THE PAGANINI CAPRICES, THEIR TECHNIQUES AND PERFORMANCE PROBLEMS: A STUDY ON TWELVE CAPRICES WITH SUPPORTING VIDEO AND AUDIO RECORDINGS

by

MADELINE LEAH MELROSE

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TABLE OF CONTENTS

Abstract	. 8
Declaration	. 9
Acknowledgements	. 10
List of Figures	. 11
List of Tables	. 12
List of Music Scores	. 14
List of Video Clips	. 16
Introduction	
Aims of Study	. 19
Research Questions	. 19
Scope of the Project	. 21
Significance	. 23
Source Materials	. 25
Methodology	. 30
Organisation	. 33
PART ONE: The Paganini Caprices	
Chapter One	
Niccolò Paganini	. 36
Review of Literature: Twenty-Four Caprices Opus 1 for Violin Solo	. 56
Recommended Repertoire to Study Prior to the Paganini Caprices	. 70
PART TWO: The Video and Audio CD	
Chapter Two	
DVD List of Tracks	. 72
Audio CD List of Tracks	. 78

PART THREE: The Caprices and their Performance Problems

Chapter Three
Caprice Number One 80
Note Discrepancies
Recommended Exercises, Studies & Scales Before Learning Caprice One
Operating the Ricochet Bow Stroke
Caprice One: Right-Hand Problems & Solutions
Caprice One: Left-Hand Problems & Solutions
Recommendations to Consolidate Caprice One
Recommended Repertoire Post Caprice One
Chapter Four
Caprice Number Three
Note Discrepancies
Recommended Exercises, Studies & Scales Before Learning Caprice Three 99
Octaves and Supplementary Exercises
Fingered Octaves & Supplementary Exercises
Fingered Octave Trills & Supplementary Exercises
Controlling Slow Bows
Recommended Repertoire Post Caprice Three
Chapter Five
Caprice Number Five
Note Discrepancies
Recommended Exercises, Studies & Scales Before Learning Caprice Five
Arpeggios & Supplementary Exercises
Descending Shifts
Silent Shifts
Saltato Bowing Variations
Saltato Bowing Technique
Recommended Repertoire Post Caprice Five

Chapter Six

Caprice Number Six	132
Note Discrepancies	132
Recommended Exercises, Studies & Scales Before Learning Caprice Six	134
Measured and Unmeasured Trills	136
The Vibrato Trill	140
The Ideal Instrument Setup for Caprice Six	141
The Learning Stages	143
Recommended Repertoire Post Caprice Six	145
Chapter Seven	
Caprice Number Nine	
Note Discrepancies	147
Recommended Exercises, Studies & Scales Before Learning Caprice Nine	149
The Horn Fifth	151
The Hunting Horn & its Purpose in the Hunt	154
'The Hunt' – The Story of Caprice Nine	157
Fingering Patterns and Double-Stops	158
Ricochet Bowing, Fast Position Changes & Supplementary Exercises	165
Recommended Repertoire Post Caprice Nine	168
Chapter Eight	
Caprice Number Ten	169
Note Discrepancies	
Recommended Exercises, Studies & Scales Before Learning Caprice Ten	
Bow Stroke Terminology	
The Technique of Performing Flying Staccato	
The Learning Stages of Up-Bow Flying Staccato	
Pacommanded Panartoira Post Caprica Tan	184

Chapter Nine

Caprice Number Eleven	188
Note Discrepancies	188
Recommended Exercises, Studies & Scales Before Learning Caprice Eleven	190
The Learning Stages of the Andante Sections	192
The Learning Stages of the Hook Stroke in the Presto Section	194
Articulation in Hook Stroke Bowing	196
Consolidating Caprice Eleven	197
Recommended Repertoire Post Caprice Eleven	198
Chapter Ten	
Caprice Number Twelve	100
Note Discrepancies	
Recommended Exercises, Studies & Scales Before Learning Caprice Twelve	
The Importance of Double-Stop Practice in String Crossings	
Thumb Extensions	
The Direction of Right-Hand String Crossings	
Significant Left-Hand Extensions	
Recommended Repertoire Post Caprice Twelve	209
Chapter Eleven	
Caprice Number Sixteen	210
Note Discrepancies	210
Recommended Exercises, Studies & Scales Before Learning Caprice Sixteen	211
Forte Markings & Tempo	214
Problem Areas	216
String Crossings	221
Left-hand Extensions & Contractions	224
Recommended Repertoire Post Caprice Sixteen	225

Chapter Twelve

Caprice Number Nineteen	226
Note Discrepancies	226
Recommended Exercises, Studies & Scales Before Learning Caprice Nineteen .	227
Imitating Birdsong	229
Managing the String Crossings	231
Securing the Double-Stops	233
Fast Passagework	234
Recommended Repertoire Post Caprice Nineteen	236
Chapter Thirteen	
Caprice Number Twenty	237
Note Discrepancies	237
Recommended Exercises, Studies & Scales Before Learning Caprice Twenty	239
The Flying Spiccato Bow Stroke	242
Coordination of the Spiccato & Trills of Caprice Twenty	244
The Double & Triple-Stops of Caprice Twenty	245
Recommended Repertoire Post Caprice Twenty	247
Chapter Fourteen	
Caprice Number Twenty-Four	249
Note Discrepancies	249
Recommended Exercises, Studies & Scales Before Learning Caprice	
Twenty-Four	251
Double-Stops: Tenths	255
Triple-Stops	259
Left-Hand Pizzicato	262
Recommended Repertoire Post Caprice Twenty-Four	264

st of Sources	269
Primary Sources	269
Treatises and Methods	269
Scores of the 24 Caprices	271
Scores	272
Apps	283
Discography (Listed by Performer)	283
Videos	285
Interviews	289
Secondary Sources	290
Books	290
Journal Articles	293
Dissertations	298
Websites	299
Reviews	301
ppendices	302
Appendix One: Portrait of Niccolò Paganini by Daniel Maclise 1831	302
Appendix Two: Caprice Five Bowing Changes	303
Appendix Three: Bowings for Variation Eight from Caprice Twenty-Four,	
from Various Editions of the Paganini Caprices	305
Appendix Four: Bowing Patterns Collected from Video Performances of	
Variation Eight from Caprice Twenty-Four	306
Appendix Five: Author's Fingerings & Bowings of the Paganini Caprices	307

ABSTRACT

The 24 Caprices by Niccolò Paganini are considered the most technically and musically demanding works in the entire violin repertoire. They are rarely performed in concerts due to the high risk of technical inaccuracies occurring and are usually only attempted by celebrity violinists who have devoted their life to mastering the violin.

This project aims to bridge the gap between the capable violin student, esteemed teacher, and the challenging 24 Paganini Caprices, so that they can be both musically and technically better understood. The project does not seek to create an unrealistic attainment of perfection for the person who chooses to tackle the Caprices but provides a logical and practical approach for the highly trained, yet human, musician who wants to understand better the difficulties and solutions in the Caprices.

Twelve Caprices out of the set of twenty-four are examined for their diverse techniques and challenging musical phrases. Using the methodology of reflexive evaluation, the project investigates the outcome of performance and how to solve problems of technique and interpretation through a clear step-by-step approach with a pedagogical purpose.

Seventeen techniques are studied, analysed and discussed in this project. By disassembling the Caprices into their technical categories, the Caprices become more approachable and playable as challenging sections are brought out of context. The harmonic structure, form, tempo and unusual writing are also studied, and a larger overview of the piece provides knowledge and insight into the persona, interpretation and emotional moodiness of the Caprices.

The project's contribution to the discipline is justified through several examples; including carrying out empirical work that has not been completed before, using a unique methodological approach to address technical problems, providing knowledge in a cross-disciplinary perspective and extending and elaborating on an existing work. Most importantly, the pedagogical methodology of the project is transferrable, and can be used and adapted when approaching other works containing the same technique and musical references as the Paganini Caprices

DECLARATION

I certify that this work contains no material which has been accepted for the award of

any other degree or diploma in my name, in any university or other tertiary institution and, to

the best of my knowledge and belief, contains no material previously published or written by

another person, except where due reference has been made in the text. In addition, I certify

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time.

I acknowledge the support I have received for my research through the provision of an

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Signature:

Date: 30th April 2020

9

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LIST OF FIGURES

Number		Page
Figure 1	Cropped Portrait of Paganini by Daniel Maclise, 1831	49
Figure 2	Genealogical Picture of Bow Strokes by Dounis	83
Figure 3	The Franco-Belgian bow hold.	85
Figure 4	Measurement of the Balance Point	86
Figure 5	Paganini's Violin (Il Canon)	143
Figure 6	Horn Fifth Progression	152
Figure 7	Replica Parforce or Hunting Horn	155
Figure 8	The Master of Game excerpt (Edward of York)	156
Figure 9	Carl Flesch Up-Bow Flying Staccato Accent Points	178
Figure 10	Accented Note	183
Figure 11	Hook Stroke Bowing Articulation Points	196
Figure 12	Caprice Twelve: Slurred String Crossing Directions	207
Figure 13	Galamian's Examples of the Viotti & Paganini Bowings	217
Figure 14	Caprice Nineteen: Bowing Distribution	232
Figure 15	Dounis's Directions For Practising: Fundamental Trill Studies	241
Figure 16	Stretches for Tenths (A.)	255
Figure 17	Stretches for Tenths (B.)	256

LIST OF TABLES

Number		Page
Table 1	Technical Challenges in the 24 Paganini Caprices	21
	Twelve Selected Caprices and their Techniques	
	The 24 Paganini Caprices and its Dedicatees	
	Simon Fischer's Logical Order of Study	
	Ivan Galamian's Order of Study	
	Order of Study (Author)	
	Caprice One: Comparison of Note Discrepancies	
Table 8	Caprice One: Recommended Repertoire	82
Table 9	Recommended Repertoire Post Caprice One	96
Table 10	Caprice Three: Comparison of Note Discrepancies	98
	Caprice Three: Recommended Repertoire	
Table 12	Recommended Studies for Caprice Three and Caprice Six	101
Table 13	Recommended Repertoire Post Caprice Three	115
Table 14	Caprice Five: Note Discrepancies	117
Table 15	Caprice Five: Recommended Repertoire	119
Table 16	Caprice Five: Variations of Saltato Bowing	127
Table 17	Recommended Repertoire Post Caprice Five	131
Table 18	Caprice Six: Note Discrepancies	133
Table 19	Caprice Six: Recommended Repertoire	134
Table 20	Measuring the Alternating Notes in Caprice Six	137
Table 21	Recommended Repertoire Post Caprice Six	146
Table 22	Caprice Nine: Recommended Repertoire	150
Table 23	Recommended Repertoire Post Caprice Nine	168
Table 24	Caprice Ten: Note Discrepancies	170
Table 25	Caprice Ten: Recommended Repertoire	171
Table 26	Recommended Repertoire Post Caprice Ten	187

Table 27	Caprice Eleven: Note Discrepancies	9
Table 28	Caprice Eleven: Recommended Repertoire	1
Table 29	Recommended Repertoire Post Caprice Eleven	8
Table 30	Caprice Twelve: Note Discrepancies	0
Table 31	Caprice Twelve: Recommended Repertoire	1
Table 32	Caprice Twelve: Thumb-Extension Locations	6
Table 33	Recommended Repertoire Post Caprice Twelve	9
Table 34	Caprice Sixteen: Recommended Repertoire	2
Table 35	Caprice Sixteen: Locations of Skipping String Crossings	3
Table 36	Recommended Repertoire Post Caprice Sixteen	5
Table 37	Caprice Nineteen: Note Discrepancies	7
Table 38	Caprice Nineteen: Recommended Repertoire	8
Table 39	Recommended Repertoire Post Caprice Nineteen	6
Table 40	Caprice Twenty: Note Discrepancies	7
Table 41	Caprice Twenty: Recommended Repertoire	0
Table 42	Recommended Repertoire Post Caprice Twenty	.7
Table 43	Caprice Twenty-Four: Note Discrepancies	0
Table 44	Caprice Twenty-Four: Recommended Repertoire	2
Table 45	Recommended Repertoire Post Caprice Twenty-four	5

