5 6 5 7 5 7 5 4 5 4 7

7

T A B C

4 7 5 7 5 8 5 8 7 8 7 5 7 5 8 7 8 7 5 5

Let's expand on the previous concept! Another excellent way to further develop thumb-ring finger independence is to play *p-a* alternations on different strings. This will seem tiresome at first, especially at high speeds! However, if you keep at it, you can get very fast using this technique! We will use a variation of the well-known *Malagueña de Lecuona* as our first example. Here the ring finger will be playing on the first string. Keep repeating the outlined pattern for at least a few minutes!

Exercise # 5b

Thumb-Ring finger Alternation

3

3

0 1 0 0 0 0 0 0 0 0 0 0

T A B T A B T A B T A B T A B T A B

This page has been left blank to avoid awkward page turns.

In the following example, the ring finger will be playing on the second string. Again, make sure to keep repeating the outlined pattern for at least a few minutes, in order to train the p-a alternation! This next example borrows the main melody from the very well-known composition “Leyenda” by Isaac Albeniz.

Exercise # 5c

Thumb-Ring finger Alternation - Part II

VII

3

5

7

9

Treble clef, 6 measures. The first measure starts with a sixteenth note followed by eighth notes. The second measure starts with a sixteenth note followed by eighth notes. The third measure starts with a sixteenth note followed by eighth notes. The fourth measure starts with a sixteenth note followed by eighth notes. The fifth measure starts with a sixteenth note followed by eighth notes. The sixth measure starts with a sixteenth note followed by eighth notes.

TAB:

T	0	0	0	0	0	0
A	9	10	7	9	10	
B	7					

11

Treble clef, 6 measures. The first measure starts with a sixteenth note followed by eighth notes. The second measure starts with a sixteenth note followed by eighth notes. The third measure starts with a sixteenth note followed by eighth notes. The fourth measure starts with a sixteenth note followed by eighth notes. The fifth measure starts with a sixteenth note followed by eighth notes. The sixth measure starts with a sixteenth note followed by eighth notes.

TAB:

T	0	0	0	0	0	0
A	9	10	7	9	10	
B	7					

13

Treble clef, 6 measures. The first measure starts with a sixteenth note followed by eighth notes. The second measure starts with a sixteenth note followed by eighth notes. The third measure starts with a sixteenth note followed by eighth notes. The fourth measure starts with a sixteenth note followed by eighth notes. The fifth measure starts with a sixteenth note followed by eighth notes. The sixth measure starts with a sixteenth note followed by eighth notes.

TAB:

T	0	0	0	0	0	0
A	9	10	7	9	10	
B	7					

15

Treble clef, 6 measures. The first measure starts with a sixteenth note followed by eighth notes. The second measure starts with a sixteenth note followed by eighth notes. The third measure starts with a sixteenth note followed by eighth notes. The fourth measure starts with a sixteenth note followed by eighth notes. The fifth measure starts with a sixteenth note followed by eighth notes. The sixth measure starts with a sixteenth note followed by eighth notes.

TAB:

T	0	0	0	0	0	.
A	9	10	7	10	8	.
B	7					

Scales with Middle-Ring Finger Alternation

The *a-m* (ring finger to middle finger) movement is the second trouble spot when executing the classical guitar tremolo. A very effective way to increase the autonomy of these fingers is to **practice scales using strict alternation of *a-m***, both free-stroke and rest-stroke.

Here is the E Phrygian scale in the first position played using **strict alternation of *a-m***. Take your time with these exercises! Try to project a clear, well-rounded sound from your instrument.

Exercise #6

Middle-Ring finger Scales - Part I

T 4 | .
A 4 | .
B 4 | .

0 — 1 — 3 — 0 — 2 — 3 — 0 — 2 — 3 — 0 — 2 — 3 — 0 — 2 — 3 — 0 — 2 — 3 — 0 — 1

3

T 3 | .
A 3 | .
B 3 | .

3 — 1 — 0 — 3 — 1 — 0 — 2 — 0 — 3 — 2 — 0 — 3 — 2 — 0 — 3 — 2 — 0 — 3 — 1

Here is a repetitive rhythmic pattern to help you feel more comfortable using this kind of RH alternation. First a six-note sequence, based on the C \sharp natural minor scale.

Exercise #7

Middle-Ring Finger Scales - Part II

Here is a chromatic sequence to further practice this technique. Be careful not to mess up the pattern when string-crossing!

Exercise #8

Middle-Ring Finger Scales - Part III

2

TAB

0-1-2-3-4 0-1-2-3-4 0-1-2-3-4 0-1-2-3-4 0-1-2-3-4 0-1-2-3-4 0-1-2-3-4

4-3-2-1-0 4-3-2-1-0 3-2-1-0 4-3-2-1-0 4-3-2-1-0 4-3-2-1-0 4-3-2-1-0

Variable Accents

Another way to greatly improve the rhythmical evenness of your tremolo technique is by using **variable accents**. The most practical way of doing that is *to practice it slowly with a slight but obvious accent on "m"*. This will subdivide the usual 16th note pattern of the tremolo into two distinct groups of two eighth notes each. After considerable practice, when the tremolo is sped up, the accent on the middle finger tends to dissolve, leaving an even tremolo technique. There is significant physiological association between the middle and ring fingers, and this practice technique helps considerably in creating more independence between them. Use the metronome to mark time points on *p* and *m*. We will see a very similar concept to this recommended by classical guitarist **Sharon Isbin**.

Exercise #9

Variable Tremolo Accents

The musical score consists of two staves. The top staff is a treble clef staff with a 4/4 time signature. It contains six measures of 16th-note patterns. The patterns are: (p, a, m, i), (p, a, m, i), (p, a, m, i), (p, a, m, i). The bottom staff is a bass clef staff with a 4/4 time signature. It shows corresponding fingerings: T, A, B, 4, 2, T, A, B, 4, 2. The bass staff also includes a 0 above the 4th string in the first measure and a 0 above the 3rd string in the second measure.

Scales Using a-m-i Alternation

Here's another excellent tremolo practice technique! **Practice scales using a-m-i!** Since that is the exact motion of the tremolo, practicing scales in this manner will certainly benefit your tremolo a great deal! The late legendary classical guitarist **Narciso Yepes** used to play scales this way, as does the great flamenco concert guitarist, **Serranito**.

Here's an F# Phrygian scale at the second position played in this manner. I will repeat the scale three times, since each time the string crossing is taking place with a different RH finger! This way you get to practice crossing strings with all three RH fingers.

Exercise #10

d = 100

3-Finger Scales - Part I

1

2

3

4

5

6

7

Here is a repeating sequence, using a static three notes-per-string practice pattern on the fifth position, based on the A Dorian scale.

Exercise #10b

$\downarrow = 100$

3-Finger Scales - Part II

Let us expand this sequence to include two more strings. There is a stretch involved, but with a little practice, you should be able to tackle it.

Exercise #10c

$\text{J} = 100$

3-Finger Scales - Part III

The image shows a musical score for guitar. The top part is a standard staff notation with a treble clef, a key signature of one sharp (F#), and a time signature of 4/4. It features a melodic line with eighth-note patterns and grace notes, each marked with a '3' above it. Below the staff are lyrics: 'a m i' repeated eight times. The bottom part is a tablature for a six-string guitar, showing the strings from top (T) to bottom (B). It displays a chord progression: 8-7-5, 8-7-5, 7-5-4, 7-5-4, 5-7-9, 5-7-9, 7-8-10, and 7-8-10. The tablature is aligned with the lyrics and the musical staff.

Finally, let us expand this sequence to include the last two strings. This sequence will be mostly chromatic in nature. The LH fingering will be the same throughout.

Exercise #10d

$\text{♩} = 100$

3-Finger Scales - Part IV

The image shows a musical score for guitar. The top staff is a treble clef staff with a 2/4 time signature. It contains a melodic line with various note heads and stems, some with numbers (4, 3, 1) and some with letters (a, m, i). The bottom staff is a bass clef staff with a 6/4 time signature, labeled 'T A B' on the left. It features a harmonic progression where the bass line consists of sustained notes with horizontal bars above them, labeled with the numbers 8, 7, and 5. The notes are grouped into six sets of three, corresponding to the measures in the treble staff.

This page has been left blank to avoid awkward page turns.

This next, final sequence makes a terrific exercise for scale techniques in general. When used with the aforementioned way of RH fingering, it will certainly help your tremolo reach new heights of speed and control.

Exercise #10e

3-Finger Scales - Part V

The sheet music consists of four staves, each representing a different section of the exercise. Each staff includes a treble clef, a key signature of one flat (B-flat), and a time signature of 6/4. The first staff begins with a descending scale from B-flat to E-flat. The second staff begins with a descending scale from A-flat to D-flat. The third staff begins with an ascending scale from G to C. The fourth staff begins with an ascending scale from F to B-flat. Each staff features a continuous tremolo pattern indicated by vertical lines with the number '3' and the letters 'a', 'm', and 'i' below them, corresponding to the three fingers used for the tremolo. Below each staff is a guitar neck diagram showing the fingerings for each note. The first staff shows fingerings T-A-B (4-3-1) repeated six times. The second staff shows fingerings T-A-B (2-4-5) followed by T-A-B (2-4-5). The third staff shows fingerings T-A-B (6-5-3) followed by T-A-B (6-5-3). The fourth staff shows fingerings T-A-B (4-6-7) followed by T-A-B (4-6-7).

9

The sheet music shows a melodic line in treble clef with a key signature of one sharp. The tablature below shows six sets of three-note chords on the 12th, 11th, and 9th frets of the guitar neck. Each set of chords is preceded by a '3' indicating a three-note strum.

Using All the Bass Strings

The importance of accurately controlling the motion of the RH thumb is an aspect of tremolo technique that is very often underrated. When initially practicing tremolo, make sure that you are able to **employ all the bass strings** in your playing. Just because you are moderately comfortable playing tremolo on the high E string with the thumb playing the third string, it doesn't necessarily mean that the same will be true when the thumb is playing the low sixth string! When practicing using the RH thumb, make sure you concentrate on one bass string at a time.

Here is an exercise playing parallel thirds on the first and second strings, with the thumb playing the second string all the time and a-m-i playing the first string. This sequence is based on the C major scale.

Exercise #11

• 70

Parallel 3rds on First & Second String

p a m i p a m i p a m i p a m i p a m i p a m i p a m i

0-0-0 0-0-0 0-0-0 0-0-0 1-1-1 1-1-1 1-1-1 1-1-1

T A B . 1 1 1 1 3 3 3 3

1 1 1 1 1 1 1 1

3 3 3 3 3 3 3 3

1 1 1 1 1 1 1 1

3 3 3 3 3 3 3 3

1 1 1 1 1 1 1 1

5 5 5 5 5 5 5 5

1 1 1 1 1 1 1 1

5 5 5 5 5 5 5 5

1 1 1 1 1 1 1 1

8 8 8 8 8 8 8 8

10 10 10 10 10 10 10 10

8 8 8 8 8 8 8 8

10 10 10 10 10 10 10 10

7

3 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1

T 12 10-10-10 12 10-10-10 12 10-10-10 12 10-10-10 13 12-12-12 13 12-12-12 13 12-12-12 13 12-12-12

A
B

9

3 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1

T 12 10-10-10 12 10-10-10 12 10-10-10 12 10-10-10 10 8-8-8 10 8-8-8 10 8-8-8 10 8-8-8

A
B

11

2 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1

T 8 7-7-7 8 7-7-7 8 7-7-7 8 7-7-7 6 5-5-5 6 5-5-5 6 5-5-5 6 5-5-5

A
B

13

1 1 1 1 1 1 1 3 1 1 1 1 1 1 1

T 5 3-3-3 5 3-3-3 5 3-3-3 5 3 1-1-1 3 1-1-1 3 1-1-1 3 .

A
B

This next exercise in parallel sixths will help train your thumb to play on the third string, with the tremolo on the first string. Keep playing it until you feel you have total control over it.

Exercise #12

$\text{♩} = 70$

Parallel 6ths on First & Third Strings

The sheet music consists of three staves of musical notation for a guitar. The top staff shows the treble clef, a 4/4 time signature, and a key signature of one sharp. It contains a melody of eighth notes on the first string, with the instruction "p a m i" repeated four times. The middle staff shows the bass clef, a 4/4 time signature, and a key signature of one sharp. It contains a bass line with eighth notes on the third string, with the instruction "1-1-1" repeated four times. The bottom staff shows the bass clef, a 4/4 time signature, and a key signature of one sharp. It contains a bass line with eighth notes on the third string, with the instruction "5-5-5" repeated four times, followed by a bass line with eighth notes on the first string, with the instruction "7-7-7" repeated four times. The staff numbers 1, 2, 3, and 5 are written above the staves to indicate specific measures.

7

2

3

2

3

2

3

2

3

T 12-12-12 12-12-12 12-12-12 12-12-12 | 10-10-10 10-10-10 10-10-10 10-10-10

A 12 12 12 12 | 10 10 10 10

B

9

2

1

2

3

2

3

2

3

T 8-8-8 8-8-8 8-8-8 8-8-8 | 7-7-7 7-7-7 7-7-7 7-7-7

A 9 9 9 9 | 7 7 7 7

B

11

2

3

2

1

2

3

2

3

T 5-5-5 5-5-5 5-5-5 5-5-5 | 3-3-3 3-3-3 3-3-3 3-3-3

A 5 5 5 5 | 4 4 4 4

B

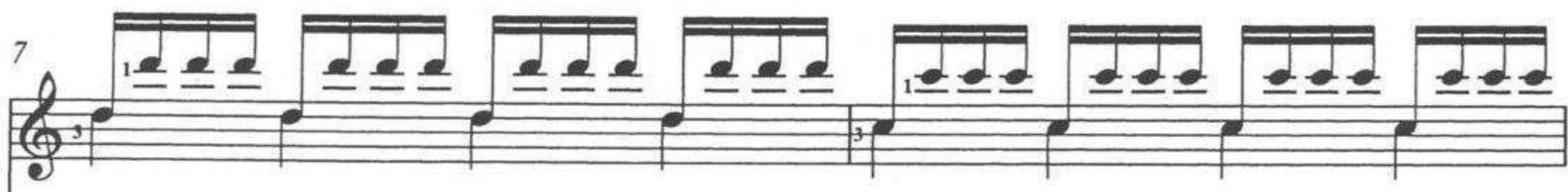
For our next exercise, let's use parallel octaves on the fourth and first strings. Pay attention to the balance of the sound. Do not let your thumb overshadow the tremolo notes, or the other way around!

Exercise #13

$\text{♩} = 70$

Parallel Octaves on First & Fourth Strings

The sheet music consists of three staves of guitar tablature. The top staff shows a treble clef, a key signature of one sharp, and a common time signature. It features a continuous eighth-note tremolo pattern on the first string (A) with alternating fingers (p, a, m, i). The middle staff shows a bass clef, a key signature of one sharp, and a common time signature. It features a continuous eighth-note tremolo pattern on the fourth string (D) with alternating fingers (0, 0, 0, 0, 1, 1, 1). The bottom staff shows a bass clef, a key signature of one sharp, and a common time signature. It features a continuous eighth-note tremolo pattern on the fourth string (D) with alternating fingers (2, 2, 2, 3, 3, 3, 3). The music is divided into measures by vertical bar lines.



To further the string changing concept with the RH thumb, let's take a first position Em chord and play it using tremolo. The thumb will be moving on every available string (apart from the first).

