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SISTEMA  
DE  
ESCALAS BASICAS  
PARA  
VIOLONCELLO

(Versión en español - English version - Deutsche Fassung)

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Editorial BOILEAU - Barcelona

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# SISTEMA DE ESCALAS BASICAS PARA VIOLONCELO

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## INTRODUCCION

El estudio de escalas y arpegios es de capital importancia en el aprendizaje de cualquier instrumento, ya que ambos constituyen el armazón del sistema musical tonal.

La experiencia fruto de mi actividad docente me ha enseñado que a menudo las escalas se vienen estudiando de manera esporádica y poco sistemática en lo referente a digitaciones, arcos y articulaciones.

Este volumen ofrece una recopilación de escalas simples, de dobles cuerdas y arpegios a lo largo de todas las tonalidades y pretende servir de ayuda tanto a alumnos como a profesores en la realización sistemática de su estudio a fin de conocer más rápida y profundamente la "geografía" del violoncelo.

Para el uso de este volumen resulta muy recomendable prestar atención a los numerosos ejemplos prácticos de los capítulos números 1 y 2 y, según el nivel del ejecutante, aplicarlos a todas las escalas. En todas ellas, el autor hace uso de sistemas de digitación válidos para todas las tonalidades. Es necesario estudiar también las digitaciones alternativas consignadas en parte en las propias notas y en parte al final de algunos párrafos (ver Pág. 39).

No es mi intención criticar libros de escalas de otros autores, ya que siempre que se considere conveniente deben ser éstos también aplicados a los estudios y por esto el contenido de este volumen revela muchas similitudes con otras obras publicadas.

Finalmente quisiera recordar que los estudios de escalas deben ser complementados por ejercicios para las manos izquierda y derecha. Las obras de autores como Klengel, Feuillard, Sarker, Tortellier son de obligado conocimiento para todo violoncelista.

Quisiera aprovechar esta ocasión para manifestar mi gratitud a Margarita Kirchner y Adam Glubinsky, cuya colaboración en la realización de este volumen me fue de gran ayuda.

PETER THIEMANN

Barcelona, Julio de 1989

## VORWORT

Das Studium von Tonleitern und Arpeggien hat für die Erlernung eines jeden Instrumentes zentrale Bedeutung, bilden sie doch das Gerüst des tonalen Musiksystems. Erfahrungen während meiner Lehrtätigkeit haben gezeigt, daß Tonleitem oft nur sporadisch und in Bezug auf Fingersätze, Bogenstriche und Artikulationen meist unsystematisch geübt wurden.

In diesem Band wird eine Zusammenstellung von Tonleitem, Arpeggien und Doppelgrifftonleitem durch alle Tonarten vorgelegt. Sie soll Schülern wie Lehrern eine Hilfe sein, Tonleiterstudien systematisch zu betreiben, um die "Geographie" des Cellos schneller und profunder zu erlernen.

Zur Benutzung dieses Bandes ist dringend empfohlen, die vielen Ausführungsbeispiele der Kapitel 1 und 2 zu beachten und je nach Spielfähigkeit auf alle Tonleitem anzuwenden. Bei allen Tonleitem folgt der Verfasser Fingersatzsystemen, die für alle Tonarten gleichsam gültig sind. Es ist notwendig, die alternativen Fingersätze, die teils in den Noten selbst, teils am Ende eines Paragraphen (vgl. S.39) notiert sind, ebenso zu studieren.

Es ist nicht meine Aufgabe, Tonleiterbände anderer Autoren zu kritisieren. Wo es sinnvoll erscheint, sollten auch sie zum Studium herangezogen werden. Es versteht sich, daß viele Ähnlichkeiten zu anderen Publikationen im Wesen des Inhalts liegen.

Es sei schließlich darauf hingewiesen, daß das tägliche Tonleiterstudium unbedingt von Übungen für die linke und rechte Hand ergänzt werden muß. Veröffentlichungen von Autoren wie Klengel, Feuillard, Starker, Tortellier sind unerlässlich für jeden Cellisten.

An dieser Stelle möchte ich meinen Dank an Margarita Kirchner und Adam Glubinsky ausdrücken, deren Mitarbeit bei der Realisierung dieses Bandes von großer Hilfe war.

PETER THIEMANN  
Barcelona, Juli 1989

## PREFACE

*The practise of scales and arpeggios is of vital importance for any musical training since it forms the base for the whole tonal system. I have noticed through my teaching experience that the practise of scales is often done only sporadically and with regard to fingerings, bowings and articulations generally unsystematically. In this volume you will find a compilation of scales, arpeggios and scales of double stops in all keys. The idea is to help students and teachers alike to practise scales more systematically in order to acquire a more speedy and profound knowledge of the "geography" of the Cello.*

*While using this volume it is strongly advised to always refer to the many examples in executions of chapter 1 and 2 and to use them for all scales according to the players ability. I have used fingerings which are applicable in all keys. However, it is necessary to practise any alternative fingerings which are either marked in the music or at the end of the paragraph (e.g. P.39)*

*It is not my task to criticize publications of any other authors. They can be consulted and used at any time when it seems useful. It is self-explanatory that many similarities have their base in the same subject matter.*

*Finally it should be noted that any daily practise of scales must necessarily be accompanied by exercises for the left and right hand. Publications of Julius Klengel, Feuillard, Tortellier, Starker are highly recommendable.*

*My sincerest thanks go to Margarita Kirchner and Adam Glubinsky whose support in the realization of this volume was of invaluable help.*

PETER THIEMANN  
Barcelona, July 1989

***Chapter 1*****Capítulo 1****Kapitel 1**

Formas básicas de los ritmos, arcos y articulaciones

*Basic rhythms, bowings and articulations*

Grundformen von Rhythmen, Bogenstrichen und Artikulationen

Los ritmos básicos (velocidades)

**A***Basic rhythms (speed)*

Grundrhythmen (Geschwindigkeiten)



Los arcos básicos

**B***Basic bowings*

Grandbogenstriche



Es recomendable estudiar en primer lugar con este arco todas las formas de escalas. La repetición de notas posibilita el buen control de la afinación, del manejo del arco, de los cambios de posiciones, del vibrato regular y del sonido, pues con ella se evita el cambio simultáneo de arco y dedo.