LIST OF MUSIC SCORES

Number		Page
Music Score 1	Locatelli, L'Arte Del Violino, Caprice 7, bb. 1-7	40
Music Score 2	Caprice One, bb. 1-7	40
Music Score 3	Caprice Nineteen (Birdsong), bb. 1-10	44
Music Score 4	Caprice One, Triple-Stops, bb. 12-19,	88
Music Score 5	Caprice One, Exercise, Triple-Stop Bowing	89
Music Score 6	Caprice One, Descending Thirds, bb. 24-37	89
Music Score 7	Caprice One, Exercise, Descending Double-stops	91
Music Score 8	Caprice One, Descending Thirds & Phrasing, bb. 24-37	93
Music Score 9	Caprice Three, Alternate bowing and fingering options, bb. 1-24	104
Music Score 10	Caprice Three, Exercise, Fingering options, bb. 5-6	105
Music Score 11	Caprice Three, Exercise, Octaves, bb. 5-6	105
Music Score 12	Caprice Three, Flesch Fingering, bb. 5 and 14	106
Music Score 13	Caprice Three, Exercise, Fingered Octaves, bb.1-4	108
Music Score 14	Caprice Three, Exercise, Fingered Octaves, bb. 1-6	108
Music Score 15	Paganini, Caprice Three, Exercise, Fingered Octave Trills	111
Music Score 16	Caprice Three, Exercise, Fingered Octave Trill Rhythms	112
Music Score 17	Caprice Three, bb. 25 to 60	113
Music Score 18	Caprice Three, Exercise, Finger Evenness, bb. 1-2	114
Music Score 19	Caprice Five, Exercise, Rhythms for Arpeggios	121
Music Score 20	Caprice Five, Exercise, Descending A Minor Scale	125
Music Score 22	Caprice Five, Exercise, Saltato Bowing in Four-Note Bounces	130
Music Score 23	Caprice Six, bb. 1-4	136
Music Score 24	Caprice Nine, Example of Original Ricochet Bowing Pattern	147
Music Score 25	Caprice Nine, bb. 94-111	148
	Mozart duet for Violin and Viola, K.423, bb. 33-36	
Music Score 27	Scarlatti Piano Sonata in C Major, K. 159, bb. 1-2	153

Music Score	28	Caprice Nine, horn fifths locations, bb. 1-19	154
Music Score	29	Caprice Nine, Richault Edition, bb. 1-17	160
Music Score	30	Caprice Nine, bb. 1-19	161
Music Score	31	Caprice Nine, Adaptation of Peters Edition, bb.1-19	164
Music Score	32	Caprice Nine, Locations of Positions, bb. 82-90	166
Music Score	33	Up-Bow Flying Staccato String Crossing Exercise	185
Music Score	34	Caprice Sixteen, bb. 39-44	216
Music Score	35	Caprice Sixteen, bb. 24-26	218
Music Score	36	Caprice Sixteen, bb.27-29	219
Music Score	37	Dounis' Shifting Exercise: Sixth Exercise for Shifting	220
Music Score	38	Caprice Sixteen, Exercise, bb.27-29	221
Music Score	39	Caprice Sixteen, bar 15	225
Music Score	40	Caprice Nineteen, Exercise, Fast Passagework	235
Music Score	41	Ricordi's First Edition of Paganini Caprice Twenty, bb. 1-17	238
Music Score	42	Caprice Twenty Exercise: Dividing the triple-stops	246
Music Score	43	Fritz Kreisler, Allegretto in the Style of Niccolo Porpora, bb. 1-10	248
Music Score	44	Paganini Caprice Twenty: bb. 25-32	248
		Caprice Twenty-Four, Original Manuscript, bb. 1-53,	
Music Score	46	Caprice Twenty-Four, Tone & Semitone Distances, bb. 73-84	257
Music Score	47	Caprice Twenty-Four, Exercise, Triple Stops	260
Music Score	48	Caprice Twenty-Four (var. 8): bb. 90-115, Original Manuscript	261
Music Score	49	Caprice Twenty-Four, Exercise, Left Hand Pizzicato	263

LIST OF VIDEO CLIPS

Number	Pag
Video Clip 1 Caprice One: Ricochet Down Bow	86
Video Clip 2 Caprice One: bb.1-4, Ricochet bowing in slow motion	87
Video Clip 3 Caprice One: bb. 14-16, Triple-strop bowing exercise	89
Video Clip 4 Caprice One: bb. 27-37, Phrasing	93
Video Clip 5 Caprice One: bb. 1-4, Ricochet exercise	95
Video Clip 6 Caprice One: bb. 1-16, Timing the left and right hands	96
Video Clip 7 Caprice Three: bb.1-8, Altered bowings and fingerings	104
Video Clip 8 Caprice Three: b. 2, Octave trill in slow motion	111
Video Clip 9 Caprice Three: b. 4, Fingered octave trill (exercise 1)	111
Video Clip 10 Caprice Three: b. 4, Fingered octave trill (exercise 2)	112
Video Clip 11 Caprice Three: bb. 25-50 (Presto), Finger evenness exercises	114
Video Clip 12 Caprice Five: b. 1, Arpeggio exercises	121
Video Clip 13 Caprice Five: b. 1, Arpeggio phrasing	123
Video Clip 14 Caprice Five: bb. 2-3, Saltato bowing in slow motion	129
Video Clip 15 Caprice Five: bb. 2-7, Saltato bowing	129
Video Clip 16 Caprice Five: bb. 2-5, Saltato in four note bounces	130
Video Clip 17 Caprice Five: bb. 2-5, Saltato in eight note bounces	130
Video Clip 18 Caprice Six: bb. 19-21, Measured and unmeasured trills	139
Video Clip 19 Caprice Six: bb. 2-3, Vibrato trills	140
Video Clip 20 Caprice Six: bb. 1-8, Learning the melodic line	144
Video Clip 21 Caprice Six: bb. 1-8, Melodic line with double-stops	144
Video Clip 22 Caprice Six: bb. 1-8, Trills	145
Video Clip 23 Caprice Six: bb. 1-8, Consolidating the learning stages	145
Video Clip 24 Caprice Nine: bb. 1-8, Fingering pattern (imitando il flauto)	165
Video Clip 25 Caprice Nine: bb. 8-12, Fingering pattern (imitando il corno)	165
Video Clip 26 Caprice Nine: bb. 82-90. Intonation exercise in a single position	166

Video Clip 27 Caprice Nine: bb. 82-90, Hand position exercise	167
Video Clip 28 Caprice Nine: bb. 82-90, Coordination exercise	167
Video Clip 29 Caprice Nine: bb. 82-90, Consolidating the position changes	168
Video Clip 30 Caprice Ten: Open string accented bowing exercise	183
Video Clip 31 Caprice Ten: Variations on accented bowing exercises	183
Video Clip 32 Caprice Ten: Slow motion travelling staccato	184
Video Clip 33 Caprice Ten: Travelling staccato string crossing exercises	185
Video Clip 34 Caprice Ten: b. 1, Applying bowing exercises	186
Video Clip 35 Caprice Ten: bb. 1-4, Performance tempo	186
Video Clip 36 Caprice Eleven: bb. 1-8, Learning the double-stops	194
Video Clip 37 Caprice Eleven: bb. 54-65, Eliminating the hook stroke	196
Video Clip 38 Caprice Eleven: Articulation in hook stroke bowing	196
Video Clip 39 Caprice Eleven: bb. 29-36, Developing secure string crossings	197
Video Clip 40 Caprice Eleven: bb. 79-85, Managing consecutive string crossings	198
Video Clip 41 Caprice Twelve: bb. 1-8, Double-stop exercise	204
Video Clip 42 Caprice Twelve: bb. 1-8, Thumb extensions	206
Video Clip 43 Caprice Twelve: String crossing exercise	207
Video Clip 44 Caprice Twelve: Slow motion right wrist movements	208
Video Clip 45 Caprice Twelve: bb. 20-21, Preparing the hand for tenths	209
Video Clip 46 Caprice Sixteen: bb. 1-8, Detaché with accented notes	215
Video Clip 47 Caprice Sixteen: bb. 40-44, Articulation	217
Video Clip 48 Caprice Sixteen: bb. 25-26, Managing difficult shifts	219
Video Clip 49 Caprice Sixteen: bb. 27-29, Shifting exercise	221
Video Clip 50 Caprice Sixteen: bb. 27-29, Increasing tempo while maintaining	
secure shifts	221
Video Clip 51 Caprice Sixteen: b. 37, String crossing angles	224
Video Clip 52 Caprice Nineteen: Spiccato exercise	231
Video Clip 53 Caprice Nineteen: Open string spiccato & double-stop exercise	231
Video Clip 54 Caprice Nineteen: bb. 5-8, Consolidating the bow strokes	232
Video Clip 55 Caprice Nineteen: bb. 5-13, Double-stop exercise	233
Video Clip 56 Caprice Nineteen: bb. 27-28 & 35-36, Securing the shifts	236
17	

Video Clip 57 Caprice Twenty: b. 25, Bowing exercise
Video Clip 58 Caprice Twenty: bb. 25-27, Coordination exercise
Video Clip 59 Caprice Twenty: bb. 25-27, Increasing the tempo
Video Clip 60 Caprice Twenty: bb. 1-16, Phrasing & bow weight distribution
Video Clip 61 Caprice Twenty: bb. 17-24, Splitting the triple-stops
Video Clip 62 Caprice Twenty: bb. 17-24, Performance tempo
Video Clip 63 Caprice Twenty-Four: bb. 5-6 (var. 6), Scales with double-stop fingering 258
Video Clip 64 Caprice Twenty-Four: bb. 5-6 (var. 6), Double-stop-broken-tenths
exercise
Video Clip 65 Caprice Twenty-Four: bb. 5-6 (var. 6), Upper/lower note focus in
double-stop playing
Video Clip 66 Caprice Twenty-Four: bb. 5-6 (var. 6) Consolidating the learning stages 259
Video Clip 67 Caprice Twenty-Four: var. 8, Tuning the triple-stops
Video Clip 68 Caprice Twenty-Four: var. 8, Bow management in triple-stops
Video Clip 69 Caprice Twenty-Four: var. 8, Bowing with consecutive down-bows 261
Video Clip 70 Caprice Twenty-Four: var. 8, Bowing variations
Video Clip 71 Caprice Twenty-Four: var. 9, Arco notes
Video Clip 72 Caprice Twenty-Four: var. 9, Organisation of the left-hand
Video Clip 73 Caprice Twenty-Four: var. 9, Increasing the tempo

INTRODUCTION

Aims of Study

The 24 Caprices by Niccolò Paganini are to this day considered the most technically demanding works in all the violin repertoire. They feature multiple techniques which are often played simultaneously and require demanding skill from the performer. They feature as works for the most prestigious international violin competitions such as the Menuhin International Violin Competition and the Premio Paganini International Violin Competition.

While the Caprices feature an abundance of varying techniques, they are musically interesting and often feature incredibly musical melodic lines. Each Caprice is unique in its style and character, and it is often challenging for the performer to deliver a musical and technically proficient performance.

The purpose of this study is to create a project that serves the professional violinist, teaching specialist, and willing student in a pedagogical manner. By systematically dissecting the Caprices and providing logical solutions to their challenges, they become more approachable for any capable violinist.

The project is motivated by the following aims:

- a) To contribute to an understanding, by violinists and others, of the technical challenges of the Paganini Caprices and how to address them
- b) To document the process of developing the required performing techniques by video and audio recordings
- c) To allow the pedagogical instructions found in the project to be used and adapted to suit a wider variety of string repertoire.

Research Questions

The project is interrogated by the following research questions:

a) What makes the Paganini Caprices challenging for the violinist?

At times, the Caprices require more than two techniques to be performed simultaneously; this is what makes the caprices difficult. By isolating the techniques and practising them individually, the performer can organise the appropriate movements so that the difficult techniques can be achieved independently.

b) What practice materials are required to perfect the techniques in the selected Caprices?

Thorough preparation is essential to overcome the technical difficulties found in the Caprices. There are three stages of preparatory resources that the violinist should work through. The first stage consists of the study of scales which should be repetitively practised in the key of the Caprice. This improves intonation and forms an integral part of the preparation. The second stage involves studying a collection of method books that specifically discuss how to execute particular techniques. The third and final stage involves practising the technical action in a musical context through the use of studies. Only after the completion of these three stages can the Caprices be attempted.

c) How best can the process of technical demonstration be presented so that it can be used and adapted to other string works?

The techniques that are taken from the Paganini Caprices are discussed and demonstrated out of context from the Caprices. Exercises and practice strategies are explored and recommended so that the technique can be performed to a high standard. To maintain the project's integrity, the technique(s) are reintroduced to the Caprice and are performed in context.

Scope of the Project

Each of the 24 Caprices have been analysed to identify the techniques therein. While every Caprice contained more than one technique, a single technique was always a main feature of the work. This has been labelled as: ✓ in **Table 1** and is named the Primary Technique.

Apart from **Table 1** illustrating the Primary Techniques in all 24 Caprices, it also demonstrates the Caprices which utilise the same techniques; for example, Caprices One and Nine both contain ricochet techniques. To avoid repetitive discussions about a technique occurring in multiple Caprices, one Caprice was selected. The Caprice which featured the technique repetitively, and which enhanced the compositional integrity of the piece, was selected as having the Primary Technique. Caprice One utilises the ricochet bowing technique throughout, and the technique is a critical component of it; therefore, it features as the Primary Technique.