Exercise #13b

J = 80

Changing Strings with the Thumb

p a m i p a m i p a m i p a m i p a m i p a m i p a m i p a m i

T A B

Now, let us train our thumb to move freely back and forth between strings, in both directions. We will use our trusty Em chord again.

Exercise #13c

Changing Strings with the Thumb - Part II

The image displays three staves of musical notation for guitar, specifically Exercise #13c. The notation is in treble clef, 3/4 time, and consists of three measures of sixteenth-note patterns.

Staff 1: The top staff shows a continuous pattern of sixteenth notes. Below the staff, the vocal line "p a m i" is repeated six times. The tablature below shows the thumb (T) playing the 3rd string at the 0 position, the index finger (I) playing the 4th string at the 2 position, and the middle finger (M) playing the 3rd string at the 0 position.

Staff 2: The second staff shows a continuous pattern of sixteenth notes. The tablature below shows the thumb (T) playing the 3rd string at the 0 position, the index finger (I) playing the 4th string at the 2 position, and the middle finger (M) playing the 3rd string at the 0 position.

Staff 3: The third staff shows a continuous pattern of sixteenth notes. The tablature below shows the thumb (T) playing the 3rd string at the 0 position, the index finger (I) playing the 4th string at the 2 position, and the middle finger (M) playing the 3rd string at the 0 position.

This next pattern will help you train your RH thumb to jump from the sixth to the third and then to the second string. We will use a variation of the minor part of the well-known and beautiful *Romance* as the vehicle for this tremolo exercise.

Exercise #14

$\text{J} = 100$

Romance Tremolo!

1

2

3

7

cV

TAB

12-12-12 10-10-10 0 8-8-8 8-8-8 7-7-7 5-5-5

0 0 5 0

9

CVII

TAB

5-5-5 7-7-7 5 8-8-8 7-7-7 8-8-8 7-7-7-7

5 0 7

11

TAB

11-11-11 8-8-8 7 7-7-7 7-7-7 5-5-5 0-3-3-3

8 0 0

13

TAB

3-3-3 2-2-2 0 0-0-0 2-2-2 2-2-2 2-2-2

0 2 1 2



Tablature for guitar strings T (Top), A, and B (Bottom). The first measure shows T: 2-2-2, A: 3-3-3, B: 2. The second measure shows T: 0-0-0, A: 0, B: 0. The third measure shows T: 2-2-2, A: 2, B: 0. The fourth measure shows T: 0-0-0, A: 0, B: 0. The fifth measure shows T: 0-0-0, A: 0, B: 0. The sixth measure shows T: 0-0-0, A: 0, B: 0.

17

Musical staff showing sixteenth-note patterns. The first measure starts with a bass note at the bottom of the staff, followed by sixteenth notes on the A and G strings. The second measure starts with a bass note, followed by sixteenth notes on the D and G strings. The third measure starts with a bass note, followed by sixteenth notes on the B and G strings. The fourth measure starts with a bass note, followed by sixteenth notes on the E and G strings. The fifth measure starts with a bass note, followed by sixteenth notes on the A and G strings. The sixth measure starts with a bass note, followed by sixteenth notes on the D and G strings.

Tablature for guitar strings T (Top), A, and B (Bottom). The first measure shows T: 0-0-0, A: 0-0-0, B: 2. The second measure shows T: 0-0-0, A: 0, B: 2. The third measure shows T: 0-0-0, A: 0, B: 3. The fourth measure shows T: 0-0-0, A: 0, B: 0. The fifth measure shows T: 0-0-0, A: 0, B: 0. The sixth measure shows T: 0-0-0, A: 0, B: 0.

You will have to master extreme string crossings with the thumb while leaving the tremolo intact! In this example, we will use a single E minor chord played in the first position. The thumb movement is loosely based on the Villa-Lobos *Study #1* pattern, with significant string crossings of the thumb.

Exercise #15

More Thumb String Skipping

$\text{♩} = 80$

The sheet music consists of three staves. The top staff is a standard musical staff with a treble clef, a key signature of one sharp (F#), and a common time signature (indicated by a '4'). It features a continuous eighth-note pattern. The middle staff is a tablature staff for the guitar, labeled 'T A B' at the beginning. It shows a repeating pattern of notes on the strings, with specific fingerings indicated: '3' over the first note, '2' over the second, '0' over the third, and '2' over the fourth. The bottom staff is another tablature staff for the guitar, also labeled 'T A B'. It shows a repeating pattern of notes on the strings, with specific fingerings indicated: '0' over the first note, '2' over the second, '2' over the third, and '0' over the fourth. Vertical bar lines divide the music into measures.

Single-String Tremolo

Single-string tremolo is another great way to smooth out any rhythmic inconsistencies in your tremolo technique. Playing tremolo on the same string makes it very easy to spot any problems in your sound.

Exercise # 16

Single-String Tremolo

The musical score for Exercise #16 is divided into six staves, each consisting of a musical staff above a TAB (Tablature) staff. The music is in 4/4 time and treble clef. The notes are represented by various symbols: circles, squares, diamonds, and numbers (1, 2, 3, 4, 5, 7, 10). The TAB staff indicates the fret position for each note. The first staff starts with a 0, followed by a sequence of 1s, 3s, and 1s. The second staff starts with a 0, followed by a sequence of 1s, 3s, and 5s. The third staff starts with a 3, followed by a sequence of 4s, 1s, 3s, and 1s. The fourth staff starts with a 7, followed by a sequence of 10s, 10s, 10s, 8s, and 10s. The fifth staff starts with a 5, followed by a sequence of 4s, 1s, 3s, and 1s. The sixth staff starts with a 3, followed by a sequence of 1s, 3s, and 1s. The music is divided into measures by vertical bar lines, and the notes are grouped by horizontal bar lines.

To make the sequence longer and of greater didactic value, let's play the same A minor scale on the first string using a four-note repeating sequence. Don't forget to practice these patterns on the other strings as well!

Exercise # 16b

Single-String Tremolo - Part II

0

p a m i p a m i p a m i p a m i p a m i p a m i p a m i p a m i

TAB

1

0-0-0-0-0-0-0-0-1-1-1-1-1-1-1-1-3-3-3-3-3-3-3-3-5-5-5-5-5-5-5-5

TAB

2

3-3-3-3-3-3-3-3-5-5-5-5-5-5-5-5-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7

TAB

3

1-1-1-1-1-1-1-1-3-3-3-3-3-3-3-3-5-5-5-5-5-5-5-5-7-7-7-7-7-7-7-7

TAB

4

3-3-3-3-3-3-3-3-5-5-5-5-5-5-5-5-7-7-7-7-7-7-7-7-8-8-8-8-8-8-8-8

TAB

5

3-3-3-3-3-3-3-3-5-5-5-5-5-5-5-5-7-7-7-7-7-7-7-7-8-8-8-8-8-8-8-8

TAB

6

5-5-5-5-5-5-5-5-7-7-7-7-7-7-7-7-8-8-8-8-8-8-8-8-10-10-10-10-10-10-10-10

TAB

7

5-5-5-5-5-5-5-5-7-7-7-7-7-7-7-7-8-8-8-8-8-8-8-8-10-10-10-10-10-10-10-10

TAB

9

1 2 4 4

p a m i p a m i p a m i p a m i p a m i p a m i p a m i p a m i p a m i

7-7-7-7-7-7-7-8-8-8-8-8-8-10-10-10-10-10-10-10-12-12-12-12-12-12-12

TAB

15 4

p a m i p a m i p a m i p a m i p a m i p a m i

TAB: 10-10-10-10-10-10-10-8-8-8-8-8-8-7-7-7-7-7-7-5-5-5-5-5-5-5-5-5

17 4

p a m i p a m i p a m i p a m i p a m i p a m i

TAB: 8-8-8-8-8-8-8-7-7-7-7-7-7-5-5-5-5-5-5-3-3-3-3-3-3-3-3

19 4

p a m i p a m i p a m i p a m i p a m i p a m i p a m i

TAB: 7-7-7-7-7-7-7-5-5-5-5-5-5-3-3-3-3-3-3-1-1-1-1-1-1-1-1

“p” and “a” Playing Simultaneously

This practice technique will assist markedly in **making the ring finger follow immediately after the thumb in the classical tremolo**. Instead of playing the sequence *pami* as four distinct notes, we will play the thumb and ring finger simultaneously, effectively resulting in triplets! This will instill greater rhythmic control over the ring finger, thus helping us control it more precisely. The chord progression used will be very simple, as in the majority of these examples, in order to concentrate on right-hand technique.

Exercise # 17

Thumb & Ring Finger Combination

The image shows a musical score and tablature for a guitar part. The score consists of two staves: a treble clef staff with sixteenth-note patterns and a bass clef staff with eighth-note patterns. Below the score is a tablature staff with six horizontal lines representing the strings. The tablature includes lettering below the first five strings (T, A, B) and numerical values (0, 2, 0, 2, 0, 2) above the strings. The tablature staff also features vertical bar lines and a vertical brace at the end of the second measure.

Tremolo on the Inside Strings

Now we approach what may well be the hardest part of tremolo technique; playing tremolo **on the inside strings**, usually the second and third strings. The most common problem is that the right-hand fingers (a-m-i) tend to hit the adjacent strings after they have played their part in the tremolo, that is after having hit the correct string. Correcting this problem will bring you much closer to the complete mastery of tremolo technique. In the following exercise, we will play an Em chord in the first position, while sustaining a second-string tremolo on the open B string.

Exercise # 18

Tremolo on the "inside" strings - Part I

The musical notation consists of two parts. The top part is a treble clef staff with sixteenth-note patterns. The bottom part shows a guitar neck with three sets of strings (T, A, B) and fingerings (0, 2, 3). The notes on the treble clef staff correspond to the fingerings on the guitar neck. The first measure starts with a bass note (B) followed by a tremolo pattern (0, 2, 3). The second measure starts with a bass note (A) followed by a tremolo pattern (0, 2, 3). The third measure starts with a bass note (G) followed by a tremolo pattern (0, 2, 3). The fourth measure starts with a bass note (F#) followed by a tremolo pattern (0, 2, 3). The fifth measure starts with a bass note (E) followed by a tremolo pattern (0, 2, 3). The sixth measure starts with a bass note (D) followed by a tremolo pattern (0, 2, 3). The seventh measure starts with a bass note (C) followed by a tremolo pattern (0, 2, 3). The eighth measure starts with a bass note (B) followed by a tremolo pattern (0, 2, 3).

In our next exercise we will play an E natural minor scale in the first position while sustaining a second string tremolo on the open B string.

Exercise # 18b

Tremolo on the “Inside” Strings - Part II

3

4

5

Now repeat the exact same thing, but this time keeping the tremolo on the open third string.

Exercise # 19

Tremolo on the “Inside” Strings - 3rd String

The image shows a musical score for a single melodic line. The top staff is a treble clef staff with a key signature of one sharp (F#) and a time signature of 4/4. It consists of eight measures of eighth-note patterns:

- Measure 1: 0, 0, 0
- Measure 2: 1, 2, 1
- Measure 3: 2, 4, 1
- Measure 4: 1, 2, 4, 1
- Measure 5: 2, 1, 2, 4, 1
- Measure 6: 1, 2, 4, 1
- Measure 7: 2, 1, 2, 4, 1
- Measure 8: 1, 2, 4, 1

 Below the staff, the lyrics "p a m i" are repeated eight times. The bottom staff is a tablature for a six-string guitar, showing the strings from top E to bottom B. The tablature follows the same pattern as the music above, with the first four measures having open strings (0, 0, 0) and the next four measures having partial chords (2, 3, 5). The tablature includes a "T A B" label and a "4" indicating the time signature.

3

TAB

	4	0 - 0 - 0	5	0 - 0 - 0	4	0 - 0 - 0	2	0 - 0 - 0		0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0
B									5	3	2		5

5

TAB

0 0 0 0 0 0
0 0 0 0 0 0
0 0 0 0 0 0

3 5 3 2

Here is another example of tremolo on the third string. The chord progression is similar to the one used by the band *Metallica* in their tune “Sanitarium”.

Exercise # 19b

Tremolo on the “Inside” Strings - 3rd String Part II

p a m i p a m i p a m i p a m i p a m i p a m i p a m i

TAB

4 | 0-0-0 -0-0-0 4 0-0-0 -0-0-0 | 0-0-0 -0-0-0 5 0-0-0 -0-0-0

B 4 | 2 2 0 3 3 | 0 3 3

3

TAB

0-0-0 -0-0-0 7 0-0-0 -0-0-0 | 0-0-0 -0-0-0 0 0-0-0 -0-0-0

B 0 5 5 5 4 3

5

TAB

0-0-0 -0-0-0 0 0-0-0 -0-0-0 | 0-0-0 -0-0-0 0 0-0-0 -0-0-0

B 2 0

This page has been left blank to avoid awkward page turns.

In our next exercise, we will play parallel thirds. This will train your thumb to move out of the way of the incoming fingers and help make your tremolo more even and stronger, no matter what string it is played on. We'll start with the third and fourth string combination using the E natural minor scale.

Exercise # 20

Diatonic Thirds on Adjacent Strings - 4th & 3rd Strings

1

p a m i p a m i p a m i p a m i p a m i p a m i

T 6 | A 4 | B

2

T 4 | A 4 | B

3

T 5 | A 7 | B

4

T 7 | A 10 | B

5

T
A 9 7-7-7 9 7-7-7 10 9-9-9 10 9-9-9 12 11-11-11 12 11-11-11
B | | | | | | | | | | | |

6

T
A 10 9-9-9 10 9-9-9 9 7-7-7 9 7-7-7 7, 5-5-5 7, 5-5-5
B | | | | | | | | | | | |

7

T
A 9 7-7-7 9 7-7-7 7, 5-5-5 7, 5-5-5 5, 4-4-4 5, 4-4-4
B | | | | | | | | | | | |

8

T
A 7, 5-5-5 7, 5-5-5 5, 4-4-4 5, 4-4-4 4, 2-2-2 4, 2-2-2
B | | | | | | | | | | | |

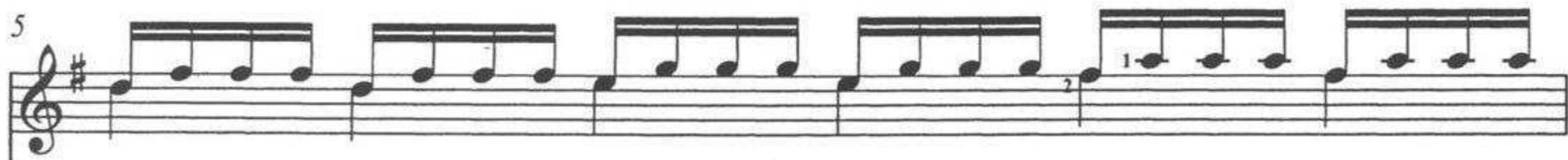
Let's continue with parallel thirds on the third and second strings.

Exercise # 20b

Diatonic Thirds on Adjacent Strings - 3rd & 2nd Strings

The sheet music consists of four staves, each with a treble clef and a key signature of one sharp (F#). The time signature is common time (4/4).