*It is advised to first practise all kinds of scales with this bowing. The repetition of each note enables a good control of intonation, bow control, shifts, even vibrato and sound because any simultaneous bow and finger change is avoided.*

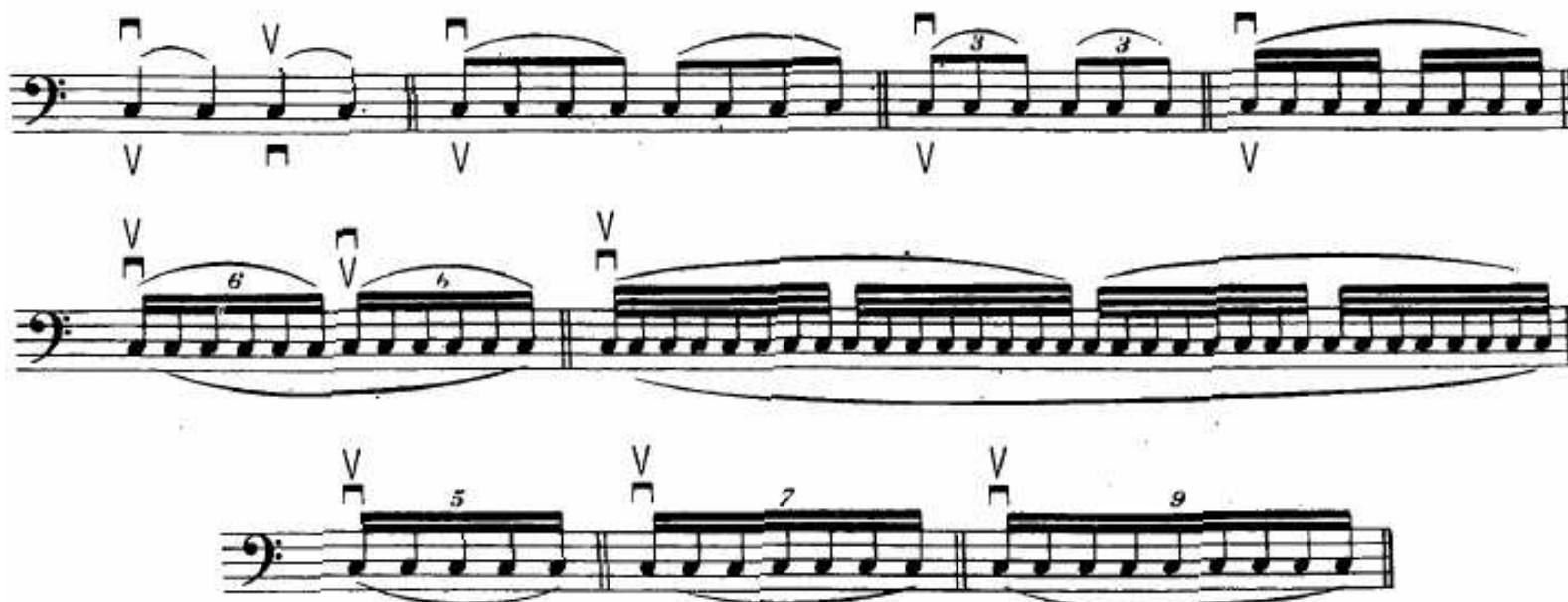
Es empfiehlt sich, alle Formen von Tonleitern zunächst mit diesem Bogenstrich zu üben. Die Wiederholung jeder Note ermöglicht eine gute Kontrolle der Intonation, der Bogenführung, der Lagenwechsel, des gleichmäßigen Vibratos und Klanges, da der gleichzeitige Wechsel von Bogen und Finger vermieden wird.



*This bowing should be practised at all speeds of paragraph A.*

Este arco se debe estudiar en todas las velocidades del punto A

Dieser Bogenstrich sollte in allen Geschwindigkeiten des Paragraphen A geübt werden.



## C

## Articulaciones básicas de los arcos

*Basic bowing articulations*

I

*Grundartikulationen der Bogenstriche*

tenuto - arco largo a la cuerda  
*sustained bow on the string*  
 breiter Strich an der Saite



staccatto - arco corto a la cuerda  
*short bow on the string*  
 kurzer Strich an der Saite



portato - arco largo con separaciones  
*sustained bow with short separations*  
 breiter Strich mit kurzen Separationen



spiccato - hacer saltar el arco activamente desde la cuerda  
*manually activated bouncing bow*  
 kurzer, aktiu von der Saite geworfenes Strich



sautillé - el saltar prácticamente automático desde la cuerda  
*light, "quasi automatic", bouncing bow*  
 Springbogen von der Saite

D Para conseguir velocidad del arco y una buena coordinación entre las manos izquierda y derecha se debe estudiar las escalas con repeticiones de notas con aumento gradual de la velocidad.

*To achieve bow speed and a good coordination of left and right hand scales should be practised with note repetitions by gradually increasing speed.*

Um Bogengeschwindigkeit und eine gute Koordination zwischen linker und rechter Hand zu erreichen, sollten die Tonleitern mit Tonwiederholungen bei graduell steigender Geschwindigkeit geübt werden.