 Table 1
 Technical Challenges in the 24 Paganini Caprices

	Technical Difficulties in the 24 Paganini Caprices														
Caprice	Ricochet	Ameggio	D. Stops	Triple Stops	String X	Tenths	Fast Passagework	Spiccato	Sautille	Trills	Staccato	Hook	Detache	Pizz	Saltato
1	/	Х	Χ	Х	Χ										
2			Χ		/	Х	Х				Х		Х		
3			Χ		Χ		1			1					
4			/		X	Х	X	Χ		X			Х		
5		1			Χ		X		1						1
6			/							/					
7		Х	Χ	Х		Х	X				1	Х	Х		
8			/				X	Χ		X			Х		
9	Х		✓	Х	X			✓					Х		
10		X			Χ		X	Χ		Χ	1				
11			✓	Х	Χ		X					1	Х		
12					/	Х	X					,			
13			/		/		X	Х			Χ		Х		
14			/	Х		Х					Χ				
15			Χ	Х	Χ		1	Χ			✓	Х			
16					X						Х		/		
17		Х	/				Х				Х	Х	Х		
18			/				Х	✓			Х		Х		
19			✓	Х	Χ		Х	✓			Х				
20			/		Х		X	1		/					
21		Х	✓		X	Х	1								
22			/		Χ	Х	Х	Х		Χ	Х		Х		
23					/	Х	1	Х			Х		Х		
24		1	/	1	/	/	1	1			/		/	1	

There are a total number of seventeen techniques which are discussed and analysed in this project. The techniques include ricochet bowing, octaves, trilling octaves, fast passagework, arpeggios, sautillé bowing, saltato bowing, trills in double-stops, spiccato bowing, flying staccato bow stroke, hook stroke, slur bowing, détaché bowing, spiccato bowing, triple-stops, tenths and pizzicato. These techniques exist in Caprices 1, 3, 5, 6, 9, 10, 11, 12, 16, 19, 20 and 24, which forms the project's capacity and scope. **Table** 2 provides the Primary and Secondary Techniques found in the twelve selected Caprices.

Table 2 Twelve Selected Caprices and their Techniques

Caprice	Primary Technique	Secondary Techniques
No. 1	Ricochet	Arpeggios, double-stops, triple-stops and
		string crossings
No. 3	Octaves, trilled octaves and fast	Double-stops and string crossings
	passagework	
No. 5	Arpeggios, sautillé and saltato bowing	String crossings and fast passagework
No. 6	Trills in double-stops	No additional secondary techniques
No. 9	Double-stops with spiccato bowing	Ricochet, triple-stops, string crossings and
		détaché
No. 10	Bowed staccato (flying staccato)	Arpeggios, string crossings, fast passagework,
		spiccato and trills
No. 11	Double stops and hook stroke bowing	Triple-stops, string crossings, fast
		passagework and détaché bowing
No. 12	String crossings on neighbouring string	Double-stops (10ths) and fast passagework
	(in slurs)	
No. 16	Détaché bow stroke	String crossings and staccato
No. 19	Double-stops with spiccato bowing	Triple-stops, string crossings, fast
	and large string crossings	passagework and staccato
No. 20	Double-stops, spiccato and trills	String crossings and fast passagework
No. 24	Arpeggios, double-stops (tenths), triple	No additional secondary techniques
	stops, string crossings, fast	
	passagework, spiccato, staccato,	
	détaché and p <u>izzicato</u>	

Caprice Twenty-Four features several Primary Techniques throughout the variations. Only triple stops, double-stop-tenths and pizzicato are discussed in Chapter Fourteen to avoid any repetitive analysis or discussion on the same techniques.

Significance

Before presenting the doctoral originality of the project, it is necessary first to clarify the project's discipline. It is the discipline of musical performance as approached through the training and development process that can be deemed violin pedagogy.

The target audience for the project is the instructional specialist who seeks to interpret the score, master some of the challenges in both the left and right hands and achieve a high standard in their interpretation through the communication of live performance.

The project contributes to doctoral originality in the following ways:

1. Carrying out empirical work which has not been done before

The project is empirical in nature and is based on the success of the methodology. Although there are audio and video recordings of the Paganini Caprices, they have not been recorded or documented during the critical stages of learning.

2. Using a different methodological approach to address technical problems

The methodology that has been chosen for this study is called Reflexive Evaluation.¹ Reflexive Evaluation is made up of five stages: observation, induction, deduction, testing, and evaluation. There is no recorded study that uses this methodology in the learning stages of the Paganini Caprices.

¹ Graham Gibbs, *Learning by Doing: A Guide to Teaching and Learning Methods* (Oxford: Oxford Brookes Further Education Unit, 1988), p. 27.

3. Producing an analysis of something not previously examined before

The Paganini Caprices have been analysed from the following perspectives:

- Structurally
- Biographically
- Compositionally
- Sequentially
- Musically

The project provides instruction that is specific to the violin. It comprises of 'how-to' steps so that the stages of learning are clearly identifiable.

4. Extending and elaborating on an existing piece of work

The project contributes new information to the discipline of string pedagogy and performance and elaborates on existing documentation that has already been recorded regarding the 200-year-old Caprices.

5. Providing a new interpretation using existing/known information

The project contributes a new interpretation of the Paganini Caprices in the form of an audio CD that consists of a performance of twelve Caprices from the selection of 24.

6. Adding to knowledge in a way that has not been previously done before

The project is unique in the way its outcomes are presented. The forms of media used (thesis, audio CD and video DVD) provide the reader with a complete visual, intellectual, logical and practical explanation of the project's outcomes. For this reason, the project is not restricted to violin players only, instead it can be used by

other string players including viola, cello, double bass and guitar. The presented outcomes can be adapted and used for other challenging works that contain difficult technical and musical challenges.

Source Materials

Eight editions of the 24 Paganini Caprices were used in the methodology component of this project. Paganini's first name is often spelt differently as Niccolò, Niccolo or Nicolò.² For this project, Paganini's first name has been spelt precisely as presented in the source.

Ricordi's first and second editions are valuable resources as Ricordi was the first to publish the Caprices following Paganini's instructions. However, there are many errors among the editions, including discrepancies concerning: notes, rests, terms, dynamic markings, bowings, and phrase markings. A table providing a list of all the note discrepancies can be found in Part Three, from Chapters Three to Fourteen in the project.

Studied Editions of the 24 Paganini Caprices

Niccolò Paganini, *Opus 1 24 Capricci per Violino Solo* (c.a.1817), https://imslp.org/wiki/Special:ImagefromIndex/12926/nhfn.

Nicolò Paganini, 24 Capricci Per Violino solo Composti e Dedicati Agli Artisti da Nicolo Paganini, 1st ed. (Milan: G. Ricordi, c.a.1820), 403, http://conquest.imslp.info/files/imglnks/usimg/f/f8/IMSLP330985-PMLP03645-24capriccipervio00paga.pdf.

N. Paganini, 24 Caprices pour Le Violon composes par N. Paganini. ed. by D. Ferdinand (Leipzig: Breitkopf & Härtel, c.a.1823), 3936,

² John Sugden, *The Illustrated Lives of the Great Composers: Paganini* (London: Omnibus Press, 1986), p. 11.

- http://conquest.imslp.info/files/imglnks/usimg/7/7d/IMSLP363858-PMLP03645-paganini 24 caprices op1 breitkopf.pdf.
- N. Paganini, *Vingt-Quatre Caprices on Studes Pour Le Violon*, ed. by Henry Bonaventure (Paris: Richault, c.a.1825), 1028.R, http://ks4.imslp.net/files/imglnks/usimg/d/dc/IMSLP390349-PMLP03645-paganini_caprices_ed_henry.pdf.
- Nicolò Paganini, 24 Capricci Per Violino solo Composti e Dedicati Agli Artisti da Nicolo Paganini, 2nd ed. (Milan: G. Ricordi, c.a.1836), 9036, http://conquest.imslp.info/files/imglnks/usimg/0/00/IMSLP29587-PMLP03645-Paganini_Capricci_2a_Edizione.pdf.
- N. Paganini, *Paganini Capricen Opus 1 Violine*, ed. by Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, http://conquest.imslp.info/files/imglnks/usimg/4/44/IMSLP382305-PMLP03645-PAGANINI-Flesch_24_Caprices.pdf.
- Niccolo Paganini, *Paganini 24 Caprices Opus 1 for Violin Solo*, ed. by Ivan Galamian (New York: International Music Company, 1973), 2292.
- Nicolò Paganini, 24 Capricci Für Violine Solo (Urtext), ed. by Renato De Barbieri, Alberto Cantú and Ernst Herttrich (München: G. Henle Verlag, 1990), 405.

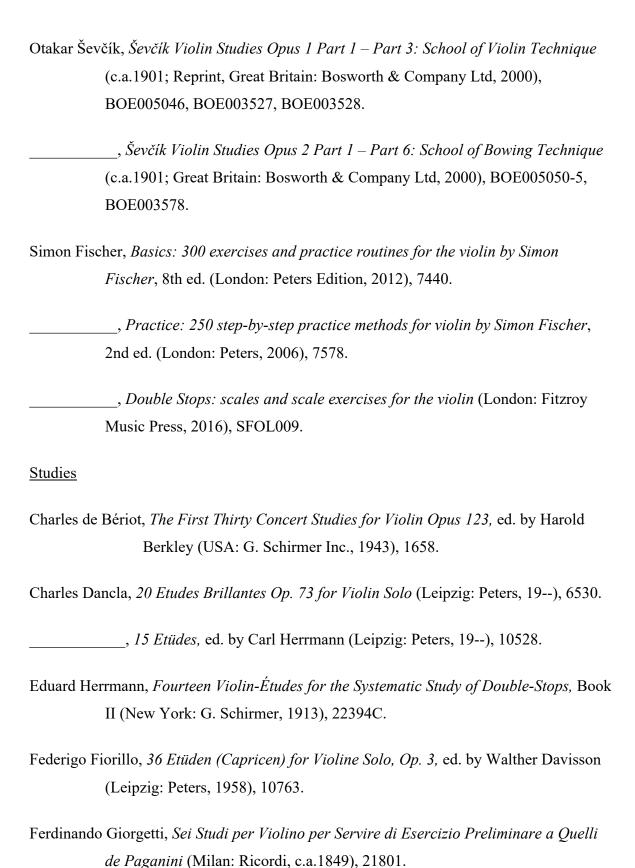
Scales, studies and exercises were also used in the methodology and were a crucial resource in the learning process of the selected Caprices. Provided from Chapters Three to Fourteen, in Part Three of this project, is a table listing the recommended repertoire that supports the development of the Primary Techniques found in the Caprices.

Scale Systems

- Carl Flesch, Carl Flesch Scale System: Scale exercises in all major and minor keys for daily study, a supplement to Book 1 of The Art of Violin Playing, revised and edited by Max Rostal (c.a.1926; reprint, Germany: Verlag von Ries & Erler, 1987), O5188.
- Endre Granat, *The Heifetz Scale Book* (The Jascha Heifetz Estate: Lauren Keiser Music Publishing, 2017), EAN13.
- Hans Sitt, *Tonleiterstudien (Scale-Studies) für Violine* (Leipzig: Fr. Kistner, c.a.1898), 7100.
- Ivan Galamian, *Contemporary violin technique*, ed. by Frederick Neumann, vols. 1 and 2 (Boston: Galaxy Music Corporation, 1966), GMC2356 and GMC1.2562.
- Jan Hrimaly, Scale-Studies For the Violin (USA: G. Schirmer inc., 1905), 842.
- Simon Fischer, *Scales by Simon Fischer: Scales and scale studies for the violin* (London: Peters Edition, 2012), 71908.

Exercises

- Aleksey Yanshinow, Daily Violin Exercises Opus 27 (Moscow: Muzgiz, 1939), M16316r.
- Demetrius Dounis, The Dounis Collection: Eleven Books of Studies for the Violin, Op. 12, 15 (two books), 16 (two books), 18, 20, 21, 27, 29, 30 by Demetrius Constantine Dounis (New York: Fischer, 2005), BF16.
- Henry Schradieck, *The School of Violin-Technics, Book 1: Exercises for Promoting Dexterity in the Various Positions*, vol. 515, (1900; reprint, USA: Schirmer Inc, 1967), HL50255380.



- Franz Wohlfahart, Sixty Studies for the Violin Op. 45 Complete Books I and II, ed. by Gaston Blay (1905; Reprint, New York: Schirmer: 2004), 2046.
- Hans Sitt, *Op. 32 Études For The Violin Book I III: Twenty études in second, third, fourth and fifth positions,* vol. 871 (New York: Schirmer, 1907), 18103.
- ______, Op. 32 Études For The Violin Book IV: Twenty études in 6th and 7th position (Leipzig: Ernst Eulenburg, 1929), plate unknown.
- ______, Op. 32 Études For The Violin Book V: Twenty Studies in Double Stops, ed. by Gustav Saenger (New York: Carl Fischer, 1912), 14189.
- Heinrich Kayser, *36 Etudes/Studies Op. 20 Violine*, revised by Hans Sitt (Leipzig: Peters, c.a.1915), 10005.
- Henri Wieniawski, *Ecole Moderne Etudes-Caprices Opus 10 for Violin Solo*, ed. Ivan Galamian (c.a.1930; Reprint, USA: IMC, 1973), 645.
- Pierre Gaviniès, 24 Etudes 'Matinées' for Violin, ed. by Walther Davisson (Leipzig: Peters, 1958), 10838.
- Pierre Rode, *24 Caprices for Violin*, ed. by Ivan Galamian (c.a.1950; Reprint, New York: International Music Company, 1962), 2066.
- Jacques Mazas, *Etüdes Opus 36 Heft I-III for Violine*, ed. by Walther Davisson (Leipzig: Peters, 1951), 1819.
- Jakob Dont, *24 Etudes and Caprices Opus 35 for Violin*, ed. by Ivan Galamian (c.a.1950; Reprint, New York: International Music Company, 1968), 2066.
- _______, 24 Preparatory Exercises to Kreutzer & Rode Studies Op. 37 for Violine Solo, revised by Hans Sitt (Frankfurt: Peters, 1950), 10006.