- Staff 1:** Shows eighth-note patterns on the 3rd and 2nd strings. The TAB below shows fingerings: 0, 0, 0, 0, 2, 1, 1, 1, 2, 1, 1, 1, 4, 3, 3, 3, 4, 3, 3, 3. The staff number '1' is at the beginning.
- Staff 2:** Shows eighth-note patterns on the 3rd and 2nd strings. The TAB below shows fingerings: 2, 1, 1, 1, 2, 1, 1, 1, 4, 3, 3, 3, 4, 3, 3, 3, 5, 5, 5, 5, 5, 5. The staff number '2' is at the beginning.
- Staff 3:** Shows eighth-note patterns on the 3rd and 2nd strings. The TAB below shows fingerings: 4, 3, 3, 3, 4, 3, 3, 3, 5, 5, 5, 5, 5, 5, 7, 7, 7, 7, 7, 7. The staff number '3' is at the beginning.
- Staff 4:** Shows eighth-note patterns on the 3rd and 2nd strings. The TAB below shows fingerings: 5, 5, 5, 5, 5, 5, 7, 7, 7, 7, 7, 7, 9, 8, 8, 8, 9, 8, 8, 8. The staff number '4' is at the beginning.



TAB

7 7 7 7 7 7 9 8 8 8 9 8 8 8 11 10 10 10 11 10 10 10

B

This section shows a sixteenth-note pattern on the A string (T), followed by eighth-note patterns on the A (T) and B (B) strings.

6

Musical staff showing sixteenth-note patterns. The staff begins with a quarter note followed by a sixteenth-note pattern of (D, E, F#). This pattern repeats three times, followed by a sixteenth note at measure 6, beat 2.

TAB

9 8 8 8 9 8 8 8 7 7 7 7 7 7 5 5 5 5 5 5 5 5 5 5 5 5

B

This section shows eighth-note patterns on the A (T) and B (B) strings.

7

Musical staff showing sixteenth-note patterns. The staff begins with a quarter note followed by a sixteenth-note pattern of (D, E, F#). This pattern repeats three times, followed by a sixteenth note at measure 7, beat 2.

TAB

7 7 7 7 7 7 5 5 5 5 5 5 4 3 3 3 4 3 3 3

B

This section shows eighth-note patterns on the A (T) and B (B) strings.

8

Musical staff showing sixteenth-note patterns. The staff begins with a quarter note followed by a sixteenth-note pattern of (D, E, F#). This pattern repeats three times, followed by a sixteenth note at measure 8, beat 2.

TAB

5 5 5 5 5 5 4 3 3 3 4 3 3 3 2 1 1 1 2 1 1 1 .

B

This section shows eighth-note patterns on the A (T) and B (B) strings, ending with a dotted half note on the B string.

In order to develop the same ability to a more advanced degree, but with variable thumb-tremolo distance, we will now play parallel sixths in the key of E natural minor.

Exercise # 21

Diatonic Sixths - 4th & 2nd Strings

1

2

3

4

5

6 eighth notes followed by 3 sixteenth notes.

T: 8-8-8 | 8-8-8 | 10-10-10 | 10-10-10 | 12-12-12 | 12-12-12
A: 9 | 9 | 10 | 10 | 12 | 12
B: | | | | | |

6

6 eighth notes followed by 3 sixteenth notes.

T: 10-10-10 | 10-10-10 | 8-8-8 | 8-8-8 | 7-7-7 | 7-7-7
A: 10 | 10 | 9 | 9 | 7 | 7
B: | | | | | |

7

6 eighth notes followed by 3 sixteenth notes.

T: 8-8-8 | 8-8-8 | 7-7-7 | 7-7-7 | 5-5-5 | 5-5-5
A: 9 | 9 | 7 | 7 | 5 | 5
B: | | | | | |

8

6 eighth notes followed by 3 sixteenth notes.

T: 7-7-7 | 7-7-7 | 5-5-5 | 5-5-5 | 3-3-3 | 3-3-3 .
A: 7 | 7 | 5 | 5 | 4 | 4 .
B: | | | | | |

Quasi-Chromatic Scales

Here is a repeating quasi-chromatic exercise that will help in developing rhythmical evenness as well as a uniform sound quality within the tremolo strokes. It will also do absolute wonders for your RH/LH coordination: **Tremolo Scales!** As always, start very, very slowly!

The first pattern is a four-note repeating sequence on the first string.

Exercise # 22

Single String Tremolo - Part II

Chromatic Scale Sequences

p a m i p a m i p a m i p a m i

The second pattern is an eight-note repeating sequence moving chromatically along the first string.

Exercise # 22b

Single-String Tremolo - Part II Chromatic Scale Sequences

The image displays four staves of musical notation, each representing a different pattern for a single-string tremolo exercise. Each staff consists of a treble clef staff and a corresponding guitar tablature below it. The tablature shows the frets from 1 to 7 across six strings. Below each tablature, the fingerings for each note are indicated: 'p' (pinky), 'a' (ring), 'm' (middle), and 'i' (index). The patterns involve a repeating sequence of eighth-note pairs that move chromatically up and down the string, with the index finger often used to provide harmonic support or a sustained note.

1

p a m i p a m i p a m i p a m i

TAB: 8-7-6-5 8-7-6-5 7-6-5-4 7-6-5-4

2

p a m i p a m i p a m i p a m i

TAB: 6-5-4-3 6-5-4-3 5-4-3-2 5-4-3-2

3

p a m i p a m i p a m i p a m i

TAB: 4-3-2-1 4-3-2-1 5-4-3-2 5-4-3-2

4

p a m i p a m i p a m i p a m i

TAB: 6-5-4-3 6-5-4-3 7-6-5-4 7-6-5-4

The third pattern is an eight-note repeating sequence on the first and second strings.

Exercise # 22c

Single-String Tremolo - Part II Chromatic Scale Sequences

V

p a m i p a m i p a m i p a m i

T A B

The fourth pattern is a 16-note repeating sequence on the first, second and third strings.

Exercise # 22d

Single-String Tremolo Chromatic Scale Sequences - Part IV

p a m i p a m i p a m i p a m i

T A B

The fifth pattern is a four-note chromatic sequence repeating on all six strings of the guitar.

Exercise # 22e

Single-String Tremolo - Part V Chromatic Scale Sequences

The musical score consists of two staves. The top staff is a standard musical notation staff with a treble clef, a key signature of one sharp (F#), and a time signature of 6/4. It features a continuous tremolo pattern of eighth-note pairs. Above the first note of the first measure is a small 'V'. Below each note is a number indicating the finger used: 4, 3, 2, 1 for the first measure; 4, 3, 2, 1 for the second; 3, 2, 1 for the third; 4, 3, 2, 1 for the fourth; 3, 2, 1 for the fifth; 4, 3, 2, 1 for the sixth; and 4, 3, 2, 1 for the seventh. The bottom staff is a tablature staff for a six-string guitar. It shows the strings from bottom (B) to top (E). The tablature indicates a repeating sequence of notes: 8-7-6-5, 8-7-6-5, 8-7-6-5, 8-7-6-5, 8-7-6-5, 8-7-6-5, and 8-7-6-5. To the left of the tablature, the letters T, A, and B are written vertically, likely referring to the tuning of the strings. The tablature also includes a '6' above the first string and a '4' above the second string.

The sixth pattern is a four-note chromatic sequence repeating on all six strings of the guitar, ascending and descending.

Exercise # 23

Single-String Tremolo - Part II Chromatic Scale Sequences

V

1

p a m i p a m i p a m i p a m i p a m i p a m i

T A B 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 .

2

p a m i p a m i p a m i p a m i p a m i p a m i

T A B 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 .

3

p a m i p a m i p a m i p a m i p a m i p a m i

T A B 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 .

4

p a m i p a m i p a m i p a m i p a m i p a m i p a m i

T A B 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 8-7-6-5 .

Speed Bursts

Here is a great tremolo practice tip I picked up from **Scott Tennant**. Scott is a member of the Los Angeles Guitar Quartet and lectures at the University of Southern California. You should definitely check out his recording of Rodrigo's works! He suggests using *speed bursts* to practice tremolo in the following manner;

First, play the tremolo twice, counting each note as an eighth note and then double the speed so that each note is a 16th note. Speed bursts are also extremely helpful in scales and arpeggios. Here is a simple example of this technique over a static A minor chord. This excellent practice method helps significantly in controlling the tremolo motion.

Exercise # 24

Tremolo Speed Bursts

3

TAB

B

3

TAB

B

Rhythmic Tricks

If your tremolo is still rhythmically inconsistent, try to practice with a metronome beating fast (around 160bpm) but **play quarter notes**. Pay specific attention to the thumb; make sure that the thumb stroke is even and playing “in the pocket” of the beat. Moreover, make sure the return stroke of the thumb is slow and even. Be careful not to let the thumb return too fast! The reason for this is you want the thumb to be under total control. Very slow practice with a metronome set at one click-per-note will help rid your playing of rhythmic inconsistencies.

Exercise # 25

mm=180

Playing with Rhythms

4

TAB

4

4

TAB

More Rhythmic Tricks

One of my classical guitar teachers in the mid-90s, **David Oakes**, showed me another rhythmic practice trick. Purposefully accenting syncopated variations of the regular tremolo pattern seems to help players gain more control of the tremolo. Follow the notation carefully and accent the notes indicated. First, we will accent the “a” finger.

Exercise # 26a

More Rhythmic Tricks -Ring Finger

p a m i p a m i p a m i p a m i p a m i p a m i p a m i p a m i

Now, do the same thing, accenting the “m” finger.

Exercise # 26b

More Rhythmic Tricks - Middle Finger

p a m i p a m i p a m i p a m i p a m i p a m i p a m i p a m i

Finally, the “i” finger.

Exercise # 26c

More Rhythmic Tricks - Index Finger

The music consists of two staves. The top staff is for the treble clef (G-clef) and the bottom staff is for the bass clef (F-clef). Both staves are in common time (indicated by '4'). The top staff features eighth-note patterns with 'p a m i' lyrics underneath, and the bottom staff shows eighth-note patterns with '0-0-0' underneath. Fingerings are indicated above the notes: '0' at the start of each measure, '2' in the second measure, and '3' in the third measure.

I would suggest practicing these three exercises in one practice session, one after the other, perhaps for five minutes each. At the end of the 15 minutes, your tremolo will be very “warmed up” and even!

Even More Rhythmic Tricks!

Here is an technique the great classical guitarist **David Russell** taught me in one of his master classes years ago: Practice playing tremolo where you only play one tremolo pattern (four notes) in a row, rest for a quarter beat, play the pattern again, rest for a quarter beat. However, DO NOT start with the thumb!

First, start the tremolo with the ring finger and follow the usual pattern.

Exercise # 27a

Rhythmic Displacement - Ring Finger

2

a m i p a m i p a m i p a m i p

T A B

4

0 0 0 0 0 0 0 0 0 0 0 0

2 2 2 2

3

a m i p a m i p a m i p a m i p

T A B

0 0 0 0 0 0 0 0 0 0 0 0

2 2 2 2

Our second pattern starts with the “m” finger.

Exercise # 27b

Rhythmic Displacement - Middle Finger

The final pattern starts with the index finger.

Exercise # 27c

Rhythmic Displacement - Index Finger

3

i p a m i p a m i p a m i p a m

T A B

This is a variation on the idea presented previously in the “More Rhythmic Tricks” section. I would suggest a similar practice schedule for this series of exercises. Practice each pattern for five minutes, and then go to the next for five more minutes and the final for another five minutes for a total 15-minute tremolo workout!

Final Rhythmic Trick: Triplets

Another great way to increase control over the tremolo technique is to play all the tremolo notes as triplets. This has the effect of smoothing out rhythmic inconsistencies, since you will have to alternately accent each finger within the tremolo pattern. Here is a simple example, based on a first position Dm chord.

Exercise # 28

Even More Rhythmic Tricks - Tremolo Triplets

The musical score consists of two parts. The top part is staff notation in 4/4 time with a treble clef. It shows a sequence of eighth-note triplets. Below the staff, the fingers used for each triplet are indicated by lowercase letters: 'p' (pinky), 'a' (ring finger), 'm' (middle finger), and 'i' (index finger). The bottom part is a TAB (Tablature) for a guitar, also in 4/4 time. It shows the strings (T, A, B) and the frets (2, 2, 2, 2, 2, 2, 2, 2). Below the TAB, the same fingerings ('p', 'a', 'm', 'i') are shown under each corresponding string. The TAB includes vertical tick marks below the strings, likely indicating where to pluck or strum.

This will probably take some time to get used to, but stick with it. The secret to complete mastery of the tremolo lies in being able to control the smallest nuances of sound and rhythm.

Advanced Right-Hand Finger Independence

Since tremolo is (usually) performed at a relatively high speed, there is another issue that enters the equation of the mechanics of playing it properly: the return of the fingers to their original position after each one has played its note. Here is a very original exercise (originally created by **John Sloan**) that helps improve finger independence and return time after a stroke.

Play tremolo using only two fingers. This helps train the fingers to get back to a “ready” position quickly in preparation for the next stroke. Our first example will use the pattern: thumb, index, index, index (piii).

Exercise # 29a

Right-Hand Finger Return - Index Finger

The music score consists of three staves. The top staff is a treble clef staff with four measures of 4/4 time. It features a continuous tremolo pattern where each measure starts with a vertical stroke (thumb) followed by four horizontal strokes (index). Below the notes are the fingerings: p i i i p i i i p i i i p i i i p i i i p i i i p i i i. The bottom staff is a bass clef staff with four measures of 4/4 time. It shows a continuous tremolo pattern where each measure starts with a vertical stroke (thumb) followed by four horizontal strokes (index). Below the notes are the fingerings: 0. To the left of the bass staff, there is a tablature staff with four horizontal lines labeled T, A, and B. The first measure has vertical strokes above the T and A lines. The second measure has vertical strokes above the A and B lines. The third measure has vertical strokes above the B and A lines. The fourth measure has vertical strokes above the T and A lines. Vertical bar lines separate the measures on all staves.

Our second example will use the pattern: thumb, middle, middle, middle (pmmm).

Exercise # 29b

Right-Hand Finger Return - Middle Finger

p m m m p m m m p m m m p m m m p m m m p m m m p m m m p m m m

T 4 | . 2 2 2 2 | 2 2 2 2 | .

A 4 | . 2 2 2 2 | 2 2 2 2 | .

B | . 2 2 2 2 | 2 2 2 2 | .

Our final example will use the pattern: thumb, ring, ring, ring, (paaa).

Exercise # 29c

Right-Hand Finger Return - Ring Finger

p a a a p a a a p a a a p a a a p a a a p a a a p a a a p a a a

T 4 | . 2 2 2 2 | 2 2 2 2 | .

A 4 | . 2 2 2 2 | 2 2 2 2 | .

B | . 2 2 2 2 | 2 2 2 2 | .

CAUTION: DO NOT try to go very fast with these exercises; If you do, you risk injuring your right-hand fingers, especially the ligaments. These exercises make your right-hand fingers work three times harder than they usually do and three times faster! So, for your hand's sake, TAKE IT SLOW!

Rasgueados

On the subject of dealing with the quick and accurate return of the RH fingers to their original point we should mention that the muscles used for this motion are the *extensor muscles*. These muscles are not used directly when playing the guitar (ie. plucking). The only guitar technique that exercises them directly is the **flamenco rasgueado**. Practicing “ami” continuous rasgueados is an excellent way to train these often neglected muscles. The motion involves the same fingers used in the tremolo, in the same order; however, they move in the opposite direction, therefore facilitating the *return* of the fingers to the ready to play position.