## Capítulo 2

### Chapter 2

5

### Kapitel 2

Ejemplos de arcos y ritmos y sus combinaciones para su aplicación en el estudio diario de las escalas.

*Patterns for bowings, rhythms and their combinations for the application in daily practise.*

Beispiele von Bogenstrichen, Rhythmen und ihren Kombinationen zur Anwendung im täglichen Tonleiterstudium.

#### Arcos

A

#### Bowings

Sheet music for Chapter 2, Part A, showing bowing patterns. The music is in bass clef and common time. It consists of two staves of eight measures each, divided by a vertical bar line. Measures 1 through 7 show various bowing patterns with 'V' and 'N' strokes. Measures 8 through 11 show more complex patterns with 'V', 'N', and '3' strokes. Measure 12 is labeled 'etc.' Below the staff. The title 'Bowings' is at the top left, and 'Arcos' is centered above the staff.

#### Bogenstriche

B

#### Bowings with rhythmic combinations

#### Bogenstriche mit rhythmischen Kombinationen

Sheet music for Chapter 2, Part B, showing bowing patterns with rhythmic combinations. The music is in bass clef and common time. It consists of two staves of eight measures each, divided by a vertical bar line. Measures 12 through 15 show various bowing patterns with 'V' and 'N' strokes. Measures 16 through 19 show more complex patterns with 'V', 'N', and '3' strokes. Measures 20 through 23 show patterns with 'V', 'N', and '3' strokes. Measures 24 through 27 show patterns with 'V', 'N', and '3' strokes. Measure 28 is labeled 'etc.' Below the staff. The title 'Bowings with rhythmic combinations' is at the top left, and 'Arcos con combinaciones ritmicas' is centered above the staff.

# Capítulo 3

## *Chapter 3*

## *Kapitel 3*

Escalas, arpegios y tercera de la primera posición

*Scales, arpeggios and thirds of the first position*

Tonleitern, Arpeggien und Terzen in der ersten Lage

I

Do

la

Sol

mi

Fa

re

Re

si

Sib

sol

The image shows a musical score for a bassoon or cello, featuring ten staves of music. Each staff begins with a note name (La, fa, Mi, do, La, Sol, mi, Fa, re, Re) and a clef (Bass clef). The music consists of eighth-note patterns representing arpeggios. Above the first five staves, the word "Arpeggios" is written, and above the last five staves, the word "Arpeggien" is written. The notes are numbered 0 through 4 above each staff, indicating fingerings for the player.

La      1      2      4      0      1      2      4      0      1      2      4

fa      4      1      1      2      4      0      1      2      1      0      4      2      1      4

Mi      0      4      0      1      2      4      0      1      0

do      0      1      2      4      0      1      2      4

Arpeggios | Arpeggien

Do      0      3      0      4      1      4      2

La      1      4      1      0

Sol      0      3      0      4

mi      3      0      3      1

Fa      4      1      4      2

re      4      1      0      2      0      4

Re      4      1      0      3      0      4      0



Terceras  
*Thirds*

I

Terzen

Do

la

Sol

mi

Fa     

re     

Re     

si     

Sib    

sol    

La     

fa #   

Mi b   

do b   

Todas estas escalas, arpegios y tercera deben ser estudiadas dependiendo de la habilidad, en el mayor n mero posible de las formas descritas en los cap tulos 1 y 2

*All these scales, arpeggios and thirds should be practised in as many of the patterns of chapter 1 and 2 as possible.*

Alle diese Tonleitern, Arpeggien und Terzen sollten je nach Spielf igkeit in gr sstm glichster Anzahl der in den Kapiteln 1 und 2 beschriebenen Formen ge ubt werden.

Chapter 4

Capítulo 4

Kapitel 4

## Escalas, arpegios y terceras de 2 octavas

*Scales, arpeggios and thirds in 2 octaves  
Basic scales of double stops*

#### **Torleitern, Arpeggien und Terzen in 2 Oktaven**

\* Las escalas menores se presentan en primer lugar en sus modalidades natural, melódica y armónica. La digitación es válida para las tres formas. A continuación aparece en cada caso solamente la menor natural. Sin embargo se deben estudiar siempre las tres modalidades.

\* The minor keys are first presented in their natural, melodic, and harmonic mode. Fingerings are the same for all three modes.

*Later you will find only the manual mode. However all three modes should be practised.*

\* Die Molltonleitern werden zunächst in ihren Formen reines, melodisches und harmonisches Moll beschrieben.

Fingersätze gelten für alle Formen.

Im Folgenden wird nur noch die reine Molltonleiter erscheinen. Dennoch sollten alle drei Formen in allen Tonarten geübt werden.

### la menor natural

### la menor melódica \*

The image shows two measures of musical notation for a bassoon. The key signature changes from one sharp to two sharps. The bassoon plays eighth-note patterns, primarily consisting of B, C, D, E, and F# notes. Measure 11 ends with a fermata over the last note.

la menor armónica \*

A musical score page for the bassoon part, featuring two staves of music. The first staff begins with a bass clef, a common time signature, and a key signature of one sharp. The second staff begins with a bass clef, a common time signature, and a key signature of one sharp. The music consists of eighth-note patterns.

Sheet music for Sol position 1-3. The staff shows a bass clef, a key signature of one sharp, and a common time signature. The notes are primarily eighth notes, with some sixteenth-note patterns. Fingerings are indicated above the notes: 0, 1, 3, 4; 0, 1, 3, 4; 0, 1; 2, 4; 1, 2, 4; 1, 2, 4; 1, 2, 4; 1, 3, 4; 3. Below the staff, a numbered sequence 1, 2, 4, 1, 2, 4, 1, 2, 4, 1, 2, 4, 1, 3, 4, 3 provides a guide for the fingerings.