Rodolphe Kreutzer, 42 Studies for Violin, ed. by Ivan Galamian (New York: International Music Company, 1963), 2073.

Methodology

The methodology used in this project is classified as Reflexive Evaluation.³ The Reflective Cycle consists of the following stages:

- 1. **Description** what happened?
- 2. **Feelings** what were you thinking and feeling?
- 3. **Evaluation** what was good and bad about the experience?
- 4. **Analysis** What sense can you make out of the situation?
- 5. **Conclusion** What else could you have done?
- 6. **Action Plan** if it arose again, what would you do? (back to step 1, Description)

This research investigation is about the outcome of performance and how to solve problems of technique and interpretation. It is a performance-based study, with a pedagogical purpose, it does not seek to adopt any particular theoretical framework. It is not theoretical but practical, and thus empirical in nature. There is, however, a clear sense of method to the investigative approach.

Analytical Process

Step One: Visual Analysis of Editions/Scores

The first step began by understanding the score without the violin using multiple editions of the Caprices. A visual analysis of the left and right-hand techniques was recorded in this step and differences between the editions such as notes, tempo indications, time signatures and fingerings were noted down and taken into consideration in preparation for the second step.

³ Gibbs, Learning by Doing: A Guide to Teaching and Learning Methods, p. 27.

Step Two: Aural Analysis of Selected Recordings

The second step involved listening critically to recordings of violinists of various levels performing the Caprices. A review of each recording was created, and an evaluation of the violinists' execution of the techniques was formed. This stage also involved comparing the differences between the performances and the scores. Any differences between the bowings, notes, tempos, rhythms, tonal and timbre changes, and changes made for musical expression purposes were noted down during the aural analysis.

Step Three: Fingering and Bowing Decisions

Once a visual and aural analysis of the score had been completed, step three involved playing the Caprice on the violin. This step began by sight-reading the work slowly and carefully while working through sections of the piece that required consideration to fingering and bowing changes. Fingering choices were impacted by string crossings, finger stretches, shifting options and sound quality. Bowing decisions were impacted by string crossings, a clear sounding point, bow divisions, and if the Caprice required on or off the string bow contact.

Step Four: Reflexive Evaluation and Isolation of the Technique

Once fingering and bowing choices had been established, learning the primary technique commenced. The technique was isolated from the Caprice and practised. The reflexive evaluation was then applied, and the stages considered. The following points were considered when the technique was practiced:

- Right arm: elbow position and bowing strokes.
- Right hand: position of fingers and thumb on bow hold, application of finger pressure, bowing strokes, tempo, and articulation.
- Bow: pressure, speed, and point of contact.
- Left arm: elbow angle and arm vibrato.

Left hand: vibrato, finger extensions and contractions, shifts, tempo, thumb

position, and finger pressure.

Violin: string thickness, open-string tuning, bridge curvature, and string

height.

Posture: chin rest height, shoulder rest height, relaxation and tension, position

of head on chin rest, and assessment of tension in left shoulder.

Step Five: Supporting Resources

Resources such as scales, exercises and studies became fundamental to the

development of the primary technique that was studied. During practice, faults,

improvements or successes were consistently evaluated and recorded. The outcomes of

these practice sessions formed an integral part of this project and helped conceive

several exercises that were written by the author to improve the primary technique.

Step Six: Incremental Tempo Changes

Once the technique could be consistently executed, it was reintroduced back into the

context of the Caprice. The tempo of the Caprice was increased gradually by three to

five beats per minute until the desired performance tempo was reached. Practising

repetitively with the metronome helped reinforce the execution of the technique within

the context of the Caprice.

Step Seven: Creating the Audio CD

Once the Caprice could be performed at performance tempo, it was professionally

recorded onto an audio CD. The recording session took place at the Professional Music

Academy of South Australia under the supervision of a qualified recording engineer.

32

Step Eight: The Thesis

The thesis forms the main component of the project and addresses the techniques found in the Caprices. It discusses them as independent techniques that can be performed in other works and also within the context of the Caprices. Supplementary exercises and practice strategies are provided in the thesis and recommendations on the most efficient way of practising are recommended. Apart from the techniques, factors that can contribute to the technical and musical difficulties such as postural choices, bowing patterns, instrument setup, string choice, tuning, instrument fittings and fingering choices are also discussed.

Step Nine: Video Production

Apart from the supporting resources mentioned in step five that aim to develop and secure the execution of the primary technique, additional exercises were composed and notated by the author for each Caprice. These exercises provide the player with practise regimes and strategies that help strengthen the techniques in the context of the Caprice. The video clips provide demonstrations of these exercises and correspond to the notated exercises within Part Three of the thesis. The video recordings were made at the Video Recording Studios at The University of Adelaide, South Australia and were filmed and edited by the author.

Organisation

The thesis begins with an introduction which outlines the scope, significance of the project and methodology. The introduction is followed by three parts which are subdivided into fourteen chapters. Part One contains a single chapter and includes two sub-headings titled: *Niccolò Paganini* and *Literature Review: Twenty-Four Caprices Opus 1 for Violin Solo*. The section on Niccolò Paganini provides background information about the life of the composer and the people and music which motivated Paganini to create his Caprices. The next section explores the Caprices from a performance and pedagogical perspective and forms the project's literature review. The second part provides the performance

component of the project and lists the DVD and audio tracks which need to be referred to during the third part. The final part (Part Three) forms the body of the work and encompasses musical and technical issues which are found in the selected Caprices. A conclusion completes the project and provides a list of sources and appendices.

Introduction

The introduction provides background information on the project from its conception to its completion. The purpose, motivation, scope, and significance of the project are presented in this chapter, as well as essential source materials. A section on the methodology used crafts a backbone for the project, providing it with an identifiable step by step process.

Part One

Part One contains three significant sections. The first section, titled *Niccolò Paganini*, provides insight into the personality and life of the composer. Information concerning his health, physique, finances, love affairs, friendships and education are also explored. The future impact that Paganini had on subsequent generations of performing musicians and composers is also examined and discussed.

The next section titled *Literature Review: Twenty-Four Caprices Opus 1 for Violin Solo* provides contextual information about the creation of the Caprices and its dedicatee's. In addition, the literature review examines publications of the Caprices, audio CDs and video DVD recordings. Sources are categorised into either pedagogical or performance sources and are reviewed for their varying levels of success.

The final section of chapter one is titled *Prior Recommended Repertoire* and provides a list of repertoires that should be studied before commencing the Caprices.

Part Two

The second part of the project encompasses one chapter (Chapter Two), which provides details on the performance components of the project. This chapter provides the track list to the DVD which supports the dissertation by illustrating practice strategies to overcome the challenges found in the selected Caprices. The chapter also provides a track

list for the audio CD which contains a professional recording of the twelve selected Caprices.

Part Three

The final chapter, titled *The Caprices and their Performance Problems*, forms a significant part of the project and provides the outcome of the project's methodology. In this chapter, Caprices One, Three, Five, Six, Nine, Ten, Eleven, Twelve, Sixteen, Nineteen, Twenty, and Twenty-four are forensically examined, and technical and musical difficulties are presented. Each of the selected Caprices presented in this thesis provides the reader with practical, real-life solutions in the form of step-by-step exercises and discussions to challenge the difficulties that are found in the Caprices. These step-by-step exercises are supplemented with video recordings that provide the reader with a better visual and aural understanding.

At the end of each chapter, the author has provided a list of violin-specific repertoire. The repertoire list features works that were published after the Paganini Caprices which share the same technical difficulties. This selection of repertoire can be studied after the completion of the Paganini Caprice.

Conclusion

The conclusion closes the project and provides scope on areas of further research. A list of sources which are categorised into primary and secondary sources is included, and several appendices which provide the reader with further knowledge on the solutions to the Paganini Caprices are included.

PART ONE: The Paganini Caprices

CHAPTER ONE

Niccolò Paganini

Niccolò Paganini was born in 1782 in the Italian village of Genoa,⁴ during a time of war and instability as the French Empire grew into power and sought to destroy Italy's political foundations.⁵

Paganini's parents Teresa Bocciardo and Antonio Paganini, had six children together and maintained a middle to lower class socioeconomic status.⁶ Although the children did not receive any formal schooling,⁷ Paganini described both of his parents as "musical amateurs," suggesting that Paganini's first musical encounter took place at the home.

Before the age of six, Paganini began playing the violin and received lessons from his father. Even at a young age, Paganini must have shown signs of talent, as his father went to unhealthy lengths to ensure his son succeeded at the instrument. Antonio would frequently punish Paganini by methods of starvation or beatings for redundant mistakes in his playing. He was regularly forced to practice long hours that would be considered abusive by today's standards and detrimental to a child's well-being. He was regularly forced to practice long hours that would be considered abusive by today's standards and detrimental to a child's well-being.

⁴ Sugden, The Illustrated Lives of the Great Composers: Paganini, p. 11.

⁵ Clara Lovett, John Larner, Giuseppe Nangeroni, Marino Berengo, James Powell, Giuseppe Di Palma, Paola Signoretta, "Italy," Encyclopedia Britannica, Last Updated: Aug 28th, 2019, https://www.britannica.com/place/Italy.

⁶ G.I.C. De Courcy, *Paganini The Genoes*, vol. 1 (Norman: University of Oklahoma Press, 1957), p. 9.

⁷ François-Joseph Fétis, *Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin*, New Introduction by Stewart Pollens (1860; Reprint, New York: Dover Publications, 2013), p. 30.

⁸ De Courcy, *Paganini The Genoese*, p. 10.

⁹ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 27.

¹⁰ Samuel Stephen Stratton, Nicolo Paganini: His Life and Work (London: The Strad, 1907), p. 6.

Sonia Ranelli, Leon Straker and Anne Smith, "Playing-related Musculoskeletal Problems in Children Learning Instrumental Music: The Association Between Problem Location and Gender, Age, and Music Exposure Factors, (Report)," Medical Problems of Performing Artists 26, no. 3 (2011): 123-139, ProQuest Ebrary.

Paganini's relationship with his father was strained, as Antonio tried to discipline the boy's talents to secure a prosperous future for himself and his family. This motivation caused Paganini to be pushed to extreme limits, where he often suffered from severe illnesses and was unwell for many weeks.¹²

As Paganini progressed in his music studies, his father's lessons soon became superfluous. Paganini's first professional teacher was Antonio Cervetto, who was a violinist of the theatre. ¹³ Even though Cervetto was not the leader of the orchestra, he would often allow Paganini to sit in the theatre to watch concerts free of charge; an opportunity the boy's family could not have otherwise afforded. ¹⁴

Unfortunately, Paganini dismissed Cervetto's generosity, and credited his musical training to no one stating that he was, "self-taught," and that "great ideas sprang spontaneously from the inner flame that animated him." While Cervetto did not directly influence Paganini's abilities on the violin, he did provide Paganini with opportunities to be inspired by other performing musicians which ignited his imagination and creativity.

Paganini's next teacher was Francesco Gnecco (1769-1810), an accomplished composer in operatic writing. Gnecco could play many string and wind instruments and provided Paganini with a foundation in compositional writing, knowledge on instrument capabilities, and instrument groups.¹⁶

Paganini remained with Gnecco until he suggested Paganini learn from his previous teacher Giacomo Costa; who was at that time the leading violinist in Genoa,¹⁷ and musical director of several notable churches.¹⁸ Under the watchful eye of his father, Paganini made

¹² Stratton, Nicolo Paganini: His Life and Work, p. 6.

¹³ Sugden, The Illustrated Lives of the Great Composers: Paganini, p. 13.

¹⁴ De Courcy, *Paganini The Genoese*, p. 28.

¹⁵ P. de Wailly, "Boucher de Perthes et Paganini," *Revue de Musicologie* No. 27 (1928): 9, p. 167-169. Quoted in De Courcy, *Paganini The Genoese*, p. 28.

¹⁶ De Courcy, *Paganini The Genoese*, p. 29.

¹⁷ Sugden, *The Illustrated Lives of the Great Composers: Paganini*, p. 14.