Exercise # 30

a-m-i Rasgueados

Soleares

The musical notation consists of two staves of guitar tablature. The top staff is labeled "Soleares" and has a treble clef, a key signature of one sharp (F#), and a common time signature (indicated by a '4'). The bottom staff has a bass clef and a common time signature. Both staves show a repeating pattern of eighth-note chords. Above the tablature, arrows indicate the direction of the fingers: 'a' (thumb), 'm' (index), and 'i' (middle). Below the tablature, the strings are numbered 6, 5, 4, 3, 2, 1 from bottom to top. The first staff shows a sequence of chords: (0,0,0,0,0,0) - (0,0,0,0,0,0) - (0,0,0,0,0,0) - (0,0,0,0,0,0) - (0,0,0,0,0,0) - (0,0,0,0,0,0) - (0,0,0,0,0,0) - (0,0,0,0,0,0). The second staff shows a sequence of chords: (1,1,1,1,1,1) - (1,1,1,1,1,1) - (1,1,1,1,1,1) - (1,1,1,1,1,1) - (1,1,1,1,1,1) - (1,1,1,1,1,1) - (1,1,1,1,1,1) - (1,1,1,1,1,1). Below each staff, a series of '3's indicates the strumming pattern.

If you are interested specifically in rasgueado techniques, I suggest you refer to my book *The Art of Rasgueado* (MB98405), published by Mel Bay Publications. This book outlines, explains and traces the historic and technical development of over 80 different rasgueado patterns and explains how these can be used in all kinds of guitar music. It will keep you busy for a long, long time!

Continuous a-m-i Rasgueados

According to outstanding classical guitarist and esteemed scholar and educator Stanley Yates, you should also practice the continuous ami rasgueado, as this will substantially help with the return of all fingers. Here is an example of a continuous ami rasgueado pattern.

Exercise # 30b

a-m-i Continuous Rasgueado

3 3 3 3

a m i a m i a m i a m i

TAB 4 | . 0 0 0 0 0 0 0 0 0 0 0 | .

3 3 3 3 3 3

Continuous Rasgueado with a-m

On the subject of rasgueados, another excellent way of strengthening your ring-middle and ring-index combinations is to practice continuous rasgueados using these patterns! A few minutes every day should be enough of this taxing exercise. Be careful not to overdo these patterns!

Try the ring-middle combination first!

Exercise # 31

a-m Continuous Rasgueado

Continuous Rasgueado with a-i

Repeat the same pattern with the ring-index combination.

Exercise # 31b

a-i Continuous Rasgueado

The musical notation consists of two staves. The top staff is a standard musical staff with a treble clef, a key signature of one sharp (F#), and a 4/4 time signature. It shows a continuous sequence of eighth-note chords (chords of three notes) across four measures. Below each note in the chords, there is a small letter indicating the fingering: 'a' for the ring finger and 'i' for the index finger. The bottom staff is a guitar tab staff with six strings labeled T, A, G, D, B, E from top to bottom. It shows a repeating pattern of notes being plucked with the index finger ('i') and the ring finger ('a'). The tab includes vertical bar markers at the beginning of each measure and horizontal bar markers between groups of four measures. The first measure starts with an open string (T, A, G) followed by a '0'. The second measure starts with a '1' on the T string. The third measure starts with an '0' on the A string. The fourth measure starts with a '1' on the G string.

More Single-String Scales

The great concert guitarist and distinguished educator **Sharon Isbin** suggests playing single-string scales on all strings using ring-middle-index alternation. Here's an example she uses employing the E major scale on the first string. Repeating the example three times rotates the RH fingerings through all possible combinations!

Exercise # 32

More Single-String Scales - Part I

Musical notation and tablature for Exercise #32, Part I, showing a single-string scale on the first string in E major. The scale consists of 15 notes: 0, 2, 4, 5, 7, 9, 11, 12, 14, 12, 11, 9, 7, 5, 4, 2. The notation includes a treble clef, a key signature of one sharp, and a common time signature. The tablature shows the string number (T), fret number (A), and the letter 'B' below it. Below the tablature are four sets of vertical bars representing the guitar neck.

Musical notation and tablature for Exercise #32, Part I, showing a single-string scale on the first string in E major, continuing from the previous page. The scale consists of 15 notes: 0, 2, 4, 5, 7, 9, 11, 12, 14, 12, 11, 9, 7, 5, 4, 2. The notation includes a treble clef, a key signature of one sharp, and a common time signature. The tablature shows the string number (T), fret number (A), and the letter 'B' below it. Below the tablature are four sets of vertical bars representing the guitar neck.

Finally, here is a much longer and more challenging scale sequence that uses the E natural minor scale on all six strings of the guitar. Be patient with this one!

Exercise # 32b

More Single-String Scales - Part II

1

2

3

4

Middle-Finger Rest Stroke

Sharon Isbin also advocates practicing the *pami* tremolo very slowly while playing a rest stroke with the middle finger! This approach has the advantage of breaking down the tremolo pattern into two rhythmically equal parts, consisting of two sets of two 16th notes each, therefore thwarting the “gallop” that might otherwise emerge. As you (VERY gradually) increase the tempo, you will not be able to do a rest stroke any more, but try to retain the accent on the middle finger. Here is a simple example of this technique, using a first position Em chord.

Exercise # 33

Middle Finger Rest Stroke

The musical score consists of four measures of music in 4/4 time. Each measure begins with a sixteenth note (indicated by a vertical stem with a small circle at the top), followed by a tremolo pattern of four sixteenth notes: *p*, *a*, *m*, *i*. After each tremolo pattern, there is a rest stroke indicated by a vertical stem with a downward-pointing triangle. The tablature below shows a single guitar string with four groups of three vertical strokes each, corresponding to the sixteenth-note patterns. The tablature is labeled T-A-B 4 and has a '2' above it, indicating a second position. Vertical bar lines are placed under each group of strokes.

Tremolo Arpeggios

Once the student has good rhythmic control and sufficient speed with the tremolo, the most prevalent technical problem seems to be at the point where there is a string change on the tremolo. For example, when the tremolo moves from the first string to the second string, the other way around or any other combination of changing strings, especially if this change is continuous! The extraordinary flamenco guitarist **Gerardo Nuñez** showed me the following exercise which aims to rectify the aforementioned problem. We will be playing a simple arpeggio moving from first, to second, to third and back to the second string (1-2-3-2). However, on EACH string we will be playing a full a-m-i tremolo pattern! It is harder to explain on paper than it really is, so have a look at the music!

Exercise # 34

Tremolo Arpeggios - Part I

The musical score consists of two staves. The top staff is a treble clef staff with four measures. Each measure contains a sixteenth-note arpeggio (1-2-3-2) followed by a sixteenth-note rest. Below each note is a letter indicating the attack method: p (pizzicato), a (arco), m (muted), or i (fingered). The bottom staff is a bass clef staff for the guitar, showing the strings T (Treble), A (Alto), and B (Bass). It also has four measures, corresponding to the arpeggios above. Fret numbers 0, 2, and 0 are indicated on the strings. The first measure starts with a 0 on the B string, the second with a 2 on the A string, and the third with a 0 on the A string.

In order to gain maximum efficiency from this excellent practice pattern, it would be a good idea to examine variable distances between the thumb and the tremolo string while executing it. To become proficient with all kinds of movement of the tremolo figure, strive to play patterns that introduce variable thumb-tremolo distances. Here's another example based on the open position Em chord.

Exercise # 34b

Tremolo Arpeggios - Part II

p a m i p a m i p a m i p a m i p a m i p a m i p a m i p a m i

T 4 | . 0-0-0 0-0-0 0-0-0 0-0-0 0-0-0 0-0-0 0-0-0 0-0-0 .
A 4 | . 2 0-0-0 2 0-0-0 2 0-0-0 2 0-0-0 2 0-0-0 2 .
B | . 0 2 | 2 2 | 2 2 | 2 2 | 2 2 | 2 2 | 2 .

Some Final Words: Tremolo as an arpeggio

As a final note, to conclude this section of the book, let me offer you another very interesting way of viewing the tremolo technique:

Look at the tremolo as a single string arpeggio!

This way, you can use all the time-tested, regular arpeggio exercises and patterns, especially the Giuliani RH arpeggio exercises, in order to enhance your tremolo practice patterns.

Important Note: By perfecting your tremolo technique you are getting better at one of the most difficult RH techniques of the guitar. This will VERY MUCH help your playing in general, apart from the obvious ability to play tremolo pieces!

Let's conclude our practice on this concept by taking a simple chord progression (Em-D-C) and using tremolo technique to arpeggiate each chord. As always, feel free to substitute any chords you like.

Exercise # 34c

Tremolo Arpeggios - Part III

The sheet music consists of four staves, each representing a different measure (Measures 1, 3, 5, and 7). Each staff includes a treble clef, a key signature, and a 4/4 time signature.

- Measure 1:** The top staff shows a continuous tremolo pattern of eighth-note pairs (p a m i) across six strings. The bottom staff shows corresponding TAB notation with fingers 1, 2, and 3 used for the tremolo pattern.
- Measure 3:** The top staff shows a tremolo pattern starting with a quarter note (2) followed by eighth-note pairs. The bottom staff shows TAB notation with fingers 2, 3, and 1 used for the tremolo pattern.
- Measure 5:** The top staff shows a tremolo pattern starting with a quarter note (3) followed by eighth-note pairs. The bottom staff shows TAB notation with fingers 0, 2, and 3 used for the tremolo pattern.
- Measure 7:** The top staff shows a tremolo pattern starting with a quarter note (0) followed by eighth-note pairs. The bottom staff shows TAB notation with fingers 2, 0, and 3 used for the tremolo pattern.

Chapter 2

Variations on Traditional Tremolo

The traditional classical guitar p-a-m-i tremolo pattern has been with us for a very long time. However, it is by no means the only tremolo pattern! A variety of different tremolo patterns exist, some very similar to the original, some quite distinct! In this section we shall examine the various patterns that have been used as substitutes for the “original” *p-a-m-i* tremolo. Keep in mind that most of these patterns will require a considerable initial effort on your part before you are able to come to an informed conclusion concerning their technical merits and their eventual usefulness as vehicles of musical interpretation! In short, stick with them for a while before you adopt or abort them!

Variation #1 – The p-i-m-i Tremolo

This is one of the easiest tremolo variations. It is perfectly suited to slower pieces that require firm control of the tremolo. This pattern is especially good for beginners since it produces a smoother, less choppy sound. It is also easy to control the tempo and the dynamics using this pattern, much easier than with the traditional classical *pami* tremolo. However, you will need to slowly build up your endurance and speed! This pattern is fairly tiring for the index finger, since it is used for two out of the three tremolo notes!

Let's use a simple Em chord to practice this pattern.

Exercise # 1

p-i-m-i Tremolo

Tremolo pattern: p i m i p i m i

Fingerings: 2, 2, 2, 2

Tremolo pattern: p i m i p i m i

Fingerings: 2, 2, 2, 2

Variation #2 – The p-i-a-i Tremolo

This is a variation of the previous tremolo. The only difference is that *the ring finger substitutes for the middle finger*. This change raises a couple of interesting points: The relative length of the index finger and the ring finger is roughly the same on most people. This makes this pattern particularly comfortable to play on a single string, since there is no need to compensate for any significant difference in digit length by tilting the RH.

On the other hand, the ring finger is also significantly weaker and less independent than the middle finger, which means that it will have to try harder to keep up with the more agile and responsive index finger! However, once this is accomplished, the added ability of your ring finger will help you with your playing in general, not just with the tremolo!

Let's use the same Em chord to practice this pattern.

Exercise # 2

p-i-a-i Tremolo

Sheet music for Exercise #2. The top staff is for the left hand (piano) and the bottom staff is for the right hand (guitar). The left hand staff has a treble clef, a 4/4 time signature, and a key signature of E major (no sharps or flats). It shows a continuous eighth-note tremolo pattern on the A string (5th string). The right hand staff has a bass clef, a 4/4 time signature, and a key signature of E major. It shows a continuous eighth-note tremolo pattern on the B string (6th string). Fingerings are indicated below the notes: 'p i a i' for the left hand and '2' for the right hand.

Sheet music for Exercise #2. The top staff is for the left hand (piano) and the bottom staff is for the right hand (guitar). The left hand staff has a treble clef, a 4/4 time signature, and a key signature of E major (no sharps or flats). It shows a continuous eighth-note tremolo pattern on the A string (5th string). The right hand staff has a bass clef, a 4/4 time signature, and a key signature of E major. It shows a continuous eighth-note tremolo pattern on the B string (6th string). Fingerings are indicated below the notes: '3' for the left hand and '2' for the right hand.

Variation #3 – The p-i-m-a Tremolo

Here is another variation of the traditional tremolo! In this pattern, you need to reverse the finger sequence of the treble tremolo notes. Instead of playing the usual *p-a-m-i*, you will be playing *p-i-m-a*. When initially practicing this pattern, be mindful that the middle and ring fingers have a natural tendency to move together. You should take care that this tendency does not disrupt the rhythmic integrity of your pattern! Many classical guitarists find this to be easier and smoother than the traditional *p-a-m-i* pattern. In my own playing, I've found that it brings out a slightly different inflection or timbre, which can be effectively used for tonal color variations. The *p-i-m-a* pattern is significantly less fatiguing for the RH fingers, but it is a little more troublesome to maintain a steady, unwavering rhythm. You should also take care that your ring finger does not hit the string harder or louder than the other fingers.

Once again, let's use our well-worn Em chord to practice this pattern.

Exercise # 3

p-i-m-a Tremolo

The sheet music consists of two staves. The top staff is for the treble clef (Guitar Solo) and the bottom staff is for the bass clef (Bassoon). Both staves show a 4/4 time signature. The treble staff has a tremolo pattern where each group of four notes is labeled "p i m a". The bass staff shows a continuous eighth-note pattern. The bass staff has "T" and "A" above the first two strings, and "B" above the third string.

Variation #4 – The *p-m-i-a* Tremolo

Here is a slightly more unusual variation of the traditional tremolo! This pattern reverses the index-middle sequence of the previous one. It is a little more difficult to play; but easier to master rhythmically. Since it does not follow the natural sequence of the RH fingers in either direction (either *a-m-i* or *i-m-a*), it is bound to take a little longer to master than the other patterns.

You probably guessed that, once again we'll use an Em chord to practice this pattern.

Exercise # 4

p-m-i-a Tremolo

3

Variation #5 – The p-a-i-m Tremolo

Here is what I consider the strangest tremolo pattern! This is a finger combination that will most probably feel quite unnatural at first. With practice, it is possible to achieve decent speed and sound quality. However, I have not been able to find a reason to prefer this pattern to any of the aforementioned ones!

To conclude, let's use our usual trusty Em chord to practice this pattern.

Exercise # 5

p-a-i-m Tremolo

The musical score consists of two staves. The top staff is standard musical notation with a treble clef, a 4/4 time signature, and a key signature of one sharp. It shows a sequence of eighth-note chords: (0, 2, 3), (0, 2, 3), (0, 2, 3), (0, 2, 3), (0, 2, 3), (0, 2, 3), (0, 2, 3). Below each chord, the letters 'p a i m' are written under the notes. The bottom staff is TAB notation for a six-string guitar, labeled T, A, and B. It shows a repeating pattern of notes: 0-0-0, 0-0-0, 0-0-0, 0-0-0, 0-0-0, 0-0-0, 0-0-0, 0-0-0. Above the TAB staff, there are vertical bar lines corresponding to the chords in the musical notation above. The strings are numbered 1 through 6 from left to right.

Chapter 3

Extended Tremolo Techniques

In this chapter, we will examine the various extended tremolo techniques. We will cover the different flamenco guitar tremolos and their variations and examine the innovations of contemporary players.

Flamenco Tremolo – Traditional

Flamenco guitarists use a variation of the classical tremolo, a five-note tremolo performed *piami*. Here's an example using a simple first position E major chord.