Handwritten musical notation for the bass clef section, starting with the word "mi". The notation uses a bass clef, a key signature of one sharp, and a common time signature. It consists of a series of notes and rests on a staff, with each note or rest having a specific number below it indicating its value. The numbers range from 0 to 4, with some notes having two or three digits stacked vertically. The notation is written in a cursive style.

F#  
Bass Clef  
F# minor scale

The image shows a musical staff for the bass clef. The notes are labeled with their corresponding fingerings: 4, 0, 1, 2, 4, 0, 1, 2, 4, 0, 1, 2, 1, 3, 4. Below the staff, the fingerings are repeated with numerical values 1, 2, 4, 1, 2, 4, 1, 2, 4, 1, 2, 1, 3, 4.

si      

Sib    

sol    

La     

fa#    

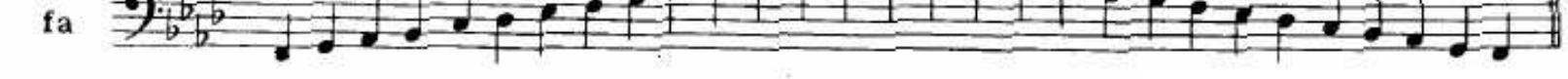
Mib    

do     

Mi     

do#    

La b   

fa     

Si    

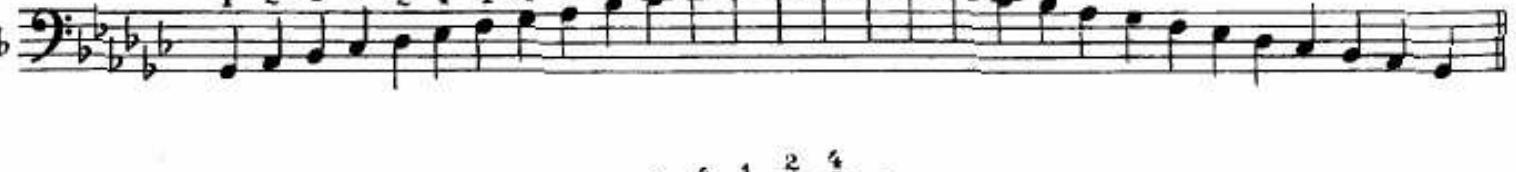
sol#    

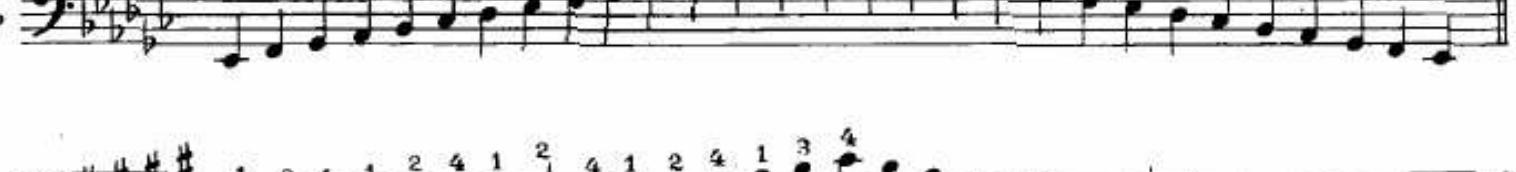
Reb    

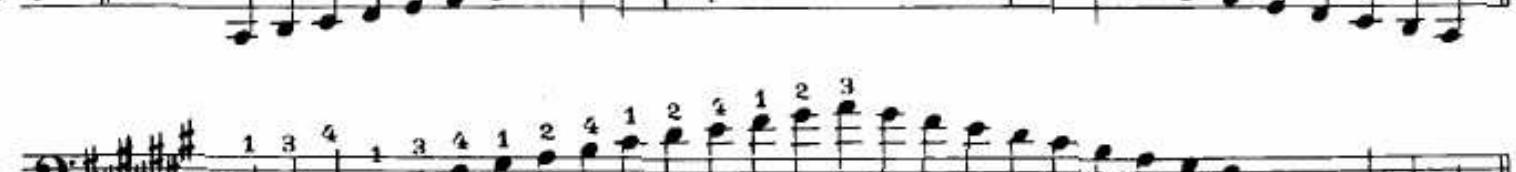
sib    

Fa#    

re#    

Solb    

mib    

Do#    

Ia#    

Do b    

Arpeggios de 2 octavas | Arpeggien in 2 Oktaven

la b    

*Arpeggios in 2 octaves*

*Arpeggien in 2 Oktaven*

Do    

la    

Sol    

mi    

Fa    

re    

Re    

si    

Sib    

sol    

La 

f a 

M i b 

do 

M i 

do 

L a b 

f a 

S i 

s o l 

R e b 

s i b 

Fa  $\sharp$

re  $\sharp$

Sol  $\flat$

mib

Do  $\sharp$

la  $\sharp$

Do  $\flat$

la  $\flat$

Terceras de 2 octavas  
*Thirds in 2 octaves*

Terzen in 2 Oktaven

Do

|

la

Sol

mi

Fa

re

Re



do      

Mi      

do ♯      

La♭      

fa      

Si      

sol<sup>#</sup>

Re<sup>b</sup>

si<sup>b</sup>

Fa<sup>#</sup>

re<sup>#</sup>

Sol<sup>b</sup>

mi b

Do #

la #

Do b

la b

Escalas fáciles de doble cuerda (sextas y tercera)  
*Basic scales of double stops (sixths and thirds)*

Leichte Doppelgrifftonleitern (Sexten und Terzen)

Sextas | Sexten

*Sixths*

Do      Sol      Re      Fa

Terceras | Terzen

*Thirds*

Do      Sol      Re      Fa

Dependiendo de la habilidad se deben estudiar tambien las escalas menores correspondientes

*According to ability these scales should also be practised in their minor mode.*

*Je nach Spielfähigkeit sollten auch die parallelen Molltonarten geübt werden.*

## Chapter 5

## Capítulo 5

## Kapitel 5

Escalas de 3 octavas - Esquema de aceleración - Arpegios y terceras de 3 octavas.