¹⁸ Jacques-Gabriel Prod'homme, *Nicolo Paganini, a biography,* trans. by A. Mattullath (New York: Carl Fischer, 1911), p. 6.

rapid progress with Costa and at the age of eight, composed a sonata for the violin.¹⁹ At age nine, Paganini made his first public appearance and performed variations on his composition *La Carmagnole* to an enthusiastic audience.²⁰

It was soon after Paganini's public debut that the Polish violinist August Duranowski (c.a.1770-1834) visited Genoa. Duranowski was a pupil of Viotti (1755-1824) and showcased several technical tricks within his concert which fascinated Paganini. Paganini later admitted to his biographer Fétis, that "many of his most brilliant and popular effects were derived to a considerable extent from Duranowski."²¹

Antonio continued his search for experienced teachers and in 1795 took his son to meet Alessandro Rolla (1757-1841) who was the leader of the Court Orchestra in Parma.²² Fétis confirms that there is a lack of evidence to prove Paganini learnt from Rolla but suggests that Paganini was only a pupil of Rolla for a short period.²³

To further Paganini's compositional education, Rolla insisted that he study with Ferdinando Paër (1771-1839), who was the director of the Parma Conservatory.²⁴ While Paganini did benefit from his tuition later, he initially studied counterpoint with Gasparo Ghiretti, who was Paër's former teacher.²⁵ It was under Ghiretti's instruction that Paganini wrote several instrumental works. Later, Paër took over from Ghiretti and provided Paganini with lessons in composition. It was under Paër's tutelage that Paganini performed at the Parma Royal Theatre and performed for the royal family.²⁶

In 1769, Paganini returned to Genoa where he met Rudolphe Kreutzer (1766 - 1831) who performed in concert as part of his tour.²⁷ While in town, Paganini played for Kreutzer

¹⁹ Renée de Saussine, *Paganini*, preface by Jacques Thibaud and trans. by Marjorie Laurie (London: Hutchinson & Co., 1953), p. 6.

²⁰ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 28.

²¹ Boris Schwartz, "Paganini, Nicolò," in *The New Grove Dictionary of Music and Musicians*, ed. Stanley Sadie, (London: Macmillan, 2001), vol. 14, p. 86.

²² Sugden, *The Illustrated Lives of the Great Composers: Paganini*, p. 15.

²³ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 28.

²⁴ De Courcy, *Paganini The Genoese*, p. 42.

²⁵ Sugden, *The Illustrated Lives of the Great Composers: Paganini*, p. 17.

²⁶ Schwartz, "Paganini, Nicolò," in *The New Grove Dictionary of Music and Musicians*, p. 86.

²⁷ ibid.

and demonstrated his unique playing abilities. Kreutzer was fond of the boy for he also had a little prodigy at the time — Charles Philippe Lafont (1781-1839). It would be twenty years later before Paganini and Lafont met at a concert in Milan, but it is likely Kreutzer told Paganini about his young protégé and his capabilities.²⁸

The most significant influence on Paganini's compositional writing came from a disregarded piece written by Pietro Locatelli (1695-1764), titled *L'arte del violino*, which contained 24 Caprices for violin solo.²⁹ Paganini implied to Fétis in his biography that he came across Locatelli's work by accident.³⁰ The piece contains a significant number of demanding techniques including double stops, triple stops, string crossings, harmonics and double-stopped trills, all of which exist in Paganini's own 24 Caprices.³¹

Paganini's Caprice One pays tribute to Locatelli's work by quoting his Caprice Seven in the opening bars. The quote is presented in **Music Scores 1** and **2** (p. 40), which provide the first seven bars of Locatelli's Caprice Seven, and Paganini's Caprice One.

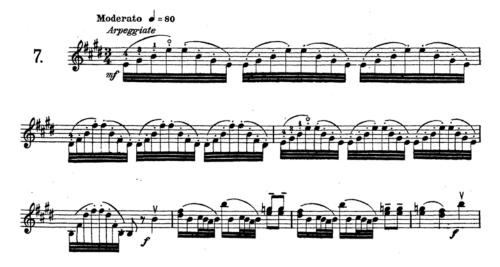
²⁸ De Courcy, *Paganini The Genoese*, p. 49-50.

²⁹ Pietro Antonio Locatelli, L'Arte Del Violino Op. 3 (Amsterdam: Michel-Charles Le Cène, 1733), 572-73.

³⁰ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. viii.

³¹ Similar violin techniques can be found in Paganini's Caprices and Locatelli's *L'Arte Del Violino*: Paganini: 1, 2, 9, 14 and Locatelli 7, 4, 2, 8 share the same techniques – Source adapted from: De Courcy, *Paganini The Genoese*, p. 46.

Music Score 1 Locatelli, L'Arte Del Violino, Caprice 7, bb. 1-7



Source: Pietro Antonio Locatelli, *No.* 7 'Moderato from L'Arte Del Violins Op. 3 (Milan: Ricordi, 1920), E.R.110, p. 19, bb. 1-7

Music Score 2 Caprice One, bb. 1-7



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 2, bb. 1-7.

Without the knowledge and opportunities passed down from his teachers; Antonio Cervetto, Francesco Gnecco, Giacomo Costa, Alessandro Rolla, Gasparo Ghiretti and Ferdinando Paër, Paganini's compositions would not have become more than mediocre works. Other influences that also affected Paganini came from notable performances by Duranowski and other local Italian musicians such as Antonio Lolli (c.a.1725-1802) and Giovanni Giornovichi (1747-1804).³² However, it was Locatelli's *L'Art del Violino*, that

³² Robin Stowell, *The Cambridge Companion to the Violin: Edited by Robin Stowell* (New York: Cambridge University Press, 1992), p. 65.

had the most profound impact over Paganini, for this work reshaped Paganini's knowledge of technical and performance capabilities. These influences not only provided Paganini with a successful career but enabled him to compose progressive works, like the *24 Caprices*. Later in his career, Paganini recorded to his biographer that only Durand,³³ Gnecco and Locatelli influenced him and that he "owed no debt to anyone." Paganini's statement corresponds to his private and secretive musical development, which was kept hidden from the public, for he wanted to ensure that the world believed his talent was self-directed and self-made.³⁵

Authors Prod' homme, Sugden, Saussine, Fétis and De Courcy suspect that upon Paganini's return to Genoa (c.a.1804), he began sketching out the *24 Caprices*. However, this theory is an assumption based on the chronological order of Paganini's first three Opus numbers being associated with this period.³⁶ Another theory is that the Caprices were composed over several years before being offered to Ricordi for publishing.³⁷ This likely hypothesis is supported by Paganini's original manuscript, which divides the Caprices into three groups; Opera Prima, Opera Seconda and Opera Terza. The first two groups (Opera's 1ma and 2da) consist of six Caprices, while the third group includes Caprices 13-24.³⁸ Unfortunately, Paganini did not mention his Caprices to his biographers until 1836,³⁹ and a lack of documentation provides inconclusive dates and locations for a period spanning three to four years that cannot be reconciled.⁴⁰ Therefore, there is a great deal of confusion and mystery concerning the Caprices and their date of creation.

³³ Durand later took the name Duranowski after his marriage c.a. 1800 - De Courcy, *Paganini The Genoese*, p. 35.

³⁴ P. de Wailly, "Boucher de Perthes et Paganini," *Revue de Musicologie* No. 27 (1928): 9, p. 167-169. Quoted in De Courcy, *Paganini The Genoese*, p. 28.

³⁵ De Courcy, *Paganini The Genoese*, p. 28.

³⁶ Sugden, *The Illustrated Lives of the Great Composers: Paganini*, p. 23.

³⁷ Claudio Casini, *Paganini* (Milan: Electa, 1982), p. 62.

³⁸ Robin Stowell, "Paganini: 24 Capricci per il Violino solo, dedicati agli Artisti Op. 1 – Robin Stowell," in Case Studies of Individual Works and Collections, from the CHASE project, ed. Clive Brown, David Milsom, Ilias Devetzoglou and George Kennaway (Universities of Leeds and Cardiff: 2008-2012), site updated 2011, accessed 1st Oct, 2019, http://mhm hud.ac.uk/chase/.

³⁹ Philippe Borer, "The Twenty-Four Caprices of Niccolò Paganini: their significance for the history of violin playing and the music of the Romantic era," (Doctor of Philosophy, University of Tasmania, 1995), p. 8.

⁴⁰ Prod'homme, *Nicolo Paganini, a biography,* p. 8.

Paganini's first opportunity for work came in 1801 when he was elected as leader for the new national orchestra in Lucca. He remained in the role for four years performing, teaching and composing, and throughout this period wrote 12 sonatas for violin and guitar. Then in 1805, Princess Elisa Baciocchi (sister of Napoleon Buonaparte) became ruler of Lucca. Consequently, the orchestra was removed and replaced by a smaller chamber court orchestra and Paganini was assigned to the second desk. Two years later, Paganini won the affections of the Princess and became solo violinist of the court. He described the duties of his position, "I had to conduct every time the royal family went to the opera, play three times a week at court and give a big concert every fortnight."

It was at one of these concerts that Paganini caught the eye of a young woman in the audience. As a tribute to the woman, Paganini presented a performance titled *Scèna Amorosa* (A Love Scene) in which only the E and G strings remained on the violin. ⁴⁴ In Schottky's biography, Paganini describes his composition:

The first string represented the girl, the second the man, and I then began a sort of dialogue depicting little quarrels and reconciliations between my two lovers. The strings first scolded, then sighed, lisped, moaned, joked, expressed delight, and finally ecstasy. It concluded with a reconciliation and the two lovers performed a pas de deux, closing with a brilliant coda. The musical Scèna received great applause. The lady for whom it was intended rewarded me with the most friendly glances...⁴⁵

After the performance, Paganini was approached by none other than the Princess who dared him to perform with only a single string at the following concert. Paganini accepted the challenge and presented the piece for the Emperor's birthday; a sonata titled 'Napoleon', that was played entirely on the G string.⁴⁶

⁴¹ Schwartz, "Paganini, Nicolò," in *The New Grove Dictionary of Music and Musicians*, p. 86.

⁴² Sugden, The Illustrated Lives of the Great Composers: Paganini, p. 24.

⁴³ Schwartz, "Paganini, Nicolò," in *The New Grove Dictionary of Music and Musicians*, p. 86.

⁴⁴ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 34.

⁴⁵ Julius Max Schottky, *Paganinis Leben und Treiben als Künstler und als Mensch* (Prague: Calve, 1830), p. 368. Quoted in De Courcy, *Paganini The Genoese*, p. 99.

⁴⁶ Sugden, The Illustrated Lives of the Great Composers: Paganini, p. 25-27.

This type of storytelling or mimesis was not a new type of writing and had been successfully conveyed in Antonio Vivaldi's (1678-1741) *Le Quattro Stagioni* (The Four Seasons) which was first published in 1725.⁴⁷ An earlier work that involves mimesis is Carlo Farina's (c1604-1639) *Capriccio Stravagante*, which is written for three viols and continuo. The piece mimics other instruments including trumpets, shawms, organs and guitars and was written in 1627.⁴⁸

Paganini was a frequent user of mimesis and reportedly imitated human voices, animal sounds, and other musical instruments on the violin in his concerts using complicated techniques such as ricochet, harmonics, scordatura tuning, double stops, ponticello and glissandi. Besides improvising these sounds in his concerts, he also used them in his compositions — such as *Le Streghe*, which imitates the whining of old witches. The *24 Caprices* also contain several occasions of mimesis including sounds of donkey hee-haws in Caprices Seven and Seventeen, flutes and horns in Caprice Nine, trumpets in Caprice Fourteen, and birdcalls in Caprice Nineteen.⁴⁹ Not only did Paganini capture these sounds by using sophisticated techniques, but he also embedded them in his Caprices.

Music Score 3 (p. 44) illustrates the first ten bars of Caprice Nineteen, which is described by Rosenthal as an imitation of birdsong. ⁵⁰ The chirpy, yet repetitive calls of tweeting birds feature during the *Allegro assai* section. The imitation requires a spiccato bowing technique which moves in an up-bow direction, this provides the Caprice with a charismatic and energetic character. The grace notes in the Caprice reflect the rhythmic irregularity of bird calls which are notated throughout the section.

⁴⁷ Antonio Vivaldi, *Le Quattro Stagioni from Il cimento dell'armonia e dell'inventione [The Test Between Harmony and Invention]* (Amsterdam: Michele Carlo Le Cene, 1725), RV269, RV293, RV297, RV315.

⁴⁸ Carlo Farina, Einem Kurzweiligen Quodlibet [Capriccio Stravagante] (Dresden: Bergen, 1627), [plate unknown].

^{49 &}quot;The proximity to flue timbre in Caprice No. 9 may have been increased through the use of double harmonics – given as an 'ossia' in Niccolo Paganini, Op. 1: Twenty-Four Caprices For the Violin. Study-version and Preface by Harold Berkley (New York: Schirmer, 1944). Albi Rosenthal has also noted the proximity of Caprice No. 19 to birdsong in 'An intriguing copy of Paganini's "Capricci" and its implications', in Monterosso, ed. Paganini e il suo tempo, 243. The way Caprice No. 17 leaps down from the upper two strings to the lower two bears some resemblance to Mendelssohn's depiction of Bottom's brays in his A Midsummer Night's Dream Overture (1842), an effect easily made grotesque by playing a crescendo and simulating a guttural stop by stopping the bow in the midst of crossing strings." Quoted in Mai Kawabata, Paganini The 'Demonic' Virtuoso (Great Britain: The Boydell Press, 2013), p. 12-13.