Exercise # 1

Elementary Flamenco Tremolo

1

TAB

p i a m i p i a m i p i a m i p i a m i

0 0

T A B 4

2

TAB

p i a m i p i a m i p i a m i p i a m i

0 0

T A B 2

Here is another simple example, based on the E Phrygian Mode. The chords are E major, F maj7 and G6.

Exercise # 2

Elementary Flamenco Tremolo - Part II

The sheet music consists of two staves. The top staff is a treble clef staff with a 4/4 time signature, featuring a continuous tremolo pattern of eighth-note pairs. The bottom staff is a guitar tablature staff with a 4/4 time signature, showing fingerings (1, 2, 3, 4) and string numbers (T, A, B). Below each staff is a vocalization "p i a m i" repeated eight times. The tablature shows the left hand playing a repeating eighth-note pattern across the strings, while the right hand provides the tremolo.

3

p i a m i p i a m i p i a m i p i a m i p i a m i p i a m i p i a m i p i a m i

T A B

0-0-0-0 0-0-0-0 0-0-0-0 0-0-0-0 0-0-0-0 0-0-0-0 1-0-0-0 2-0-0-0

2 1 1 3 2 1 2

0-0-0-0 0-0-0-0 0-0-0-0 0-0-0-0 0-0-0-0 0-0-0-0 1-0-0-0 2-0-0-0

3 4 3 4 2 3 1 2

Here is an example of flamenco tremolo based on the famous tune “Malagueña” by the great composer Lecuona. The speed of the piece is a little slower than the average classical guitar tremolo, due to the extra stroke of the index finger.

Exercise # 3

Malagueña de Lecuona

The music consists of two staves. The top staff is a treble clef staff with a 3/4 time signature. It features a continuous tremolo pattern where each note is divided into four 16th notes. The bottom staff is a six-string guitar tab. Above the strings, the fingers 2, 3, and 4 are indicated, corresponding to the tremolo pattern above. The tab shows a repeating sequence of notes across the strings.

Let us make things a little more interesting. Here is another example, based on the traditional flamenco form of the Soleares. This time the tremolo note will not be constant; it will shift within the 16th-note grouping.

Exercise # 4

Simple Soleares Tremolo

cV

p i a m i p i a m i p i a m i

cIII

Here is a study in the key of Em that has a nice moving melody in the tremolo voice. This kind of tremolo is quite typical of traditional flamenco guitar. The harmony is based on the chords Em, Am, D, B7, Cmaj7(#11). It is not as difficult as it might look initially! Most of the time you will be holding a specific easy chord shape and playing the melody with the tremolo.

Exercise # 5

Study in Em

p i a m i p i a m i p i a m i

cV

cII

9

TAB

11

TAB

13

TAB notation below the staff:

	3	3	3	3		3	3	3	3	0	0	0	0		2	2	2	2	2	2	3	3	3	3
T																								
A										0														
B	3					2									2					1			2	

15

Musical score for guitar tablature. The top staff shows a treble clef and a key signature of one sharp. The bottom staff is a tablature staff with six horizontal lines representing the strings, labeled T, A, B from top to bottom. The tablature shows a sequence of notes and rests. The first measure consists of six eighth-note groups. The second measure starts with a rest, followed by a sixteenth note (2), a eighth note (3), another rest, and then a sixteenth note (0). The third measure starts with a rest, followed by a sixteenth note (0), a eighth note (0), another rest, and then a sixteenth note (0). The fourth measure starts with a rest, followed by a sixteenth note (0), a eighth note (0), another rest, and then a sixteenth note (0). The fifth measure starts with a rest, followed by a sixteenth note (0), a eighth note (0), another rest, and then a sixteenth note (0). The sixth measure starts with a rest, followed by a sixteenth note (0), a eighth note (0), another rest, and then a sixteenth note (0).

17

Musical score for guitar tablature. The top staff shows a treble clef and a key signature of one sharp. The bottom staff is a tablature staff with six horizontal lines representing the strings, labeled T, A, B from top to bottom. The tablature shows a sequence of notes and rests. The first measure consists of six eighth-note groups. The second measure starts with a rest, followed by a sixteenth note (3), a eighth note (2), another rest, and then a sixteenth note (0). The third measure starts with a rest, followed by a sixteenth note (0), a eighth note (0), another rest, and then a sixteenth note (4). The fourth measure starts with a rest, followed by a sixteenth note (4), a eighth note (2), another rest, and then a sixteenth note (1). The fifth measure starts with a rest, followed by a sixteenth note (1), a eighth note (2), another rest, and then a sixteenth note (3). The sixth measure starts with a rest, followed by a sixteenth note (3), a eighth note (2), another rest, and then a sixteenth note (3).

19

Musical score for guitar tablature. The top staff shows a treble clef and a key signature of one sharp. The bottom staff is a tablature staff with six horizontal lines representing the strings, labeled T, A, B from top to bottom. The tablature shows a sequence of notes and rests. The first measure consists of six eighth-note groups. The second measure starts with a rest, followed by a sixteenth note (2), a eighth note (3), another rest, and then a sixteenth note (0). The third measure starts with a rest, followed by a sixteenth note (0), a eighth note (0), another rest, and then a sixteenth note (0). The fourth measure starts with a rest, followed by a sixteenth note (0), a eighth note (0), another rest, and then a sixteenth note (0). The fifth measure starts with a rest, followed by a sixteenth note (0), a eighth note (0), another rest, and then a sixteenth note (0). The sixth measure starts with a rest, followed by a sixteenth note (0), a eighth note (0), another rest, and then a sixteenth note (0).

This page has been left blank to avoid awkward page turns.

Here is another study in the key of E natural minor. This one includes a repeating ascending and descending diatonic sequence that moves horizontally on the guitar.

Exercise # 6

Study in Em

The image shows three staves of musical notation for a guitar study in E natural minor. The top staff is a standard musical staff with a treble clef, a key signature of one sharp (F#), and a time signature of 3/4. It features a repeating pattern of sixteenth-note groups: *p i a m i*. The middle staff is a tablature staff with a bass clef, a key signature of one sharp, and a time signature of 3/4. It shows a repeating sequence of notes on the 6th, 5th, and 4th strings. The bottom staff is another tablature staff with a bass clef, a key signature of one sharp, and a time signature of 3/4. It shows a repeating sequence of notes on the 6th, 5th, and 4th strings, mirroring the pattern above it. The notation is divided into measures by vertical bar lines.

7

TAB

14-14-14-14 12-12-12-12 0 10-10-10-10 12-12-12-12 10-10-10-10 0 8 8 8 8

9

TAB

10-10-10-10 8 8 8 8 0 7 7 7 7 8 8 8 8 7 7 7 7 7 0 5 5 5 5

11

TAB

7 7 7 7 5 5 5 5 0 3 3 3 3 5 5 5 5 3 3 3 3 0 2 2 2 2 .

Flamenco Tremolo – Advanced

Now we will tackle what I consider the really beautiful and much more difficult kind of flamenco tremolo. I know it is going to sound very difficult, but please bear with me and I will guarantee that you will have it down in very little time. I advise you though NOT to attempt to play the following examples if you have not already played the examples previously presented in this chapter! Doing so will most probably frustrate you and cause you to give up! Master the former examples, then you will be ready to tackle the following subject.

The lyrical flamenco tremolo is the “melody line” tremolo. This is a term I came up with in order to distinguish it from the other kinds of flamenco tremolo, as there are more coming up! What it boils down to is that *we will be changing notes in the melody WITHIN the tremolo!* Let me illustrate this with a simple example based on the Em chord:

Exercise # 7

Melody Line Tremolo - Beginner

Sheet music for Exercise #7: Melody Line Tremolo - Beginner. The music is in G major (two sharps) and common time (4/4). It consists of two staves of guitar tablature. The top staff shows a melody line with tremolo patterns over a strumming pattern. The bottom staff shows a harmonic bass line. Both staves include fingerings and dynamic markings (p, i, a, m, i). The first measure starts with a power chord (root position G major) followed by a G major chord. The second measure starts with a D major chord followed by a G major chord. The third measure starts with a G major chord followed by a D major chord. The fourth measure starts with a G major chord followed by a D major chord.

This page has been left blank to avoid awkward page turns.

Again, if you have never encountered this tremolo form before, it will probably look really difficult, but if you stay with it and practice it slowly, you will have it down very soon! Here is another example, involving an ascending sequence using the Em scale.

Exercise # 8

Melody Line Tremolo - Em Scale

The sheet music consists of six staves of musical notation for tremolo exercises. The first three staves are in common time (indicated by '2') and the last three are in triple time (indicated by '3'). The key signature is one sharp (F#). The music is written in a treble clef. The first staff shows a sequence of eighth-note patterns: 0, 2-3, 0, 1, 2-4, 1. The second staff shows a sequence of sixteenth-note patterns: 0-0-0-0, 2-2-3-3, 0, 2-2-0-0, 2-2-2-2, 3-3-5-5, 0, 3-3-2-2. The third staff shows a sequence of eighth-note patterns: 1, 2-4, 2-1, 1, 3-4, 2-1. The fourth staff shows a sequence of sixteenth-note patterns: 3-3-3-3, 5-5-7-7, 0, 5-5-3-3, 5-5-5-5, 7-7-8-8, 0, 7-7-5-5. The fifth staff shows a sequence of eighth-note patterns: 1, 2-4, 2-1, 1, 2-4, 2-1. The sixth staff shows a sequence of sixteenth-note patterns: 7-7-7-7, 8-8-10-10, 0, 8-8-7-7, 8-8-8-8, 10-10-12-12, 0, 10-10-8-8. Below each staff, a corresponding TAB (Tablature) staff is provided, showing the fingerings for each note or group of notes. The TAB staff uses the letters T, A, and B to indicate the strings.

7

TAB

7-7-7-7 8-8-10-10 0 8-8-7-7 5-5-5-5 7-7-8-8 0 7-7-5-5

0 0 0 0 0 0 0

9

TAB

3-3-3-3 5-5-7-7 0 5-5-3-3 2-2-2-2 3-3-5-5 0 3-3-2-2

0 0 0 0 0 0 0

Here is another scalar example, slightly more difficult. This one requires you to change notes in the tremolo segment of every sequence. This example will also use an ascending sequence of the Em scale.

Exercise # 9

Melody Line Tremolo - Em Scale

The tablature consists of three staves, each with a treble clef and a key signature of one sharp (F#). The top staff shows a melody line with sixteenth-note patterns and fingerings (2, 1, 0) and (4, 2, 1). The middle staff shows a tremolo pattern with sixteenth-note groups and fingerings (3-3-2-2), (0), (5-5-3-3), (0), (2-2-3-3). The bottom staff shows a tremolo pattern with sixteenth-note groups and fingerings (7-7-5-5), (0), (8-8-7-7), (0), (5-5-7-7). The tablature includes string labels T, A, and B on the left.

7

Musical notation: Treble clef, key signature of one sharp, time signature of 4/4. The first measure shows a bass note followed by six eighth-note pairs. The second measure shows a bass note followed by six eighth-note pairs. The third measure shows a bass note followed by six eighth-note pairs. The fourth measure shows a bass note followed by six eighth-note pairs.

TAB: Six horizontal lines representing the strings. The top line (Treble) has notes 10-10-8-8. The second line has notes 10-10-8-8. The third line has notes 0-7-7-8-8. The fourth line has notes 8-8-7-7. The fifth line has notes 8-8-7-7. The bottom line (B) has notes 0-5-5-7-7.

9

Musical notation: Treble clef, key signature of one sharp, time signature of 4/4. The first measure shows a bass note followed by six eighth-note pairs. The second measure shows a bass note followed by six eighth-note pairs. The third measure shows a bass note followed by six eighth-note pairs. The fourth measure shows a bass note followed by six eighth-note pairs.

TAB: Six horizontal lines representing the strings. The top line (Treble) has notes 7-7-5-5. The second line has notes 7-7-5-5. The third line has notes 0-3-3-5-5. The fourth line has notes 5-5-3-3. The fifth line has notes 5-5-3-3. The bottom line (B) has notes 0-2-2-3-3.

Finally, here is a last scalar example, slightly more difficult than the last. This one requires you to change notes in the tremolo of every sequence and moves in both ascending and descending directions at the same time. It is also much longer than the previous examples! This example is also based on the E natural minor scale.

Exercise # 10

Melody Line Tremolo - Em Scale

The sheet music consists of three staves of musical notation for a guitar, with corresponding TAB notation below each staff. The notation is in E major (one sharp) and common time (indicated by a '2'). The first staff shows a melody line with tremolo patterns. The second staff shows the TAB notation with fingerings (e.g., 0, 2, 3, 5) and string numbers (T, A, B). The third staff continues the melody line and TAB notation. The music is divided into measures by vertical bar lines and includes a repeat sign with a '3' above it, indicating a repeat of the previous section.

p i a m i p i a m i p i a m i

TAB

3

5

7

Musical staff: Treble clef, key signature of one sharp, measure number 7. TAB notation: Sixteenth-note patterns on the 6th, 5th, and 4th strings.

Musical staff: Treble clef, key signature of one sharp, measure number 7. TAB notation: Sixteenth-note patterns on the 6th, 5th, and 4th strings.

9

Musical staff: Treble clef, key signature of one sharp, measure number 9. TAB notation: Sixteenth-note patterns on the 6th, 5th, and 4th strings.

Musical staff: Treble clef, key signature of one sharp, measure number 9. TAB notation: Sixteenth-note patterns on the 6th, 5th, and 4th strings.

11

Musical staff: Treble clef, key signature of one sharp, measure number 11. TAB notation: Sixteenth-note patterns on the 6th, 5th, and 4th strings.

Musical staff: Treble clef, key signature of one sharp, measure number 11. TAB notation: Sixteenth-note patterns on the 6th, 5th, and 4th strings.

13

Musical staff: Treble clef, key signature of one sharp, measure number 13. TAB notation: Sixteenth-note patterns on the 6th, 5th, and 4th strings.

Musical staff: Treble clef, key signature of one sharp, measure number 13. TAB notation: Sixteenth-note patterns on the 6th, 5th, and 4th strings.

15

Musical staff showing sixteenth-note patterns. The first measure consists of six groups of two sixteenth notes each, with the first note of each group having a vertical bar below it. The second measure consists of six groups of three sixteenth notes each, with the first note of each group having a vertical bar below it.

Tablature staff for guitar strings T (Top), A, and B (Bottom). The first measure shows a sequence of notes: 5-5-7-7, 8-8-7-7, 0, 5-5-8-8. The second measure shows: 7-7-5-5, 7-7-5-5, 0, 7-7-8-8. The third measure shows: 0, 0, 0, 0.

17

Musical staff showing sixteenth-note patterns. The first measure consists of six groups of two sixteenth notes each, with the first note of each group having a vertical bar below it. The second measure consists of six groups of three sixteenth notes each, with the first note of each group having a vertical bar below it.

Tablature staff for guitar strings T (Top), A, and B (Bottom). The first measure shows a sequence of notes: 3-3-5-5, 7-7-5-5, 0, 3-3-7-7. The second measure shows: 5-5-3-3, 5-5-3-3, 0, 5-5-7-7. The third measure shows: 0, 0, 0, 0.

19

Musical staff showing sixteenth-note patterns. The first measure consists of six groups of two sixteenth notes each, with the first note of each group having a vertical bar below it. The second measure consists of six groups of three sixteenth notes each, with the first note of each group having a vertical bar below it.