*Scales in 3 octaves - A system for the achievement of speed -  
Arpeggios and thirds in 3 octaves.*

Tonleitern in drei Oktaven - Beschleunigungssystem - Arpeg-  
gien und Terzen in 3 Oktaven.

The sheet music consists of six staves, each representing a different note name: Do, La, Sol, Mi, Fa, and another Sol (treble clef). Each staff is divided into two sections by a vertical bar. The first section shows a scale pattern with numbered fingering (1, 3, 4, 1, 3, 4, 1, 2, 4, 1, 2, 4, 1, 3, 4, 1, 2, 4, 1, 2, 3) followed by an arpeggio pattern. The second section shows a similar sequence of notes with numbered fingering. The staves are arranged vertically, with the bass clef (F), treble clef (G), and bass clef (C) appearing at different points.

re    

Re    

si    

si    

sol    

La    

fa  $\sharp$

Mi

do

Mi

do  $\sharp$

La  $\flat$

fa

Si

sol #

Re b

sib

Fa #

re ♯

Sol ♭

mib

Do ♯

la ♭

Do ♭

la b

Speeding - up - system | Esquema de aceleración

Beschleunigungssystem

Mediante la pequeña "curva" al principio y al final de cada escala se consigue en cada caso un número de notas divisibles por 3 y 4. Así se logra un esquema de aceleración o bien, tocando al revés, de ralentización, que favorece el control y la precisión de la sucesión digital.

*Thanks to a short "diversion" at the beginning and the end of each scale a number of notes is achieved which is equally divisible by 3 and 4.*

*This results in a speeding - up - or, in the reverse, a slowing-down system which encourages control and precision of finger sequences.*

Durch die kleine "Kurve" am Anfang und Ende einer jeden Tonleiter wird eine gleichermaßen durch 3 und 4 teilbare Anzahl von Noten erreicht. So entsteht ein Beschleunigungs - oder, wenn man umgekehrt spielt - Verlangsmungssystem, das der Kontrolle und Präzision der Fingerfolge dient.

Arpegios de 3 octavas | Arpeggien in 3 Oktaven

*Arpeggios in 3 octaves*

Do      la      Sol      mi      Fa      re      Re      si      Si**b**      sol

La      

fa♯      

Mib      

do      

Mi      

do♯      

La♭      

fa      

Si      

sol♯      

**Re b**

**sib**

**Fa #**

**re #**

**Solb**

**mib**

**Do #**

**la #**

**Do b**

**la b**

## Terceras de 3 octavas

*Thirds in 3 octaves*

## Terzen in 3 Oktaven

I

**Do**      0 3 1 4 1 2 1 4 0 3 1 4 3 2 1 4 0 2 1 4 2 2 1 4 0 2 1 2 1 4 2 2 1 3 2 2

**1a**      1 3 2 3 1 2 2 4 1 2 2 4 1 2 1 2 0 4 1 4 3 2 2 1 4 2 2 1 3 2 2 1 3 2 2

**Sol**      0 3 1 4 3 2 1 4 0 3 1 4 3 2 1 4 0 2 1 2 1 4 2 3 1 4 3 2 1 3 2 2 1 3 2 2

**Mi**      3 2 1 4 0 3 1 4 3 2 1 4 0 3 1 4 3 2 1 4 0 2 1 2 1 4 2 3 1 4 3 2 1 3 2 2 1 3 2 2

**Fa**      1 4 0 2 1 4 2 2 1 4 0 2 1 4 2 3 1 4 0 2 1 4 2 3 1 4 3 2 2 1 3 2 2 1 3 2 2

**re**      1 4 3 2 1 4 0 2 1 4 2 2 1 4 0 2 1 4 2 3 1 4 0 2 1 4 2 3 1 4 3 2 2 1 3 2 2 1 3 2 2

Re      

si      

Sib     

sol     

La      

fa #    

Mib

do

Mi

do<sup>#</sup>

La b

fa

Si    

sol#    

Re b    

sib    

Fa #    

re #    

Sol b

mi b

Do #

la #

Do b

la b

*Chapter 6***Capítulo 6****Kapitel 6**

Escalas, arpegios y tercera de 4 octavas

*Scales, arpeggios and thirds in 4 octaves*

Tonleitern, Arpeggien und Terzen in 4 Oktaven

The sheet music consists of five staves, each representing a different note: Do (Bass clef), La (Treble clef), Sol (Bass clef), Mi (Treble clef), and Fa (Bass clef). Each staff contains two measures of musical notation. The notes are primarily eighth notes, and the fingering is indicated by numbers above or below the notes. The first measure of each staff shows a scale pattern, and the second measure shows an arpeggio or third pattern. The fingering numbers correspond to the fingers used for each note: 1, 2, 3, 4, and 1 again.

\*Digitaciones usando las cuerdas al aire se encuentran en los capítulos anteriores.