⁵⁰ Albi Rosenthal, *An intriguing copy of Paganini's Capricci and its implications* in Raffaello Monterosso, ed. *Nicolò Paganini e il suo tempo [Nicolò Paganini and His Times]* (Genoa: City of Genoa, 1982), p. 243.

Music Score 3 Caprice Nineteen (Birdsong), bb. 1-10



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 36, bb. 1-10.

Although *The 24 Caprices* are considered Paganini's most famous work, he did not play them publicly in concert.⁵¹ Therefore, they were not well known until twenty years after their publication; once Paganini had become famous from his solo career.⁵²

There are several reasons why Paganini may have avoided playing his Caprices in public, but it is likely the mysteriousness of the Caprices created a saleable pitch to audiences. Even though the Caprices were not performed, they were widely known throughout Europe as an enigma.⁵³ This fascination and curiosity from audiences drew them into Paganini's concert halls and provided him with an income that was guaranteed at each concert.

Another possibility may be that Paganini may have experienced anxiety at the idea of performing his highly technical Caprices. If Paganini failed to execute his Caprices in a public concert, the outcome would have been catastrophic. He would likely have lost income, credibility, and public support which would have ended his career as a soloist. The pressure of playing his most difficult composition, may have been enough, even for Paganini, to avoid them altogether in a public concert.

⁵¹ Sugden, *The Illustrated Lives of the Great Composers: Paganini*, p. 23.

⁵² Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 80.

⁵³ Robin Stowell, *Henryk Wieniawski: The True Successor of Nicolò Paganini? A comparative assessment of the two virtuosos with particular reference to their caprices* [Electronic source] vol. 3 (Germany: Argus Schliengen, 2011), p. 76, https://www.hkb-interpretation.ch/fileadmin/user_upload/documents/Publikationen/Bd.3/HKB3_70-90_Stowell.pdf.

Paganini's solo career began after the Princess (who was now the Grand Duchess of Tuscany) replaced the court orchestra with a string quartet.⁵⁴ Paganini remained the first violinist for only a short period before resigning to commence his career as a soloist.⁵⁵

Between 1810 and 1812, Paganini performed in the northern regions of Italy and continued to develop his technical tricks and abilities to seduce his audiences. However, it was Paganini's journey to Milan in 1813, where he had the most success after the debut of his composition *Le Streghe*. This success was recorded by Peter Lichtenthal who was the Italian correspondent for the *Allgemeine Musikalische Zeitung*:

Everyone wanted to see and hear this phenomenal wizard and everyone was really staggered. It fairly took one's breath away. In a sense, he is without question the foremost and greatest violinist in the world. His playing is truly inexplicable. He performs certain passage-work, leaps, and double-stops that have never been heard before from any violinist, whoever he might be. He plays – with a special fingering of his own – the most difficult passages in two, three, and four parts; imitates many wind instruments; plays the chromatic scale right close to the bridge in the highest positions and with a purity of intonation that is sheerly incredible. He performs the most difficult compositions on one string and in the most amazing manner while plucking a base accompaniment on the others, probably as a prank. It is difficult to believe that one is not hearing several instruments. In short, as Rolla and other celebrities say, he is one of the most artificial violinists the world has ever known. I say artificial because, when it comes down to simple, deeply moving, beautiful playing, one can indeed find any number of violinists as good as he and now and then (and not infrequently at that) even some who certainly surpass him – Rolla for instance. One can easily understand that he creates a furore at his concerts. However, musical connoisseurs are quite right in saying that he does not play the Kreutzer Concerto at all in the spirit of the composer, in fact, that he distorts much of it almost beyond recognition.⁵⁷

While Lichtenthal's text praises Paganini's remarkable technical abilities, his comments describing the *distorted* execution of Kreutzer's Concerto are particularly fascinating. It is highly likely that Paganini adapted Kreutzer's rather formal violin concerto and delivered a provocative interpretation of the piece, which at the time, would

⁵⁴ Sugden, *The Illustrated Lives of the Great Composers: Paganini*, p. 30.

⁵⁵ Stratton, Nicolo Paganini: His Life and Work, p. 21.

⁵⁶ Schwartz, "Paganini, Nicolò," in *The New Grove Dictionary of Music and Musicians*, p. 87.

⁵⁷ Sugden, The Illustrated Lives of the Great Composers: Paganini, p. 54.

not have been appreciated by a conservative audience. Furthermore, the tonal quality of Kreutzer's violin concerto requires a developed firm detaché stroke that aims to replicate Kreutzer's famous full tone and legato bowing style.⁵⁸ Unfortunately, Paganini's tone was described by Fétis as "clear and pure, without being excessively full."⁵⁹ It is not surprising that in future concerts, Paganini avoided playing his compositions and works by Rodolphe Kreutzer in the same concert.⁶⁰

Paganini had several encounters with many notable performers and composers throughout his career, including Franz Liszt (1811-1886) and Hector Berlioz (1803-1869). It was in Bologna that Paganini first met with Rossini in 1814, who at the time was twenty-two years old and already an accomplished operatic composer.⁶¹ The two shared a close friendship which became more established in Rome in 1817 and Paris in 1831.⁶² Though, it was in 1821 when Rossini was preparing the premiere of his opera *Matilde di Shabran*, that Paganini stepped in to help his close friend after the conductor fell ill. Paganini conducted the premiere with such success that Rossini insisted Paganini conduct the following two performances as well.⁶³

Sometime before 1815, Paganini wrote his first violin concerto after performing a series of concerts made up of Viotti, Rode and Kreutzer concertos.⁶⁴ Consequently, the concerto is rather formal in style, and possesses a classically elegant character with interjecting moments of sophisticated techniques. Paganini composed his second and third violin concertos in 1826, shortly after the *24 Caprices* were published in 1820.

After Paganini's considerable success in Milan, he frequently visited the city giving several concerts and appearing for charity events. It was in Milan that he met with the French violinist, Charles Lafont (1781-1839) who was the leading French violinist at the

⁵⁸ David Charlton on behalf of Grove Music Online, "Kreutzer Family," published online and in print 2001, accessed September 20th, 2019, https://doiorg.proxy.library.adelaide.edu.au/10.1093/gmo/9781561592630.article.15527.

⁵⁹ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 74.

⁶⁰ Sugden, The Illustrated Lives of the Great Composers: Paganini, p. 53.

⁶¹ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 39.

⁶² Stratton, *Nicolo Paganini: His Life and Work*, p. 30.

⁶³ Schwartz, "Paganini, Nicolò," in The New Grove Dictionary of Music and Musicians, p. 87.

⁶⁴ ibid.

time.⁶⁵ The two became friendly rivals and performed in concert together. Paganini described one of the concert programs:

We each in turn played one of our own compositions, after which we played together the "Symphonie Concertante" of Kreutzer, for two Violins. In this I did not deviate in the least from the author's text, while we both were playing our own parts; but in the solos I yielded to my own imagination, and introduced several novelties, which seemed to annoy my adversary. Then followed a Russian air, with variations, by Lafont, and I finished the concert with my variations on "le Streghe." Lafont probably surpassed me in tone, but the applause which followed my efforts convinced me I did not suffer by comparison. 66

What is particularly interesting in Paganini's statement, is his admission that Lafont surpassed him in tone. Paganini played on a Guarnerius which was given to him in 1800 by Monsieur Livron, so an inadequate instrument was not the cause for lack of tone.⁶⁷

Bruce Carlson is the current conservator and restorer to Paganini's Guarnerius, or 'The Cannon' as it is now referred to. His assistant curator Alberto Giordano discusses the unusual markings on the instrument:

It seems likely that Paganini used to move the bridge in order to adjust the string length to his needs: the marks on the wood in the bridge area are deep and wide and some scratches seem as though they were created by the fingernails of the user; adjusting the bridge position could have been quite easy with the old-fashioned bridge that came with the 'Cannon', which has short and narrow feet, allowing more room for movement. It is not known if this tiny bridge was used by Paganini, but it certainly fits the 'Cannon' properly.⁶⁸

Moving the bridge like this would have allowed Paganini to adjust the string length and height. It is likely these changes would have been made to play difficult double stops in higher positions as the left-hand fingers would not need to lift as high for a string that is closer to the fingerboard. Measurements of 18th-century bridges vary, but according to

⁶⁵ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 39.

⁶⁶ ibid., p. 40.

⁶⁷ Sugden, The Illustrated Lives of the Great Composers: Paganini, p. 22.

⁶⁸ Alberto Giordano, "The Paganini 'Cannon' Violin," Tarisio Fine Instruments and Bows, New York and London, 2000, accessed 7th October 2018, https://tarisio.com/cozio-archive/cozio-carteggio/the-paganini-cannon-violin/.

David Boyden, "the bridge was about 1/12" lower, was somewhat flatter in arch, and, compared to today's bridge, sloped less steeply towards the E-string side." 69

Paganini used thin gut strings instead of overspun strings which were developed during the seventeenth century. Overspun strings were crafted by wrapping a metal wire around a gut centre and were traditionally used on the G and D strings. Paganini's decision to use gut strings instead of overspun strings served a technical purpose, as it allowed his fingers to move between the strings with greater fluidity and enabled double stop playing to be performed effortlessly. This was however at the expense of a powerful sound. To compensate for the loss of tonal power, Paganini was a frequent user of scordatura tuning. Often tuning his violin, a semitone or more higher than the orchestra. This allowed Paganini to never be overpowered by the orchestra in the tutti sections.

Another cause for Paganini's dull tone is his unconventional posture. Various artists such as Landseer, Maclise, Ingres, Delacroix, Edouart and others have represented Paganini's posture with remarkable consistency; depicting Paganini with a violin which points to the ground, and elbows which rest on his torso.⁷⁴

Figure 1 (p. 49) provides a picture of Paganini, which was sketched in pencil by the artist Daniel Maclise (1806-1870). The drawing was published by William Spooner on July 12th, in 1831 and portrays Paganini's concert debut which was made at the King's Theatre in London in 1831.⁷⁵

⁶⁹ David D. Boyden, "The Violin and Its Technique in the 18th Century," *The Musical Quarterly* 36, no. 1 (1950): 11, https://www.jstor.org/stable/739750.

⁷⁰ Stowell, *The Cambridge Companion to the Violin: Edited by Robin Stowell*, p. 11.

⁷¹ ibid., p. 11.

Peter Sheppard Skærved, "Work on Il Cannone" Peter Sheppard Skærved, 2009, last updated 2019 and accessed October 3rd, 2019, http://www.peter-sheppard-Skærved.com/2009/12/work-on-il-cannone/.

⁷³ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 135-136.

⁷⁴ Peter Sheppard Skærved, "Paganini and Posture," Peter Sheppard Skærved, September 6th, 2011, last updated 2019 and accessed September 23rd, 2019, https://www.peter-sheppard-Skærved.com/2011/09/1-40/.

⁷⁵ See **Appendix One** for complete portrait, p. 302.

Figure 1 Cropped Portrait of Paganini by Daniel Maclise, 1831



Source: Downloaded from the Debut in London of Niccolo Paganini (1784-1840), Italian Violinist, sketched by Daniel Maclise, July 1831, Victoria and Albert Museum, London, last updated 22nd September 2019, https://collections.vam.ac.uk/item/O167002/debut-in-london-of-nicolo-drawing-maclise-daniel-ra/.

The angle of the violin represented in Maclises' sketch, prevents the bow from adequately grasping the string as the bow is encouraged to slide towards the direction of the scroll. The right arm is also well below the height of the wrist, which prevents the weight of the arm being used to apply pressure to the bow stick. From this sketch, it seems that Paganini applied pressure to the bow stick using only his right fingers which would explain the lack of tonal production. Remarkably, Paganini was still able to produce sophisticated and complex techniques with this posture which served him throughout his career.

Paganini's abilities, both as a composer and performer, were extraordinary, and although he was considered a prodigy at an early age, his medical condition likely assisted him in his performing abilities and his career as a soloist. It was put forward by the medical scientist Myron R. Schoenfeld, that Paganini was affected by a condition called Marfan

Syndrome or EDS (Ehlers-Danlos Syndrome) – a genetic condition that affects the connective tissues in the human body. ⁷⁶ Scientists Paolo Mantero and Giovanni Brigato later confirmed the diagnosis. ⁷⁷ Symptoms include long arms, legs and fingers, flexible joints, crowded teeth and a curved spine. While it is confirmed that Paganini died of tubercular laryngitis, the EDS was likely responsible for the development of tubercular laryngitis as patients with Marfan syndrome often experience cardiovascular changes.