Tablature staff for guitar strings T (Top), A, and B (Bottom). The first measure shows a sequence of notes: 2-2-3-3, 5-5-3-3, 0, 2-2-5-5. The second measure shows: 3-3-2-2, 3-3-2-2, 0, 3-3-5-5. The third measure shows: 0, 0, 0, 0.

This page has been left blank to avoid awkward page turns.

If you have managed to play the last example, you are well on your way to mastering the flamenco tremolo. Well done! Note however, that so far, we have been using only open strings as our basses and all the tremolo notes have been on the high E string! That is certainly not the case with most flamenco pieces!

Our next example is, again, just a little more challenging as it also involves holding various chord shapes while changing the notes within the tremolo. The complete composition "Angelika," based on the flamenco form of Granadinas is transcribed in my *Flamenco Journal* book (MB20925DP).

Exercise # 11

Angelika Tremolo - Easy Version

The music is divided into three sections, each starting with a measure number (1, 3, 5) above the staff.

- Measure 1:** Treble staff: Tremolo pattern (p i a m i p i a m i p i a m i). Bass staff: T (3), A (3), B (4). Bass staff: T (0), A (2), B (0).
- Measure 3:** Treble staff: Tremolo pattern (p i a m i p i a m i p i a m i). Bass staff: T (2), A (2), B (2). Bass staff: T (2), A (2), B (0).
- Measure 5:** Treble staff: Tremolo pattern (p i a m i p i a m i p i a m i). Bass staff: T (3), A (3), B (1). Bass staff: T (1), A (2), B (2).

10

TAB

13

15

Next comes the “standard” version of the previous piece. In this version there is considerably more note changing within the tremolo pattern. Take your time in trying to decipher the desired timing of the notes.

Exercise # 12

Angelika Tremolo - Regular Version

The sheet music consists of six staves of musical notation for Angelika Tremolo in Regular Version. The notation includes a treble clef, a key signature of one sharp, and a common time signature. The first staff shows a melodic line with eighth-note patterns and corresponding fingerings (1, 2, 3, 4) below each note. The second staff is a tablature staff with three horizontal lines labeled T, A, and B, showing fingerings (3, 2, 0), (2, 0), (2, 0), (2, 0), (2, 0), and (2, 0). The third staff continues the melodic line with eighth-note patterns and fingerings (3, 2, 1, 4, 3, 2, 1, 4). The fourth staff is another tablature staff with fingerings (2, 2, 2, 2), (2, 2, 3, 3), (2, 2, 0, 0), (2, 2, 2, 2), (2, 2, 2, 2), and (2, 2, 2, 2). The fifth staff continues the melodic line with eighth-note patterns and fingerings (1, 2, 1, 4, 1, 2, 1, 4). The sixth staff is another tablature staff with fingerings (3, 3, 3, 3), (2, 2, 3, 3), (2, 2, 0, 0), (3, 3, 3, 3), (2, 2, 3, 3), and (2, 2, 0, 0). The seventh staff continues the melodic line with eighth-note patterns and fingerings (3, 2, 1, 4, 3, 2, 1, 4).

11

The musical score consists of two staves. The top staff is a treble clef staff with a key signature of one sharp (F#). It contains six measures of eighth-note patterns. Measure 1 starts with a bass note followed by six eighth notes. Measures 2 and 3 start with a bass note followed by five eighth notes. Measures 4 and 5 start with a bass note followed by four eighth notes. Measure 6 starts with a bass note followed by three eighth notes. The bottom staff is a guitar tablature staff with six horizontal lines representing the strings. It shows a harmonic bass line with six measures. Measure 1 has a bass note on the 6th string. Measures 2 and 3 have bass notes on the 5th string. Measures 4 and 5 have bass notes on the 4th string. Measure 6 has a bass note on the 3rd string.

13

15

TAB

2	1	2	2	1	2
---	---	---	---	---	---

Finally, let us go to the “advanced” version of the tune. This version gets much trickier as, in many tremolo groupings, you will have to play four DIFFERENT notes! Granted, this is done at specific opportune places, but it is, as you probably imagine, no piece of cake! This is a very advanced technique and will take some time and effort to properly work into your playing. Once again, take your time in trying to understand the desired timing of the notes.

Exercise # 13

Angelika Tremolo - Advanced Version

7

Staff notation shows eighth-note patterns with dynamic markings. TAB shows fingerings (e.g., 2, 1, 3) and string numbers (T, A, B).

TAB patterns:

- M7: 3-3-3-3 | 3-3-3-3 | 3-3-3-3 | 3-3-3-3 | 3-3-3-3 | 3-3-3-3
- M9: 1-1-0-0 | 1-1-0-0 | 0-1-3-1-0 | 3-3-1-1 | 0-0-1-1 | 0-0-0-0
- M11: 1-1-1-1 | 1-1-3-3 | 2-1-1-0-0 | 1-1-1-1 | 1-1-1-1 | 2-1-1-1-1
- M13: 3-3-2-2 | 3-3-2-2 | 0-3-5-3-2 | 3-3-2-2 | 3-3-0-0 | 0-2-3-2-0
- M15: 2-2-2-2 | 2-2-3-3 | 2-2-0-0 | 2-2-2-2 | 2-2-2-2 | 2-2-2-2

The Six-Note Flamenco Tremolo

The six-note flamenco tremolo is a variation of the traditional five-note flamenco tremolo. It is usually used on slower pieces, often when accompanying medium tempo flamenco dances. Its purpose is to “fill out” the sound and slow down the thumb alternation. Here’s the most frequently used six-note tremolo pattern, played over a simple E major chord.

Exercise # 14

6-note tremolo

The sheet music consists of two staves. The top staff is for the treble clef hand, showing a six-note tremolo pattern: p i m a m i. The bottom staff is for the bass clef hand, showing a six-note tremolo pattern: 0 0 0 0 0 0. The music is in 4/4 time, with a key signature of one sharp (F#). Fingerings are indicated above the notes: 1, 2, 3 for the treble hand; and 0, 2, 2 for the bass hand. The bass staff also includes string indications T, A, and B.

Let us repeat the famous “Malagueña” de Lecuona, this time played with the six-note flamenco tremolo. The speed of the piece is going to be even slower than before because we have an extra finger stroke, this time by the middle finger.

Exercise # 15

6-Note Tremolo - Malagueña

The musical score consists of two staves. The top staff is a standard musical notation staff with a treble clef, a key signature of one sharp (F#), and a 3/4 time signature. It features a six-note flamenco tremolo pattern. The bottom staff is a TAB (Tablature) staff, labeled "TAB" on the left, showing the fret positions for each note. The TAB staff has four horizontal lines representing the strings, with vertical tick marks indicating the frets. Fingerings are indicated above the notes: "p i m a m i" for the first measure, and "p i m a m i" for the second measure. Measure numbers 1 and 2 are placed below the TAB staff. The score is divided into two measures by a vertical bar line. The first measure starts with a bass note (F#) followed by six sixteenth-note tremolo strokes. The second measure starts with another bass note (F#) followed by six sixteenth-note tremolo strokes. The TAB staff shows the hand position shifting from the first finger (p) to the middle finger (i) and then back to the first finger (m) for the tremolo. The first measure ends with a bass note (F#) and the second measure begins with a bass note (F#). The TAB staff shows the hand position shifting from the first finger (p) to the middle finger (i) and then back to the first finger (m) for the tremolo. The first measure ends with a bass note (F#) and the second measure begins with a bass note (F#).

Here is an original study in the key of Em, written specifically for the six-note tremolo.

Exercise #16

Study on 6-Note Tremolo

p i m a m i p i m a m i p i m a m i

TAB

CV

CV

7

9

CIV

CI

11

The Eight-Note Flamenco Tremolo

The eight-note flamenco tremolo is yet another variation of the traditional five-note flamenco tremolo. Again, it is used on slower pieces, often while accompanying dance! Its purpose is to “fill out” the sound and slow down the thumb alternation. Here’s the most common eight-note tremolo pattern, played over a simple E minor chord.

Exercise # 17

8-Note Tremolo

The music example consists of two staves. The top staff is a treble clef staff with four measures. Each measure contains a eighth note followed by a sixteenth-note pattern: (p, i, a, m, i). The bottom staff is a bass staff with four measures. Each measure contains a note at the 2nd fret of the A string followed by a note at the 0th fret of the D string. The bass staff has lettering T, A, and B above the first, second, and third strings respectively, with a '4' above the staff indicating a fourth octave. Below the staff, there are vertical bar lines under each measure, and below the bass staff, there are vertical bar lines under each measure.

Again, let’s repeat the “Malagueña”, this time using the eight-note flamenco tremolo. The speed of the piece is going to be even slower than before, since we have two more notes than the six-note tremolo and three more notes than the traditional flamenco tremolo. The reason for using the same piece of music as an example is not for lack of repertoire or imagination; rather, is done in order to facilitate comparison of the different tremolo techniques and deep comprehension and assimilation of their inherent differences in speed, rhythm and timbre.

Exercise # 18

8-Note Tremolo - Malagueña

The sheet music consists of three staves, each with a treble clef and a key signature of one sharp (F#). The first staff shows a continuous tremolo pattern of eighth notes. The second staff shows a similar pattern with a key change to A major (two sharps) indicated by a sharp sign and the number '1'. The third staff shows another key change to C major (no sharps or flats) indicated by a sharp sign and the number '2'. Below each staff is a corresponding TAB (Tablature) staff. The TAB staff for the first staff has 'T' at the top, followed by 'A' and 'B' below it. The TAB staff for the second staff has '3' at the top, followed by '2' below it. The TAB staff for the third staff has '2' at the top, followed by '1' below it. The TAB notation uses vertical strokes to indicate note heads and horizontal lines to indicate string positions. Vertical bar lines separate measures.

Continuous Tremolo

Manolo Sanlucar, one of the most important contemporary flamenco guitarists, uses this modern tremolo technique. The tremolo figure goes on continuously, while the thumb moves INDEPENDENTLY of the rhythm of the tremolo notes! Here's an example based on an Em chord, with the thumb part using notes from the Em scale.

Exercise # 19

Continuous tremolo

Here's a little trick that will make this pattern significantly easier to master. Try to think of it as a repeating six-note sequence played *a-m-i-a-m-i*. Then add the thumb strokes at the appropriate places. This is a very impressive technique when performed well and it really stretches the boundaries of what we expect from the nylon-string guitar, whether classical or flamenco! Stepan Rak uses this pattern as well!

Index Tremolo

Here is another very interesting, unusual tremolo technique in which the tremolo notes are provided solely by the strumming of the index finger. This finger, however, strums in BOTH directions, up and down! Here's an example, based on our usual Em chord. The first motion of the index is an upstroke.

Exercise # 20

Index strumming tremolo

The musical score consists of two staves. The top staff is for the left hand (index finger) and the bottom staff is for the right hand (picks). Both staves are in common time (indicated by '2').

Left Hand (Index Finger):

- Measure 1: Starts with a downstroke (p) followed by alternating upstrokes (i) and downstrokes (i) across six strings.
- Measure 2: Starts with an upstroke (i) followed by alternating downstrokes (i) and upstrokes (i) across six strings.
- Measure 3: Starts with a downstroke (p) followed by alternating upstrokes (i) and downstrokes (i) across six strings.

Right Hand (Picks):

- Measure 1: Strums the strings with the pick (0) across six strings.
- Measure 2: Strums the strings with the pick (0) across six strings.
- Measure 3: Strums the strings with the pick (0) across six strings.

Fretboard Diagram:

The fretboard diagram shows the strings T (Top), A, and B. The first string (T) has a '3' above it, the second string (A) has a '4' above it, and the third string (B) has a '0' below it. The fourth string (G) has a '2' below it, the fifth string (D) has a '2' above it, and the sixth string (B) has a '2' below it. Vertical bar lines indicate the beginning of each measure.

The natural expansion of this technique calls for strumming over more than a single string! So, now the index finger performs the exact same pattern, but this time strumming both the first and the second strings! As with the previous example, the tremolo notes are provided solely by the strumming of the index finger, which again strums in BOTH directions, up and down! Here's an example, based on our reliable Em chord. The first motion of the index is an upstroke.

Exercise # 21

Index Strumming Tremolo - 2 Strings

The musical score consists of two staves. The top staff is in treble clef, 3/4 time, and E major (one sharp). It shows a continuous eighth-note tremolo on the first and second strings, with a pizzicato (p) at the start and alternating up and down strokes indicated by arrows. Fingerings '2' and '3' are placed above the notes. The bottom staff is in bass clef, 4/4 time, and E major (one sharp). It shows a continuous eighth-note tremolo on the A and B strings, with a pizzicato (p) at the start and alternating up and down strokes indicated by arrows. Fingerings '2' and '3' are placed above the notes. The strings are labeled T (Treble), A, and B from top to bottom.

As you can hear, this technique mimics very well the tremolo sound of a mandolin or a balalaika!

Thumb Tremolo

On a similar vein, the thumb alone can provide a comparable tremolo, plectrum style. This can create a very convincing pick-style tremolo effect! In this example, the thumb starts playing the tremolo on the first string with an upstroke, but that is not obligatory. In other cases, it can start on a downstroke.

Exercise # 22

Thumb strumming tremolo

The musical score consists of two staves. The top staff is a standard musical notation staff with a treble clef, a 3/4 time signature, and a key signature of one sharp. It features a six-string guitar neck with note heads and vertical arrows indicating the direction of each stroke: downstrokes (downward arrow) and upstrokes (upward arrow). The bottom staff is a tablature staff for a six-string guitar, with the strings labeled T (Thick), A, and B from top to bottom. The tablature shows fingerings (e.g., 3, 4, 0, 2) and vertical lines indicating the position of each note. The music consists of three measures of sixteenth-note patterns on the first string, followed by three measures of eighth-note patterns on the first string, and finally three measures of sixteenth-note patterns on the first string again.

Contemporary Tremolo Innovators

Stepan Rak is probably the most important contemporary tremolo innovator! His music includes many different kinds of tremolos, ranging from very inventive and fiendishly difficult to downright impossible!!!

Several of his pieces involve a simultaneous tremolo on two strings achieved by using the normal RH fingering *pima*, but on the following strings; *a* and *i* on the first string and *m* on second string with *p* alternating between the bass and second string. This is sometimes combined with a third tremolo layer, created by rapidly hammering and pulling off the strings with the LH in such a way that interlocks with the RH!

He also uses a continuous *eami* pattern (with the thumb playing a similar pattern to the former technique). This is the only pattern where the little finger on the RH is used as part of the tremolo technique. His composition “Balalaika” includes many different tremolos.

The virtuoso Japanese classical guitarist **Kazuhito Yamashita** also uses various unconventional, idiomatic tremolos in his playing. Check out his recording of *Pictures at an Exhibition* for a demonstration of his unusual tremolo technique.

Tremolo Repertoire

Here is a list of as many classical guitar tremolo compositions I have been able to unearth! I'm sure that the list is not complete, but it is definitely quite effective and will keep anyone busy for a long, long time! I would like to thank **Vaggelis Sfikas, Kostas Zarkadoulas, David Oakes, David Schramm, Juan Serrano** and all the people at the Classical Guitar Mailing List and the rec.music.classical.guitar newsgroup for helping me with the compilation of this list with their posts throughout the years.