*Fingerings using open strings can be found in previous chapters.**Fingersätze mit leeren Saiten finden sich in den vorangegangenen Kapiteln.*

re

Re

si

Sib

sol

La

fa♯

Mib

do

Mi

do♯

Lab

The sheet music consists of eight staves, each with two staves of musical notation. The first staff of each section is in bass clef and the second is in treble clef. Fingerings are indicated above the notes. The sections are labeled: fa♯, Mib, do, Mi, do♯, and Lab. The music is in common time.

fa

Si

sol<sup>#</sup>

Re<sup>b</sup>

sib

Fa<sup>#</sup>

re  $\sharp$

Sol  $\flat$

mib

(3)

Do  $\sharp$

la  $\sharp$

Do  $\flat$

Digitaciones alternativas a partir de la tercera octava (subiendo):

- 1) 123 123 123 123 123 para el sistema ternario.
- 2) 12 12 12 12 12 12 123 para el sistema binario.

Otro sistema de digitaciones para todas las tonalidades:

- La tercera nota de cada escala se toca con el primer dedo.
- Continua con las digitaciones 1-2(3)-4(3).
- No se usan cuerdas al aire.

*Alternative fingerings from the third octave on (ascending):*

- 1) 123 123 123 123 123 for scales of triplets.
- 2) 12 12 12 12 12 12 123 for scales of doublets.

*Another fingering system for all keys:*

- Play the third note of each scale with the first finger.
- The consecutive fingering is 1-2(3)-4(3).
- Don't use open strings.

Alternative Fingersätze ab der dritten Oktave (aufsteigend):

- 1) 123 123 123 123 123 für triolische Tonleitern.
- 2) 12 12 12 12 12 12 123 für duolische Tonleitern.

Ein weiteres Fingersatzsystem für alle Tonarten:

- Jeweils die dritte Note jeder Tonleiter wird mit dem 1. Finger gespielt.
- Es folgen die Fingersätze 1-2(3)-4(3).
- Es werden keine leeren Saiten gespielt.

### Arpegios de 4 octavas

*Arpeggios in 4 octaves*

|

*Arpeggien in 4 Oktaven*

Re

si

Sib

sol

La

fa  $\sharp$

Mib

do

Mi

do  $\sharp$

**La b**

**fa**

**Si**

**sol ♯**

**Re b**

**si b**

**Fa ♯**

**re ♯**

**Sol b**

**mi b**

Do  $\sharp$

la  $\sharp$

Do  $\flat$

la  $\flat$

*Thirds in 4 octaves*

Terceras de 4 octavas

|

Terzen in 4 Oktaven

Do

la

Sol

mi

Fa

re

The sheet music consists of four systems, each with three staves. The first system is for the 'Sol' position, the second for 'mi', the third for 'fa', and the fourth for 're'. Each system is in G major (two sharps) and includes a bass clef. The staves show various fingerings (1, 2, 3, 4) over a series of eighth notes. The first staff of each system begins with a bass note followed by a series of eighth-note pairs. The subsequent staves continue this pattern with different fingerings. The music is divided into measures by vertical bar lines.