Paganini's first biographer Julius Max Schottky provided evidence of his unusual stance and complexion describing him as incredibly thin, pale, yellow in colour, long and bony. Schottky goes on to illustrate Paganini's performance stance, "when performing, his frame would contort and form a triangle, his body would be excessively bent inward, while his head and right foot were thrown forward."⁷⁸

Parisian physician Dr Bennati (1798-1834), was a personal friend, singer, and personal physician to Paganini. He studied laryngological disorders and was one of the first to study the singing voice. In 1831, Bennati created a physiological study of Paganini. He commented on the extraordinary mobility of Paganini's ligaments, especially the flexibility of Paganini's hands and wrists, describing them as elastic.⁷⁹

Paganini's physical condition played a pivotal role in his abilities. Having large hands that would stretch in almost any direction, a flexible wrist, and shoulders that could adjust the angle of the violin easily, provided Paganini with a futuristic system of playing and one that had not been seen before.

Paganini's unusual playing style lead many violinists to despise him; particularly Louis Spohr (1784-1859) who was a leading violinist of the highly methodical French school of violin playing.⁸⁰ Another rival of Paganini's was Karl Joseph von Lipiński

Myron R. Schoenfeld, "Nicolo Paganini: Musical Magician and Marfan Mutant," *JAMA* 239, no. 1 (1978): 40, https://doi.org/10.1001/jama.1978.03280280040022.

⁷⁷ G. Sperati and D. Felisati, "Nicolò Paganini (1782-1840)," ACTA Otorhinolaryngologica Italica 25, no. 2 (2005): 128, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2639882/.

⁷⁸ Edgar Istel and Theodore Baker, "The Secret of Paganini's Technique," *The Musical Quarterly* 16, no. 1 (1930): 106, https://www.jstor.org/stable/738605.

⁷⁹ Richard Dean Smith, "Paganini's Hand," Arthritis & Rheumatisn 25, no. 11 (1982): 1385, https://doi.org/10.1002/art.1780251119.

⁸⁰ Robin Stowell, The Cambridge Companion to the Violin: Edited by Robin Stowell, p. 61.

(1790-1861) who travelled to Piacenza to meet with Paganini. The two became mutual friendly rivals until Lipiński accused Paganini of trickery and fraud at a public concert.⁸¹

Paganini was frequently struck by ill health and for a short period cancelled his concerts between 1822-1823.⁸² The frequent cancellation of concerts caused some mild friction between Paganini and the public, but this only caused ticket prices to soar. Consequently, only patrons of upper-class society and wealthy aristocrats attended his concerts.⁸³

In 1824, Paganini returned to perform in the north of Italy where he gave a series of concerts with the soprano Antonia Bianchi. Their relationship grew romantically, and the couple had a son named Achilles.⁸⁴

In 1828, Paganini was forty-six-years-old and presented audiences with a cadaverous appearance.⁸⁵ Despite this, Paganini's abilities were idolised in Vienna, and the city rewarded him financially and artistically when he became the virtuoso of the court in 1828; which at the time was a superior position granted by the Emperor.⁸⁶

It was in Paris that Franz Liszt (1811-1886) went to see Paganini play at the Opera House in 1832.⁸⁷ Completely stunned, and inspired by Paganini's technical proficiency and musical talent, Liszt sought to create the same degree of virtuosity in the pianoforte.⁸⁸ This extraordinary event provided Liszt with inspiration to create and begin a new system of playing for the pianoforte. There is no other record in the history of music that sees the violin completely revolutionise the handling of the pianoforte.

In 1833, Paganini returned to Paris after spending some time in London, to attend a concert of Hector Berlioz (1803-1869) where he heard the *Symphony Fantastique* for the first time. Paganini was so moved by the performance that he asked Berlioz to compose a

⁸¹ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 41.

⁸² Schwartz, "Paganini, Nicolò," in *The New Grove Dictionary of Music and Musicians*, p. 87.

⁸³ Sugden, The Illustrated Lives of the Great Composers: Paganini, p. 79.

⁸⁴ ibid., p. 82.

⁸⁵ Prod'homme, Nicolo Paganini, a biography, p. 17.

⁸⁶ Schwartz, "Paganini, Nicolò," in *The New Grove Dictionary of Music and Musicians*, p. 87.

⁸⁷ ibid., p. 89.

⁸⁸ Stratton, Nicolo Paganini: His Life and Work, p. 49.

piece for solo viola as Paganini felt strongly for the Stradivari viola he owned at the time. Berlioz and Paganini's influence over one another was strongly felt, and Berlioz accepted the request. The request resulted in the composition of the Symphony *Harold in Italy* which featured a solo viola part.⁸⁹

Paganini, now aged fifty-two, returned to his homeland in 1834 as a wealthy man and purchased the Villa Gajona located near Parma. His health was in rapid decline, and he suffered from a form of cancer of the larynx (later confirmed as tubercular laryngitis) and was losing his ability of speech.⁹⁰

Paganini died suddenly in 1840 and was buried without a grave. Due to Paganini's rumours of being associated with the devil and refusing the last Sacrament of the Church, the Bishop of Nice refused to bury Paganini on consecrated ground. The remains of the once infamous violinist remained in a cellar until a burial place could be found. While his son Achille made an application for his celebrated father to be given a proper burial service, Paganini's remains continued to be moved from a hospital in Nice, to a country estate near Genoa which now belonged to Achilles.

By order of the government, the remains of Paganini were laid in a grave in 1845. No headstone of any kind nor symbol to the once remarkable and talented virtuoso was placed on the grave.⁹⁴

Fifty years later, the grave was broken. The September 7th, 1895 publication of the British newspaper *The Athenaeum* contained this paragraph:

In the Communal Cemetery of Parma, the mortal remains of the great violin player, Paganini, have just been exhumed. The violinist was buried there fifty-five years ago, nevertheless his face has been found to be well preserved and easily recognizable. It is proposed to show the body to the public before it is re-interred.⁹⁵

⁸⁹ Sugden, The Illustrated Lives of the Great Composers: Paganini, p. 109-110.

⁹⁰ Stratton, *Nicolo Paganini: His Life and Work*, p. 73.

⁹¹ Fétis, Nicolo Paganini With an Analysis of His Compositions and a Sketch of the History of the Violin, p. 50.

⁹² Stratton, Nicolo Paganini: His Life and Work, p. 82.

⁹³ Prod'homme, Nicolo Paganini, a biography, p. 67-68.

⁹⁴ Stratton, Nicolo Paganini: His Life and Work, p. 83.

⁹⁵ Note the error printed by The Athenaeum, it should state fifty years, not fifty-five years. - Stratton, Nicolo Paganini: His Life and Work, p. 83.

During the following years after his death, Paganini's body was inspected twice and moved seven times, a record number amongst the great celebratory musicians who died during that era. ⁹⁶ Paganini's final resting place remains at the Cemetery Della Villetta in Parma, Italy, where he was buried in 1876. ⁹⁷

Despite Paganini not performing the Caprices in public, there is much to be thankful for towards the grand master of violin playing. Since his death in 1840, many young violinists who were fascinated by Paganini's abilities and unusual posture tried to emulate his playing. ⁹⁸ While among the inspired subsequent generations of violinists there was never another 'Paganini virtuoso', it did provide an enormous impact not just on violinists, but on a whole generation of composers who attempted to emulate the Caprices, or Paganini's style on other instruments. Franz Liszt consciously attempted to cultivate himself as 'The Paganini of the Piano'. ⁹⁹ His composition, *Six Grandes Etudes de Paganini*, ¹⁰⁰ is directly influenced by Paganini and is based on the themes of the Caprices. The 'Paganini effect' can be heard in *Chopin's Souvenir de Paganini*, ¹⁰¹ and *Schumann's Etudes after Paganini*. ¹⁰² Brahms's *Variations on a Theme by Paganini*, ¹⁰³ Rachmaninoff's *Rhapsody on a Theme of Paganini*, ¹⁰⁴ and Lutoslawski's *Variations on a Theme of Paganini*, ¹⁰⁵ are also examples of Paganini's influence on later generations of composers.

The impact of the Caprices continued a surge in violin-specific pedagogical material which was begun by Leopold Mozart's (1719-1787) treatise titled *Versuch einer*

⁹⁶ Stratton, Nicolo Paganini: His Life and Work, p. 82-83.

⁹⁷ Sugden, *The Illustrated Lives of the Great Composers: Paganini*, p. 138.

⁹⁸ ibid., p. 141.

⁹⁹ Alison Latham, Paganini from The Oxford Companion to Music (New York: Oxford University Press, 2011), p. 921-922.

¹⁰⁰ Franz Liszt, *Grandes Etudes de Paganini, S.141* (Leipzig: Breitkopf & Härtel, 1851), 83689.

¹⁰¹ Frédéric Chopin, Souvenir De Paganini: For Piano Solo, ed. by Jack Werner (London: Elkin & Co. LTD, 1956), 2438

Robert Schumann, Etudes after Paganini Caprices Opus 3 and Opus 10, ed. by Clara Schumann (Leipzig: Breitkopf & Härtel, 1885), R.S.41, R.S.48.

¹⁰³ Johannes Brahms, *Variazioni Sopra un Tema di Paganini Op. 35 for the piano [Variations on a theme by Paganini, Op. 35]* (Milan: Ricordi, 1930), [plate?].

¹⁰⁴ Sergei Rachmaninoff, Rapsodie: Sur un Thème de Paganini pour Piano et Orchestre Op. 43 (London: Boosey & Hawkes, 1934), R1.

¹⁰⁵ Witold Lutoslawski, Variations on a Theme by Paganini for Two Pianos (London: Chester Music, c.a. 1972), J.W.C.55044.

Gründlichen Violinschule. ¹⁰⁶ The treatise remained the most prolific source of pedagogic information until end of the 19th century. Karl Guhr's book titled *Ueber Paganinis Kunst die Violine zu Spielen*, ¹⁰⁷ provided a detailed account of Paganini's performance style, physique and new innovative techniques. This left compromised holes in Mozart's treatise which invited new competitors to fill in the gaps.

The new competitor was Louis Spohr (1784-1859), a German violinist who became famous for his French-school method of violin playing. Spohr despised Paganini and the two were considered rivals for most of Paganini's life. Stowell describes their relationship and rivalry:

Although he [Spohr] praised Paganini's left-hand accuracy and agility, he despised empty virtuosity and described the Italian maestro's compositions as 'a strange mixture of the highly genial and childishly tasteless'. Spohr's refined technical and expressive vocal ideals are summarised in his *Violinschule*: 'Strive only after what is noblest!' he urges. 'Disdain every kind of charlatanism'.¹⁰⁸

Spohr's *Violinschule* and pedagogic principles became widely influential and encouraged other notable pedagogues and violinists to compose their own violinschules.¹⁰⁹ Some significant methods include Joseph Joachim and Andreas Moser's *Violinschule*,¹¹⁰ Leopold Auer's *Violin Playing as I Teach It*,¹¹¹ Ivan Galamian's *Principles of Violin Playing and Teaching*,¹¹² and a collection of technical exercises and discussions that were

Leopold Mozart, Versuch einer Gründlichen Violinschule [A Treatise on the Fundamental Principals of Violin Playing]
Translated by Editha Knocker; with a preface by Alfred Einstein, 2nd ed. (1756; Reprint, London: Oxford University Press, 1975).

¹⁰⁷ Karl Guhr, Über Paganinis Kunst die Violine zu Spielen [About the Art of Paganini's Violin Playing] (Mainz: Schott, 1829).

Robin Stowell, "In Principle, Violin Pedagogy Through the Ages -2: Louis Spohr's "Violinschule"," The Strad 118, (2007): 59, EBSCO Host.

¹⁰⁹ Louis Spohr, *Spohr's Grand Violin School Newly Revised From the latest German and English Editions*, ed. by U.C. Hill (Boston: Oliver Ditson, 1852).

¹¹⁰ Joseph Joachim and Andreas Moser, *Violin School*, English translation by Alfred Moffat, 3 vols. (Berlin: N. Simrock, 1905), 12017.

¹¹¹ Leopold Auer, Violin Playing as I Teach It, 1921; Reprint (New York: Dover Publications, Inc., 1980).

¹¹² Ivan Galamian, *Principles of Violin Playing and Teaching*, new Introduction by Sally Thomas (1962; reprint, New York: Dover Publications Inc, 2013).

written between 1921 and 1946 by Demetrius Dounis.¹¹³ The Hungarian violinist Carl Flesch (1873-1944) was also a particularly prolific composer who wrote a number of books specialising in violin techniques and methods including, *Problems of Tone Production in Violin Playing*,¹¹⁴ *Violin Fingering: its Theory and Practice*,¹¹⁵ and *The Art of Violin Playing*.¹¹⁶

These notable violinists of the 20th century propelled the scientific thinking of technique in violin playing. The purpose of practice was considered and pedagogical material concerning left and right-hand techniques grew more profound. Theories, procedures and strategies were illustrated, and new ways to manoeuvre around the difficult instrument developed.

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¹¹³ Dounis, The Dounis Collection: Eleven Books of Studies for the Violin (New York: Fischer, 2005), BF16.