- “Recuerdos de Alhambra” by Francisco Tárrega
- “Un Sueño en la Floresta” by Agustín Barrios
- “Una Limosna por el Amor de Dios” by Agustín Barrios
- “Canción de la Hilandera” (Song of the Thread Spinner), by Augustín Barrios
- “Campanas del Alba” (Bells of the Dawn) by Eduardo Sainz de la Maza, a 20th century Spanish composer
- “Invocation et Dansa” by Joaquim Rodrigo has many tremolo passages
- “Vidalita” by Eduardo Falu
- “Nieve” by Eduardo Falu
- “Una Lagrima” by Gaspar Sagreras
- “Feste Lariane”, the third variation by Luigi Mozzani
- “Sueño” by Francisco Tárrega
- “Sueño” (Reverie) by José Viñas, adapted for classical guitar by Domingo Prat
- “Fantasía original” by José Viñas
- “Early Dawn” by Aaron Shearer
- “Tremolo (Estudio de Concierto) Op. 58” by Luis Gottchalks
- “Cry of the Guitar” by Stepan Rak
- “Hommage à Tárrega” by Stepan Rak
- “Chernobyl” by Stepan Rak
- “Balalaika” by Stepan Rak – an amazing, genuine tour-de-force of tremolo technique!
- “El Delirio” by Albert Cano
- “Merlin’s Dream” by Nikita Koshin
- “Zafra” and “Simancas” by F. Moreno-Torroba
- “Melodía” by F. Moreno-Torroba – third movement of “Pieces caractéristiques”
- “Mondnacht” (Moonlight Night), a Romantic piece composed by Bavarian guitarist-composer Heinrich Albert
- “Ave Maria” by Franz Schubert, transcribed for guitar by José de Azpiazu, This is primarily a tremolo piece, performed in an alternate tuning
- “Canto Triste” (Sad Melody) (1962) by Carmen Lenzi Tamburini
- “Study” by Richard Pick
- “Prelude #6” by Richard Pick from his work “Nine Preludes”
- “Estudio” (1931) by Manuel Ponce
- The third movement “Scherzino” “Cavatina Suite” by Alexander Tansman
- “Misionera” by Fernando Bustomonte, arranged by Jorge Morel
- “Tremolo Piece” by David Walbert
- “Variations in Tremolo from Op. 21” by Giulio Regondi
- “Sueño” by J. de las Heras
- “Chant” by Brian Head
- “Variation IV” from the movie “Excursion” by Nikos Mamangakis

“Nostalgia” by Charalambos Ekmektsoglou
“Study #12” and “Study #23” by Dimitris Fampas from his work “24 Concert Studies”
“La Catira” by Antonio Lauro
The Fourth Variation from the “Sakura Theme and Variations” by Yuquijiro Yokoh, based on a Japanese Folk Song
“Romanza” Anonymous, transcribed for tremolo by Alexander Gluklikh
“ESZTERGOMIA” by Edmund Jurkowski
“Cinema Vals No. 1” by Evangelos Boudounis
“Melancolia” by Nikos Piperis
“Study No. 25” by Isaias Sávio
“Theme and Variations” by Giannis Fakides
“Lament in Tremolo Form” by Laurindo Almeida
“Panorama” by Mario Parodi
“Tema e Studio di Concerto” by S. Thalberg, transcribed by Tárrega
“Study No. 25” by Isaac Savio
“Notturno-Reverie Op. 19” by Giulio Regondi
“Prière” by Italian guitarist-composer Luigi Mozzani
“Trillo-Tremolo” by the Italian guitarist-composer Benvenuto Terzi
“Mondnacht” (“Moonlight Night”) by Bavarian guitarist-composer Heinrich Albert

Flamenco Tremolo Repertoire

Moving to flamenco tremolo, things are a little more obscure... There are very few complete flamenco tremolo compositions! There is "Nana" by the great concert guitarist **Mario Escudero** and the totally amazing *Rondena* "Oracion" by the extraordinary flamenco master **Manolo Sanlucar** is mostly tremolo... On the other hand, most flamenco guitar compositions based on the forms of Granadinas, Rondenas, Malagueñas, Soleares, Faruccas, Mineras, Tarantas, Zambras and even a few Alegrias, include a substantial amount of tremolo!

Therefore, I will list a few flamenco compositions that I believe merit special consideration. These pieces include some very interesting flamenco tremolos, even if the tremolo technique makes up only part of the whole composition.

- "Fuente y Caudal" by Paco de Lucía
- "Farucca de Lucía" by Paco de Lucía – in my opinion, one of the most beautiful tremolo melodies ever!
- "Delicada" by Sabicas
- "Elegía" by Manolo Sanlucar
- "Sierra Bermeja" by Enrique Melchor
- "Olé mi Cadiz" by Sabicas
- "Callejón de la Luna" by Vicente Amigo
- "Ensueño" by Juan Serrano
- "Barrio la Viña" by Paco de Lucía
- "Alcala" by Rafael Riqueni
- "Mi Inspiración" by Paco de Lucía
- "Buscando Amores" by Manolo Franco
- "Punta y Tacon" by Sabicas
- "Falseta a Bordón" by Mario Escudero
- "La Cartuja" by Gerardo Nuñez
- "Salobre" by Paco Pena
- "Malagueña de Lecuona" by Sabicas
- "Alameda Vieja" by Moraito
- "Cueva del Gato" by Paco de Lucía
- "Sierra del Agua" by Vicente Amigo
- "Recuerdos" by Manolo Franco
- "Zurraque" by Quique Paredes
- "Solea, Un Son Eterno" by Gerardo Nuñez
- "Gloria al Niño Ricardo" by Paco de Lucía
- "Candil Minero" by Enrique Melchor
- "Profundidades" by Rafael Riqueni
- "Tío Sabas" by Paco de Lucía
- "Villa Rosa" by Rafael Riqueni

If you have not already done so, I strongly suggest checking out Juan Serrano's books, CDs and video-tapes available through Mel Bay Publications. You will find a wealth of traditional flamenco tremolos included in these instructional materials.

If you would like to learn even more traditional flamenco tremolos, check out Juan Martín's book+CD+DVD sets, also available from Mel Bay Publications.

For a more contemporary approach I would suggest the numerous publications by Oscar Herrero, once again available from Mel Bay Publications.

Segovia and the Tremolo Technique

The great Spanish classical guitarist **Andres Segovia** is considered the father of the classical guitar. In his own playing, he used a different, somewhat easier pattern for the tremolo pieces he performed. He chose the pattern *pimi!* **Ruggero Chiesa**, one of the former Segovia's pupils at the Accademia Chigiana in Sienna during the 1950's, as well as the great classical guitarist **Carlos Barbosa Lima** verified Segovia's use of *pimi* tremolo. After finding out this fact, I spent a fair amount of time practicing this tremolo pattern. My conclusion is that it seems to offer a more complete dynamic control, as well as increased rhythmical accuracy and a uniform sound.

This is a very easy pattern to learn: if you have been playing classical guitar for a fair number of years, it will only take you a few minutes before you achieve satisfactory results! There seem to be two trouble spots: **endurance** and **speed**. To develop your endurance, gradually increase the continuous playing time of the pattern until you can play a complete tremolo piece using it. To develop speed, judiciously use your metronome and do not rush before you are ready!

Nail Talk

The length, shape and strength of the guitarist's nails are of paramount importance to his sound. Especially with the tremolo technique, I've observed that the condition of the performer's nails makes a significant difference in his/her ability to create a pleasant, captivating sound.

The following advice has been compiled, once again, from a variety of sources. Keep in mind, however, that you should DEFINITELY experiment with finding the solution that produces the best results for your own hands!

Nail Noise and Planting

As far as nail noise is concerned, this is a problem that torments even the best classical and flamenco guitarists! A particularly helpful solution is to use the "planting" technique. Here's a detailed explanation, based on an example by Scott Tennant:

Before each tremolo note is played, first touch the string with the RH finger in such a way that the flesh dampens the string's vibration. Do not play at this point. With the finger in contact by flesh only, press downward lightly and engage the fingernail. The damping and subsequent nail engagement happens so quickly that it is almost simultaneous. Now play the note. Repeat the process with the next finger, and the next. The coordination required to avoid nail noise at high speeds is very delicate, so this approach must be practiced slowly and with strict adherence to avoiding initial nail contact and to appropriate damping. If practiced slowly enough, after a few weeks, the nail noise will disappear.

Nail Length

Here is a piece of advice that will have some classical guitar purists outraged! I suggest keeping the RH **nails fairly short** - they should extend only slightly beyond the end of the fingertips. This provides more flesh surface area to damp the string with. Longer nails make damping much more difficult. While it seems that longer nails produce a brighter and more definite tone, in most cases, the "clicking" sound plagues those who use them.

The best solution seems to be to grow your nails to the point where you can effectively dampen the strings and still get a clear tone. If you're clicking a lot during tremolo, your nails are probably too long! On the other hand, if your nails are too short the tone produced is not clear! If you're experiencing drag from flesh contact, then you're making too much or incorrect flesh contact, or the nails are WAY too short. There's definitely a line that can be crossed either way, and via observation and experience you can find what gives the best results. Contrary to popular belief, some of the best classical guitarists (John Williams, Manuel Barrueco, etc.) use short nails in their playing!

Bibliography

It is impossible to provide a complete breakdown of all the sources that provided me with all the information included in this book. However, I will try to note the most important books and publications I studied during my research for this educational project.

- *Classical Guitar Pedagogy* by Anthony Glise
- *Kitharologus* by Ricardo Iznaola
- *Pumping Nylon* by Scott Tennant
- *The Christopher Parkening Guitar Method* by Christopher Parkening
- *Guitar Lessons Books 1-6* by Julio Sagreras
- *L'Arte de la Manno Destra* by Mauro Storti
- *Guitar Book No. 3* by Evangelos Asimakopoulos
- *The Guitar* by Michael Stimpson
- *Classical Guitar Answer Book* by Sharon Isbin
- *Learning the Classic Guitar* by Aaron Shearer
- *The Guitarist's Complete Technique Kit* by Bryan Townsend
- *Guitar Tremolo and How to Achieve It* by Sophocles Pappas
- *The Guitar Technique* by Evangelos Boudounis
- *Classical Guitar Lessons* by Charalambos Ekmektsoglou
- *Flamenco Guitar Basic Techniques* by Juan Serrano
- *El Arte Flamenco de la Guitarra* by Juan Martin

A significant amount of material was assembled from the recorded transcriptions of hundreds master-classes I have attended throughout the years.

Acknowledgements

There are numerous people that I would like to thank, without the help and support of whom, I would never have been able to achieve my personal and professional goals. The greatest thanks go to my parents, Efthalia and Konstantinos Anastassakis, for their continuous and multi-faceted support throughout all my years of study.

Very special thanks to my most important teacher and mentor Juan Serrano, the first person to actively encourage me to write.

To my grandparents Konstantinos and Maria Anassis who instilled in me a deep appreciation of ethnic music from a very young age.

To Stephen Rekas for his informed (and very necessary) editing.

I would be unforgivably remiss if I neglected to sincerely thank my teachers, Stelios Karaminas and David Oakes.

For his invaluable professional help, many sincere thanks to David Grimes.

For all the years of inspiration, I am forever indebted to the great flamenco masters Paco de Lucía, Juan Martín, Paco Peña, Vicente Amigo, Gerardo Nuñez, and Sabicas.

To my good friends and colleagues Sokratis Mastrodimos and Theodosis Temzelides for proofreading everything and catching (hopefully all) my mistakes.

Conclusion

Well, this effectively concludes this book! I hope you enjoyed reading it and practicing the various tremolo patterns outlined in it as much as I enjoyed writing and researching it.

As I mentioned in the introduction, the tremolo is a technique that seems to transcend the physical limitations of the guitar. In my opinion, it is a highly rewarding technique and it is definitely worth a significant amount of devoted study.

Let me once again repeat that you should be very careful when practicing the more advanced sections of this book. If you feel any pain or discomfort, stop and take a break!

As a shameless plug, if you enjoyed this book, make sure to check out my first flamenco book, available from Mel Bay Publications, titled *The Art of Rasgueado* (MB98405). It follows a very similar format to the book you are now holding, but deals exhaustively with the **rasgueado** technique and all its permutations in both flamenco and classical guitar. It covers over 80 different rasgueado patterns, plus the flamenco technique of *golpe* and includes an extended chapter devoted to playing the Rumba rhythm, as popularized by The Gypsy Kings, Ottmar Liebert, Oscar Lopez and Jesse Cook.

Finally, for those of you in perpetual search of new flamenco repertoire my latest Flamenco Book/DVD, available from Mel Bay Publications, titled *Flamenco Journal* (MB20925DP) includes over 140 pages of original compositions for solo flamenco guitar. The book comes with an instructional DVD that clearly demonstrates and explains all the flamenco specific techniques and rasgueado patterns used in the compositions, as well as complete studio recordings of all compositions.

If you have any comments, suggestions or questions, feel free to email me at ioannis@ioannis.org. And while you are at it, check out my website at www.ioannis.org and my Myspace profile at www.myspace.com/ioannisanastassakis.

Best wishes,
Ioannis Anastassakis
Athens, Greece

Bonus
Flamenco
Tremolo Parts

Soleares

1 V

cIV

p i a m i p i a m i p i a m i....

3 V

cIV

5

7

2

CV

9

T A B

5 5 8 8 7 7 5 5 7 7 7 8 8 5 5 8 8 7 7 5 5 7 7 7 8 8

5 5 5 5 5 5

0

6

11

T A B

5 5 8 8 7 7 5 5 7 7 7 8 8 5 5 5 5 5 5 5 5 5 5 5 5

5 5 5 5 5 5

5

4

CV

13

T A B

8 8 7 7 5 5 8 8 7 7 7 5 5 8 8 7 7 5 5 8 8 7 7 7 5 5

5 5 5 5 5 5

0

6

CII

15

T A B

8 8 7 7 5 5 8 8 7 7 7 5 5 2 2 2 2 2 2 2 2 2 2 2 2

5 5 5 4 2 3

Cl



A guitar tablature for measure 17. It shows six horizontal lines representing the strings. Above the first string is the letter 'T' and below it 'TAB'. The tab shows a sequence of notes with stroke counts: 1-1-1-1, 3-3-1-1, 1-3-3-1-1, 0-0-0-0, 1-1-0-0, 0-1-1-0-0. The tab also includes vertical bar markers and a '0' at the end of the measure.

A musical staff for a wind instrument (Cl) and a guitar tablature. The staff shows a treble clef, a key signature of one sharp, and a common time signature. The tablature shows six strings with note heads and stroke counts (e.g., 1, 2, 3, 4). Measures 19 consists of six groups of eighth-note pairs, each starting with a vertical bar and ending with a vertical bar.

A guitar tablature for measure 19. It shows six horizontal lines representing the strings. Above the first string is the letter 'T' and below it 'TAB'. The tab shows a sequence of notes with stroke counts: 1-1-1-1, 3-3-4-4, 3-3-3-1-3-1, 0-0-0-0, 1-1-0-0, 0-1-1-0-0. The tab also includes vertical bar markers and a '0' at the end of the measure.

Farruca

3

The sheet music consists of six staves, each with a treble clef and a 4/4 time signature.