Re

si

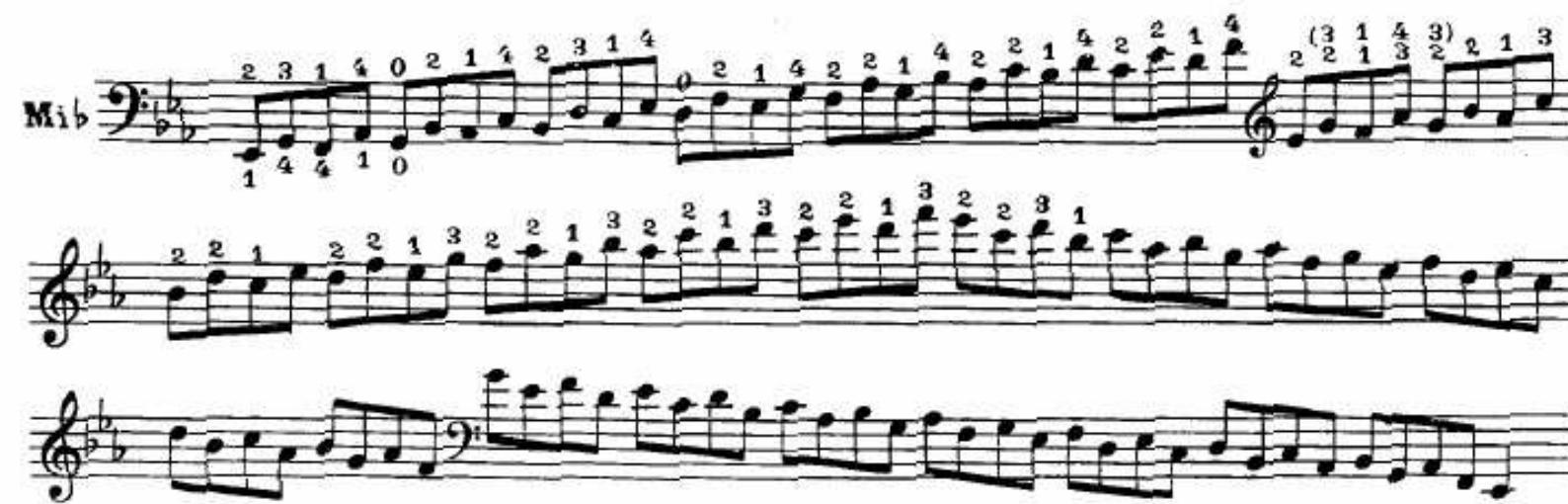
Sib

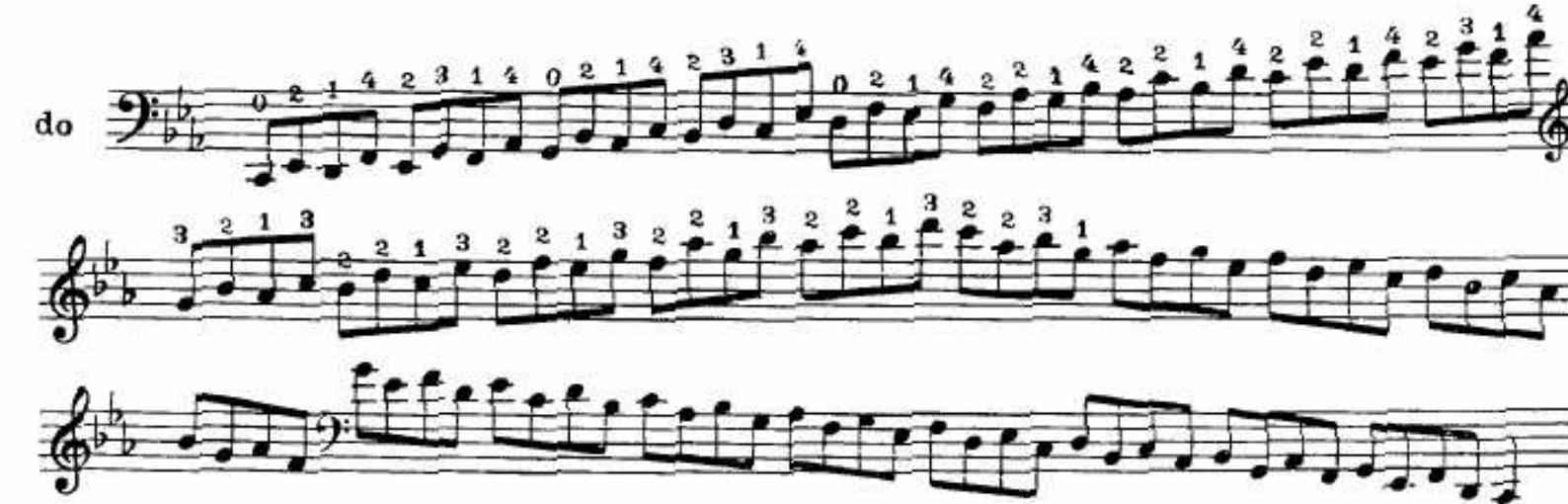
sol

The sheet music consists of four systems of musical notation, each labeled with a name: Re, si, Sib, and sol. Each system contains three staves, likely for a three-octave treble clef instrument. The notation is primarily sixteenth-note patterns, with some eighth-note patterns in the first staff of each system. Fingerings are indicated above the notes in a specific numbering system (e.g., 1, 4, 2, 2, 1, 4, 0, 2, 1, 4, 2, 2, 1, 4, 0, 3, 1, 4, 3, 2, 1, 4, 0, 3, 1, 2, 1, 4, 2, 3, 1, 4, 3, 2, 1, 3). The key signature changes from Re (two sharps) to si (no sharps or flats) to Sib (one flat) to sol (two flats) across the systems.

La      

fa#      

Mib      

do      

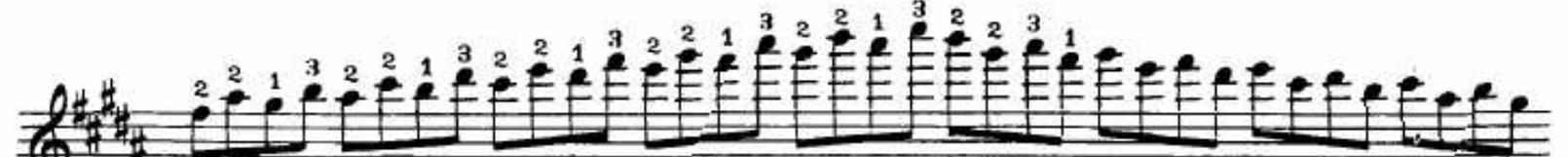
Mi

do  $\sharp$

Lab

fa

Si      

















Fa  $\sharp$

re  $\sharp$

Sol  $\flat$

mi  $\flat$

Do ♯

la ♫

Do ♫

la ♫

*Chapter 7*

**Capítulo 7**

**Kapitel 7**

Escalas de Doble Cuerda      Terceras - Sextas - Octavas  
*Scales of double stops      Thirds - Sixth - Octaves*

|      Doppelgriffintervalle      Terzen - Sexten - Oktaven

*Execution*

Realización

Ausführung



*Thirds*

Terceras

Terzen

Do

Sol

\* En todas las escalas de doble cuerda que se presentan a continuación se emplea la menor armónica. La natural y la melódica deben estudiarse igualmente con las mismas digitaciones.

\* All scales of double stops appear only in their harmonic minor mode. However the natural and melodic mode should be practised equally.

\* In allen Doppelgriffintervallen erscheint im Folgenden jeweils nur das harmonische Moll. Reines und melodisches Moll sollten bei gleichen Fingersätzen ebenso geübt werden.

mi

Fa

re

Re

si

Sib

sol

La

mi

Mib

This page contains five systems of musical notation, each with two staves. The instruments are labeled Sib, sol, La, mi, and Mib. Each staff consists of a series of notes with specific fingerings indicated above them. The fingerings are represented by numbers (0, 1, 2, 3) and fractions (1/4, 1/2, 1/3, 2/3). The music is written in various clefs (Bass, Treble, Alto), time signatures, and key signatures. The notation is dense and requires careful reading to identify the specific pitch and rhythm for each note.

do      

Mi      

do#      

La b      

fa      

**Si**

**sol<sup>#</sup>**

**Re b**

**sib**

**Fa <sup>#</sup>**

re  $\sharp$

Sol  $\flat$

mi  $\flat$

Do  $\sharp$

la  $\sharp$

This image contains five staves of musical notation, each representing a different note name (re sharp, Sol flat, mi flat, Do sharp, la sharp) and its corresponding fingerings. The notation is for a single hand, likely the left hand, as indicated by the bass clef. Each staff consists of two lines of music. Fingerings are written above the notes, showing which fingers to use for each note. The first staff (re sharp) starts with a bass note and continues with treble notes. The second staff (Sol flat) starts with a treble note and continues with bass notes. The third staff (mi flat) starts with a bass note and continues with treble notes. The fourth staff (Do sharp) starts with a treble note and continues with bass notes. The fifth staff (la sharp) starts with a bass note and continues with treble notes. The notation uses a mix of quarter and eighth notes, with some notes having stems pointing up and others down.

**Dob**

**La b**

Sixth

Sextas

Sexten

The image shows a musical score for two voices: "Do" and "La". The music is written on four staves, each with a different clef (Bass, Treble, Bass, Treble) and a specific key signature. The notes are represented by dots with numbers above them, indicating fingerings. The "Do" part starts with a bass note (B) and continues with a series of eighth-note chords. The "La" part starts with a treble note (G) and continues with a series of eighth-note chords. The music is divided into measures by vertical bar lines.

Sol

mi

Fa

re

Re

si

Sib

sol

La

fa  $\sharp$

Mib

do

Mi

do<sup>#</sup>

La<sup>b</sup>

*fa*

*Si*

*sol#*

*Reb*

*si b*

Fa  $\sharp$

re  $\sharp$

Sol  $\flat$

mib

Do  $\sharp$

The image shows two staves of sheet music. The top staff is for 'la' and the bottom staff is for bass. Both staves are in 2/4 time with a key signature of four sharps. The 'la' staff has a bass clef and the bass staff has a treble clef. Fingerings are indicated above the notes: for 'la', the first six measures show pairs of fingers (e.g., 2-1, 4-2, 2-1) and the last measure shows a 'x'. The bass staff shows various fingerings (e.g., 3-2, 2-1, 3-2, 2-1, 3-2) and rests.

### *Octaves*

## Octavas

## Oktaven

The musical score consists of two staves. The top staff starts with a bass clef, a 'Do' instruction, and a common time signature. It features a series of eighth-note patterns with fingerings (1, 0; 3, 0) and measure labels (II-III, 1-II). The bottom staff begins with a treble clef and continues the pattern of eighth-note pairs with fingerings (3, 0) and measure labels (II-III, III-IV).

la

I-II      II-III

Sol

I-II      II-III

mi

II-III      I-II

II-III      I-II

Fa

II-III      I-II

II-III      III-IV

re

II-III      I-II

II-III      III-IV

La misma digitación en todas las otras tonalidades de las escalas de octavas

*The same fingerings apply to all other keys.*

Die gleichen Fingersätze gelten für alle anderen Tonarten.

## Escalas cromáticas - Escalas en una cuerda

Chromatic scales - Scales on one string

Chromatische Tonleitern - Tonleitern auf einer Saite

En las escalas cromáticas se distinguen los sistemas "binarios" y "ternarios". En el ejemplo de la escala de Do se presentan ambas posibilidades y se pueden transportar a todas las tonalidades. Mediante la pequeña "curva" a final de cada escala ascendente se coordinan la sucesión digital y el ritmo de las escalas descendentes.

*There are two kinds of fingering systems for chromatic scales, the doublet and triplet system. An example is shown in the scale of C and can be applied to all other keys. The short "diversion" at the end of each scale enables a coordination of finger sequence and rhythm of the descending scale.*

Bei chromatischen Tonleitern unterscheiden sich das duolische und das triolische Fingersatzsystem. Am Beispiel der Tonleiter in C erscheinen beide Möglichkeiten und können auf alle anderen Tonarten übertragen werden.

Durch die kleine "Kurve" am Ende jeder Tonleiter werden Fingerfolge und Rhythmus der absteigenden Tonleiter koordiniert.

A Binario  
Doublet | Duolisch

B Ternario  
Triplet | Triolisch

## Scales on one string

## Escalas en una cuerda

## Tonleiter auf einer Saite

Se debe estudiar en todas las cuerdas y en todas las tonalidades mayores y menores

*These scales should be practised on all strings and in all keys.*

Diese Tonleitern sollten auf allen Saiten und in allen Dur- wie  
Molltonarten geübt werden.

## Escalas de un dedo

## Scales with one finger | Tonleiter mit einem Finger

## Escalas de dos dedos

## Scales with two fingers | Tonleiter mit zwei Fingern

Three staves of musical notation for three-finger scales. The first staff starts with a bass clef, the second with a treble clef, and the third with a bass clef. Each staff consists of two measures separated by a vertical bar line. The notes are numbered 1, 2, 3, or 4 above them, indicating which finger to use for each note.

Escalas de tres dedos

Scales with three fingers | Tonleitern mit drei Fingern

Six staves of musical notation for four-finger scales. The staves are arranged in two columns of three. The first column starts with a bass clef, the second with a treble clef. Each staff consists of two measures separated by a vertical bar line. The notes are numbered 1, 2, 3, or 4 above them, indicating which finger to use for each note.

Escalas de cuatro dedos

Scales with four fingers | Tonleitern mit vier Fingern

Six staves of musical notation for four-finger scales. The staves are arranged in two columns of three. The first column starts with a bass clef, the second with a treble clef. Each staff consists of two measures separated by a vertical bar line. The notes are numbered 1, 2, 3, or 4 above them, indicating which finger to use for each note. Some notes have an 'x' symbol below them, likely indicating a grace note or a specific performance technique.

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