- Staff 1:** Shows a continuous eighth-note pattern on the top string (T). Below the staff, the lyrics "p i a m i p i a m i p i a m i p i a m i" are written.
- Staff 2:** Shows a continuous eighth-note pattern on the top string (T). Below the staff, the tablature shows fingerings: 1-1-1-1, 0-0-1-1, 2-0-0-1-1, 3-3-1-1, 0-0-0-0, 0-0-0-0, 0-0-0-0, 1-0-0-0-0.
- Staff 3:** Labeled with a 'V'. Shows a sixteenth-note pattern on the top string (T). Fingerings: ①, ②, ③, ④, ⑤, ⑥.
- Staff 4:** Shows a continuous eighth-note pattern on the top string (T). Below the staff, the tablature shows fingerings: 5-5-5-5, 5-5-5-5, 6-4-4-5-5, 7-7-5-5, 0-0-0-0, 0-0-0-0, 0-0-0-0, 1-0-0-0-0.
- Staff 5:** Labeled with a 'V'. Shows a sixteenth-note pattern on the top string (T). Fingerings: ①, ②, ③, ④, ⑤, ⑥.
- Staff 6:** Shows a continuous eighth-note pattern on the top string (T). Below the staff, the tablature shows fingerings: 5-5-5-5, 5-5-5-5, 6-4-4-5-5, 7-7-5-5, 4-4-4-4, 4-4-4-4, 4-4-4-4, 3-4-4-4-4.
- Staff 7:** Labeled with a 'VII'. Shows a sixteenth-note pattern on the top string (T). Fingerings: ①, ②, ③, ④, ⑤.
- Staff 8:** Labeled with a 'CV'. Shows a continuous eighth-note pattern on the top string (T). Below the staff, the tablature shows fingerings: 7-7-7-7, 7-7-7-7, 8-8-7-7, 0-8-8-7-7, 5-5-5-5, 5-5-5-5, 5-5-5-5, 5-5-5-5.

V

9

T 5-5-5-5 7-7-5-5 6 7-7-5-5
A 0 7 7
B 0

V

11

T 5-5-5-5 7-7-5-5 6 7-7-8-8 7-7-5-5
A 0 7 7
B 0

III

VI

CII

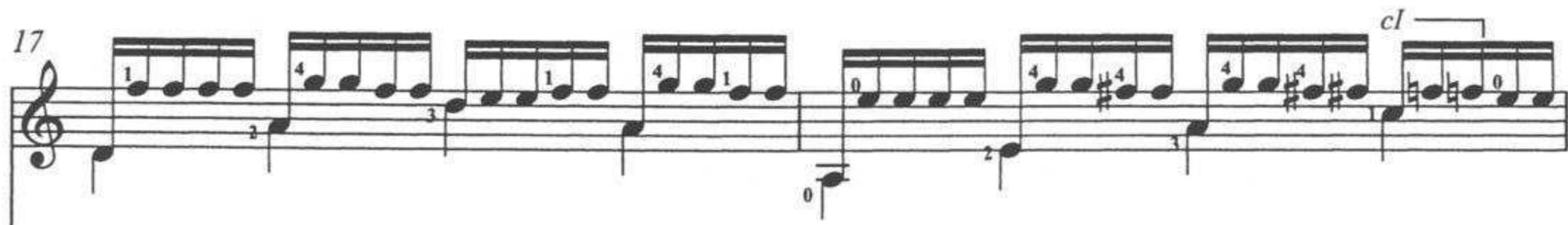
13

T 4-4-4-4 4-4-4-4 7-7-7-7 6 7-7-7-7
A 3 7
B 0

I

15

T 1-1-1-1 3-3-1-1 3-3-1-1 3-3-1-1
A 2 3 2
B 0



cI

VII X cV

19

cX

21

cX

cV

23

cVII

25

cV

cIV

27

cl

29

31

p

Malagueña

4

Variation

3

p i p i p i p i p i

T 3 2 1 0 0 1 0 0 1
A 4 2 1 0 0 1 0 0 1
B

3

p i p i p i p i p i

T 3 0 1 0 0 0 0 0 0
A 2 0 1 0 0 0 0 0 0
B

5

p m i p m i p m i p m i

T 2 3 1 0 0 0 1 0 0 1
A 2 0 1 0 0 0 1 0 0 1
B

7

p m i p m i p m i p m i

T 3 0 0 1 0 0 0 0 0 3
A 3 0 0 1 0 0 0 0 0 3
B

9

p a m i p a m i p a m i p a m i p a m i p a m i p a m i

T
A
B

0-0-0 1 0-0-0 1 0-0-0 1

11

p a m i p a m i p a m i p a m i p a m i p a m i p a m i p a m i

T
A
B

0-0-0 0-0-0 1-0-0-0 3-0-0-0 5-0-0-0 6-0-0-0

13

p i a m i p i a m i p i a m i p i a m i p i a m i p i a m i p i a m i

T
A
B

0-0-0-0 1-0-0-0-0 0-0-0-0 1-0-0-0-0 0-0-0-0 1-0-0-0-0

15

p i a m i p i a m i p i a m i p i a m i p i a m i p i a m i p i a m i

T
A
B

0-0-0-0 1-0-0-0-0 0-0-0-0 2-0-0-0-0 0-0-0-0 3-0-0-0-0

5

CIV

17

p i a m i p i a m i p i a m i

T A B

CV

19

T A B

CVII

21

T A B

CIV

23

T A B

25

TAB

cV(3) —————

27

TAB

29

TAB

31

TAB

Granadinas

6

Treble staff lyrics: *p i a m i p i a m i....*

3

5

7

9

Musical staff: Treble clef, 4/4 time, key signature of one sharp. Notes: eighth note (2), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1).

TAB: Six horizontal strings. Fret positions: 1, 0, 0, 1, 1, 0 | 0, 0, 1, 1, 3, 3, 1, 1, 0, 0, 1, 1, 0, 0, 0, 0.

Musical staff: Treble clef, 4/4 time, key signature of one sharp. Notes: eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1).

TAB: Six horizontal strings. Fret positions: 1, 1, 1, 1, 0, 0, 0, 1, 1, 0 | 0, 0, 1, 1, 3, 3, 1, 1, 0, 0, 1, 1, 0, 0, 0, 0.

11

Musical staff: Treble clef, 4/4 time, key signature of one sharp. Notes: eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1).

TAB: Six horizontal strings. Fret positions: 1, 1, 1, 1, 1, 1, 1, 1, 2 | 1, 1, 1, 1, 1, 1, 1, 1, 2.

Musical staff: Treble clef, 4/4 time, key signature of one sharp. Notes: eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1).

TAB: Six horizontal strings. Fret positions: 3, 3, 3, 3, 0, 2, 2, 3, 3, 0 | 2, 2, 3, 3, 5, 5, 5, 5, 3, 3, 2, 2, 0, 3, 3, 0, 0.

13

Musical staff: Treble clef, 4/4 time, key signature of one sharp. Notes: eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1).

TAB: Six horizontal strings. Fret positions: 3, 3, 3, 3, 0, 2, 2, 3, 3, 0 | 2, 2, 3, 3, 5, 5, 5, 5, 3, 3, 2, 2, 0, 3, 3, 0, 0.

Musical staff: Treble clef, 4/4 time, key signature of one sharp. Notes: eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1).

TAB: Six horizontal strings. Fret positions: 2, 2, 2, 2, 1, 2, 2, 3, 3, 2 | 2, 2, 0, 0, 2, 2, 2, 2, 1, 2, 2, 2, 2, 2.

15

Musical staff: Treble clef, 4/4 time, key signature of one sharp. Notes: eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1), eighth note (sharp), sixteenth note pairs (1).

TAB: Six horizontal strings. Fret positions: 2, 2, 2, 2, 1, 2, 2, 3, 3, 2 | 2, 2, 0, 0, 2, 2, 2, 2, 1, 2, 2, 2, 2, 2.

17

TAB
A
B

TAB
A
B

19

TAB
A
B

TAB
A
B

21

TAB
A
B

TAB
A
B

23

TAB
A
B

TAB
A
B

25

p m i

TAB

27

TAB

29

TAB

31

TAB

33

ff

T 3-3-3-3 3-3-2-2 0 3-3-5-5 3-3-2-2 3-3-2-2 0
A 0 0
B 3 3

35

p

T 2-2-2-2 2-2-3-3 2-2-0-0 2-2-2-2 2-2-2-2 2-2-2-2 2-2-2-2
A 1 2 1 2
B 2 2 2 2

7

38

Sheet music and tablature for guitar part 7, measures 38-44. The music is in 3/4 time with a treble clef. The tablature shows the strings T (Top), A, and B. The notation includes sixteenth-note patterns and specific fingerings (e.g., 1, 2, 3, 4) indicated by numbers above or below the notes.

40

42

44

Cl

46

p i a m

T
A
B

Cl

48

p i a m

T
A
B

50

p i a m

T
A
B

52

p i a m

T
A
B

54

TAB

B 3

3 3 3 3 3 3 2 2 0 3 3 5 5 3 3 3 3 3 3 2 2 0 3 3 0 0

56

TAB

B 2 2 2 2 2 2 3 3 2 2 0 0 2 2 2 2 2 2 3 3 2 2 0 0

58

TAB

B 3 3 3 3 3 3 2 2 0 3 3 5 5 3 3 3 3 3 3 2 2 0 3 3 3 3

60

TAB

B 0 3 3 3 3 3 3 2 2 1 3 3 2 2 3 3 3 3 3 3 2 2 1 3 3 0 0

62

64

About the Author

Born in the Greek island of Crete, Ioannis Anastassakis studied at the Greek National Conservatory and the Nakas Conservatory in Athens. He completed his Bachelor's degree at the American College of Greece, and subsequently studied at the distinguished Musicians Institute (GIT), where he was hired as an instructor, after graduating at the top 1% of his class. He continued his graduate studies in music, specializing in Solo Flamenco Guitar, under the tutelage of Juan Serrano at the California State University, completing an MA in Guitar Performance, graduating *Magna cum Laude*.

Ioannis studied for several years with Juan Serrano. In addition, he has studied with flamenco guitar legends Manolo Sanlucar, Juan Martín, Paco Serrano, José Antonio Rodriguez and Manolo Franco.

Ioannis' teachers in electric guitar are no less impressive; the list reads like a "Who's Who" of contemporary electric guitar legends: Steve Vai (*Whitesnake*), Vinnie Moore (*UFO*), Marty Friedman (*Megadeth*), John Petrucci (*Dream Theater*), Frank Gambale (*Chick Corea*), Paul Gilbert (*Mr. Big*), Richie Kotzen, Brett Garsed, Joey Tafolla, Scott Henderson, Mike Stern, Jean Marc Belkadi, Darren Householder, Tommy Tedesco, Ted Greene, Ron Eschete, Sid Jacobs and Joe Diorio.

Ioannis has also performed and/or recorded in various settings with band members of *Whitesnake*, *Dio*, *Deep Purple*, *Ozzy Osbourne*, *Elton John*, *Santana*, *Celine Dion*, *Sara Vaughan*, *Tito Puente*, *Julio Iglesias*, *Tower of Power*, *Chick Corea Electric Band*, *Jeff Beck*, *Steve Vai Band*, *Badlands*, *Santana*, *Tribal Tech*, *Natalie Cole*, *Joe Cocker*, *Cher*, *Blood Sweat & Tears* and more.

Ioannis has presented over 350 solo recitals in Europe and the United States and has been a guest lecturer at several American colleges and Universities (*University of Southern California*, *California State University Northridge*, *California State University Fresno*, *California State University Fullerton*, *Musicians Institute*, *Fresno City College*, *American College of Greece*). In addition, he has won classical and flamenco guitar competitions and has been featured numerous times on European and American TV. In December 2000, he was the first guitarist ever to present a solo guitar recital at the Greek National Opera House.

In Greece, Ioannis has served as principal instructor at the most prominent International Guitar Festival, including those in Hermoupolis, Volos, Patras, Paros, and Porto Heli. Ioannis is also a registered guitar instructor with the London College of Music and Thames Valley University, as well as LA's Guitar Institute of Technology (GIT).

Ioannis' first solo flamenco guitar CD, *Flamenco Live at Ioannina*, was released by MP3.com on August 2000 and immediately entered the company's flamenco category Top 10 chart, eventually reaching the #1 place worldwide on October 2002. The CD was re-mastered and re-released by Wild Rose Angel Productions in 2004. Ioannis' second and third solo flamenco guitar CDs, *Traditional Flamenco Guitar Selections, Vol. 1* and *Vol. 2* are scheduled to be released by Wild Rose Angel Productions in 2007 and 2008 respectively.

Ioannis' first instrumental rock/fusion electric guitar CD, *Suspension of Disbelief*, was released by Wild Rose Angel Productions in 2007. Within 3 weeks its worldwide sales soared to the top 5 on the highly regarded *Guitar9.com* website!!

Ioannis' instructional materials are published and distributed worldwide by Mel Bay Publications. His instructional books *The Art of Rasgueado* and the instructional book/DVD *Flamenco Journal* both achieved best-seller status within months of their initial publication date.

He is also a regular columnist in Mel Bay's *Guitar Sessions* magazine, specializing in articles on flamenco guitar technique and advanced modern electric guitar technique.



Ioannis is currently (2008) sponsored by La Bella Flamenco Guitar Strings, ELIXIR Electric Guitar Strings, Carvin Custom Shop Guitars, T-rex Effect pedals and GeorgeL studio cables.

Presently, Ioannis Anastassakis teaches music at the American College of Greece and maintains a busy private teaching schedule. Furthermore, he divides his time between recording, writing instructional materials for guitar, conducting clinics and seminars and presenting flamenco guitar recitals around the world. He is currently recording his second solo flamenco guitar CD and his second instrumental rock/fusion electric guitar CD and preparing an extensive series of instructional materials for Mel Bay Publications.

For the latest up-to-date information about Ioannis Anastassakis, as well as an always-expanding selection of audio clips, video files, book samples, instructional materials, latest news and much more, please visit the Official Ioannis Anastassakis WWW site at www.ioannis.org and the Ioannis Anastassakis Myspace Profile at www.myspace.com/ioannisanastassakis

Personal Contact:

Ioannis Anastassakis - Email: info@ioannis.org

Management Info:

Wild Rose Angel Productions

WWW: www.wildroseangelproductions.com

Email: info@wildroseangelproductions.com

Mel Bay's Other Study Books

- Classics for Flatpicking Guitar (98056BCD)
Complete Book of Guitar Chords, Scales and Arpeggios (94792)
Deluxe Encyclopedia of Guitar Chords (93283)
Deluxe Guitar Position Studies (93320)
Deluxe Guitar Scale Book (93282)
Easiest Guitar Theory Book (94674)
Flatpicking Gospel Tunes (98589BCD)
Folio of Graded Guitar Solos Volume 1 (93217)
Fretboard Basics for Guitar (99315BCD)
Gig Savers: Killer Technique - For Serious Players (20028)
Great Guitar Picking Tunes (98054BCD)
Guide to Guitar Chord Progressions (97169)
Guitar Daily Practice Handbook (94135BCD)
Guitar Studies - Grade 1 (94051)
Guitar Studies - Grade 2 (94052)
Guitar Technic (93225)
Guitar Theory Chart (20533)
Guitar Warm-Up Studies and Solos (98592BCD)
Jazz Guitar Chord Chart (20167)
Six Essential Fingerings for the Jazz Guitarist (20001)
Tunes for Guitar Technique (98590BCD)
Understanding Guitar Chords (96932)

MEL BAY PUBLICATIONS, INC., #4 Industrial Dr., Pacific, MO 63069

*Visit us on the World Wide Web for: Complete product listing, Monthly Hot List
New Releases, Free on-line Guitar Sessions and Creative Keyboard Webzines
and Music Freebies at www.melbay.com • email us at email@melbay.com*

Toll Free 1-800-8-MEL BAY (1-800-863-5229) • Fax (636) 257-5062

All Mel Bay products available from your favorite Music Retailer



www.melbay.com



ISBN 978-078660770-9

\$19.99

5 1999



9 780786 607709

MB20394
\$19.99 USD

UPC



7 96279-03668 9