¹¹⁴ Carl Flesch, Problems of Tone Production in Violin Playing, English text by Gustav Saenger (New York: Carl Fischer, 1934).

¹¹⁵ Carl Flesch, *Violin Fingering: its Theory and Practice*, English text by Boris Schwarz, forward by Yehudi Menuhin (London: Barrie and Rockliff, 1966).

¹¹⁶ Carl Flesch, *The Art of Violin Playing*, English text by Frederick Martens (New York: Carl Fischer, 1924).

Review of Literature: Twenty-Four Caprices Opus 1 for Violin Solo

This section of the chapter reviews and critiques existing literature on the Paganini Caprices. Although there are many scholarly publications discussing Paganini from a biographical perspective, there are few which provide in-depth commentary on the highly technical 24 Caprices.

This review of literature focuses on both performance and pedagogic sources and is divided into two parts. The first part titled *Review of Performance Sources for the Caprices* provides analytical reviews of important editions and live recordings that contribute to the Caprices from a performance perspective. The second part, titled *Pedagogical Sources for the Caprices*, lists publications and instructional videos that provide procedures on how to navigate through the challenging Caprices. A video of Ricci performing the 24 Caprices is also assessed. Concluding the literature review is also a recommended sequential order of study for the Caprices.

Review of Performance Sources for the Caprices

Editions of the Paganini Caprices

Of all Paganini's concertos and smaller compositional works, the 24 Caprices remain the most prestigious and technically demanding of all time. They were dedicated "Agli artisti" (to the artists) and were comprised as a gift to well-respected composers and performers of his generation. **Table 3** (p. 57) provides a list of the corresponding Caprices and their dedicatees.

Table 3 The 24 Paganini Caprices and its Dedicatees

Caprice	Dedicatee	Caprice	Dedicatee
1	Henri Viextemps	13	Charles Philippe Lafont
2	Giuseppe Austri	14	Jacques Pierre Rode
3	Ernesto Camillo Sivori	15	Louis Spohr
4	Ole Bornemann Bull	16	Rodolphe Kreutzer
5	Henrich Wilhelm Ernst	17	Alexandre Artôt
6	Karl Jósef Lipiński	18	Antonie Bohrer
7	Franz Liszt	19	Andreas Jakob Romberg
8	Delphin Alard	20	Carlo Gignami
9	Hermann	21	Antonio Bazzini
10	Théodor Haumann	22	Luigi Alliani
11	Sigismond Thalberg	23	[No Name]
12	Dhuler	24	Nicolo Paganini, sepolto pur troppo (to myself, regrettably buried)

Source Adapted from: Robin Stowell, "Paganini: 24 Capricci per il Violino solo, dedicati agli Artisti Op. 1 – Robin Stowell," In Case Studies of Individual Works and Collections, from the *CHASE project*, ed. by Clive Brown, David Milsom, Ilias Devetzoglou and George Kennaway (Universities of Leeds and Cardiff: 2008-2012), Site updated 2011, Accessed 1st Oct, 2019, http://mhm hud.ac.uk/chase/.

There is no evidence to suggest that the Caprices were composed with their dedicatee's playing style or character in mind, as the dedicatees were annotated on the original score after the first publication (between 1832 and 1840). Whether or not the dedicatee's playing style or personality directly influenced Paganini's Caprices remains uncertain.

In c.a.1817, the score of the Twenty-Four Caprices was handed over to the Ricordi publication firm. It consisted of many errors including missing notes, incorrect pitches, rhythms, tempo markings, bowings, rests, note durations and timbral indications. The first edition was published by Ricordi (c.a.1820, plate 403) and served as the 'master copy' for the Breitkopf und Härtel edition (c.a.1823, plate 3936) and the Richault edition (c.a.1825, plate 1028).

¹¹⁷ Stowell, "Paganini: 24 Capricci per il Violino solo, dedicati agli Artisti Op. 1 – Robin Stowell," site updated 2011 and accessed 1st Oct, 2019, http://mhm hud.ac.uk/chase/article/paganini-24-capricci-per-il-violino-solo-dedicatiagli-artisti-op-1-robin-stowell/Ivan.

¹¹⁸ ibid.

Violinists Ferdinand David (1810-1873),¹¹⁹ Carl Flesch (1873-1944),¹²⁰ and Ivan Galamian (1903-1981),¹²¹ produced practical and systematic editions of the Caprices. However, in their process to conquer the technical difficulties, they also manipulated the markings in their editions of the Caprices. Consequently, there are many editions of the Caprices that all contain different instructions and markings from each other.

To rectify this problem, the Urtext edition edited by Renato De Barbieri, Alberto Cantú and Ernst Herttrich, ¹²² provides a scholarly compilation of the different markings and annotations produced from Paganini's score, and the first (c.a.1820, plate 403), second (c.a.1836, plate 9036) and third (c.a.1872, plate unknown) Ricordi editions, the Breitkopf und Härtel edition (c.a.1823, plate 3936), and the Richault edition (c.a.1825, plate 1028.R). This compilation of scores has since been digitised and made available as part of a more extensive collection of works via the Henle Library iPad app which allows the user to navigate through different editions of the Caprices easily. ¹²³

Twentieth-century publications of the Caprices like the Peters (c.a.1910, plate 9703), IMC (1973, plate 2292), and Urtext (1990, plate 405) editions, were not included for comparison against the first and second Ricordi editions (c.a.1820, plate 403, and c.a.1836, plate 9036), the Breitkopf und Härtel edition (c.a.1823, plate 3936) or the Richault publication (c.a.1825). Therefore, there is a clear gap in the literature that requires analysis and comparison of both nineteenth and twentieth-century editions to identify mistakes.

Provided in Part Three of this project, are comparison tables that identify the note discrepancies in the selected Caprices. The tables include a comparison against Paganini's original score (c.a.1817), and the first and second Ricordi editions (c.a.1820, plate 403, and c.a.1836, plate 9036), the Breitkopf und Härtel edition (c.a.1823, plate 3936), and the Richault (c.a.1825, plate 1028), Peters (c.a.1910, plate 9703), IMC (1973, plate 2292), and Urtext editions (1990, plate 405).

¹¹⁹ Paganini (Leipzig: Breitkopf und Härtel, 1854), [plate unknown].

¹²⁰ Paganini (Leipzig: Peters, c.a.1910), 9703.

¹²¹ Paganini (New York: International Music Company, 1973), 2292.

¹²² Paganini (München: G. Henle Verlag, 1990), 405.

¹²³ Dr. Wolf-Dieter Seiffert, Henle Library, iPad vers 1.6.0.G, Apple App Store, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8.

Ruggiero Ricci's Audio CD Recordings

Paganini died long before the era of sound recording. Surprisingly, the very first recording consisting of the entire set of 24 Caprices was not made till 1947. It was recorded on LP by the distinguished American violinist Ruggiero Ricci (1918-2012). To preserve the integrity of the recording, Roger Beardsley from DECCA Record Label digitised the recording in 1998.¹²⁴

The intonation in this recording is sometimes unstable, especially in the awkward double-stop passages. The clarity of Ricci's fast passagework is often unclear due to his choice of tempo being very fast, and the sense of lyricism and elegance required for Caprices Three, Five, Ten, Eleven, Sixteen and Twenty-Two, is quite often lost due to an overwhelming harsh timbre in Ricci's tone. However, Ricci's command of his bow and management of the challenging string crossings are truly commendable.

In 1988, at the age of 70, Ricci re-recorded the entire Paganini Caprices for the last time using Paganini's own Guarneri del Gesu violin, 'The Cannon,' 125 which was loaned to him by the city of Genoa.

In an interview with Laurie Niles for *The Violinist*, Ricci tells how difficult playing on the Guarneri was:

It has a very strong sound, it was very weird. They just take you to a little room, they take it out, and the guard is standing there, and you can't practice on it. It was a very difficult fiddle to play. It's quite a large fiddle, it has high ribs. It's a hard violin to play. 126

Although Ricci's performance in his 1988 recording of the Caprices is admirable given his age, there are sections of the Caprices that are aggressive and rough in their attack. The lyricism and elegance that some of the Caprices require is lost due to the

¹²⁴ Niccolo Paganini, First Complete Recording of the 24 Caprices Op. 1, with Ruggiero Ricci (Violin) recorded 1947, CEDAR, IDIS309, 1998, CD.

¹²⁵ Niccolo Paganini, Paganini Caprices Op. 1, with Ruggiero Ricci (Violin) Recorded 1988, BIDDULPH, LAW016, 1988, CD.

¹²⁶ Ruggiero Ricci, interview by Laurie Niles, *Violinist.com*, December 1st, 2007, video and text, https://www.violinist.com/blog/laurie/200712/7851/.

incredibly fast passagework. However, to record this CD without editing or having practised on Paganini's instrument beforehand is commendable.

Live Performances of the Caprices

The following musicians are the only known violinists who ever recorded the Caprices in one take without manipulating the recording.

- James Ehnes¹²⁷
- Adrian Justus¹²⁸
- Rudolf Koelman¹²⁹
- Nikolay Madoyan¹³⁰
- Alexander Markov¹³¹
- Tedi Papavrami¹³²

This provides an opportunity to discuss them and compare these genuine performances of the Caprices.

Out of the set of twenty-four, Caprice Three is one of the most challenging to play. The fingered octaves, combined with octave trills, require the left-hand to stretch beyond its limitations; forcing the player to play through severe tension and pain. All of the live recordings contained intonation errors, but these were particularly noticeable in Koelman,

¹²⁷ Niccolo Paganini, *Paganini: 24 Caprices*, with James Ehnes (Violin) Recorded 1995, TELARC DIGITAL, 80398, 2009, CD.

¹²⁸ Niccolo Paganini, *Paganini 24 Caprices: Live Recording in Tokyo*, with Adrian Justus (Violin) Recorded 2012, AMICI, AJ1003, 2012, CD and DVD set.

¹²⁹ Niccolo Paganini, *Paganini 24 Caprices for Violin Solo Op. 1*, with Rudolf Koelman (Violin) Recorded 1996, Hänssler Classics, B0009IORFM, 2004, CD.

Nikolay Madoyan, "Paganini 24 caprices played live in one concert (without interval)!," produced by ONERPM, [location?], recorded 2003 and uploaded to Youtube October 2012, video, 1:12:36, https://www.youtube.com/watch?v=wSyvG5-mv44.

Alexander Markov, "24 Caprices of Paganini," with Alexander Markov (Violin), produced by Warner Classics and NVC Arts, recorded 1989 and uploaded to Youtube December 2011, video, 1:28:53, https://www.youtube.com/watch?v=4xlDGHJQMzw&list=PLE7CEBA1FF4919334.

¹³² Niccolo Paganini, Niccolò Paganini: 24 Caprices Live in Tokyo & Studio Version, Tedi Papavrami, with Tedi Papyrami (Violin) Recorded 2001, AEON, B002OTSJZI, 2009, CD.

Markov, and Papavrami's recordings. Violinists Ehnes, Justus and Madoyan camouflaged their poor intonation in the octaves so well because the top note of the octave was barely audible.

The technical execution of the ricochet bowing found in Caprice One varied among the performers. Justus and Markov present a spirited musical performance with precise phrases and sensible tempo choices. Their playing has clarity, and the interpretation appears to correspond sensibly with the harmonic structure of the work. However, Markov's live video recording reveals exaggerated movements that at times, create a 'clicking' sound within the ricochet stroke. This sound appears when Markov flicks his wrist to commence the down-bow ricochet, and the bow moves too much in a vertical direction.

Madoyan's performance of Caprice One is precise but takes on a cautious approach. While it appears Madoyan intends to play the Caprice with a sense of lyricism, this affects the musical aesthetic of the piece as it seems to lose its drive through the phrases. Except for Ehnes' performance, all the recordings performed the descending thirds with intonation errors and fast passagework that was so fast it was inaudible.

Except for Madoyan and Markov, Caprice Five's original saltato bowing pattern (down-down-up), was not attempted by the performers. While Madoyan played the bowing as printed in the original score, Markov used the bowing pattern found in the second Ricordi edition. The bowing pattern is a slurred variation consisting of four notes in a down-bow played off the string, followed by the same pattern in an up-bow direction. This bowing pattern is typically avoided because the energy of the bow decreases rapidly towards the third and fourth note of the slur. Even though Markov executed this bowing pattern successfully, he did not perform this bowing pattern throughout the Caprice. Apart from the bowing pattern changing for musical reasons, it appears as though some of the repetitive string crossings affected Markov's ability to continue the slurred bowing variation.

All the violinists executed the octaves in the opening sequence of Caprice Nineteen with precise intonation. However, musically, two distinct characters were depicted in the

61

¹³³ Paganini (Milan: Ricordi, c.a.1836), 9036.

recordings. The violinists Ehnes, Justus, Madoyan, Markov, and Papavrami, all performed the opening section slowly, with lyricism and smooth well-connected bow strokes. In contrast, Koelman performed the opening section with detached bow strokes at a moderate to fast tempo, which produced a charismatic and playful character.

Overall, it is a significant accomplishment to perform and record all of the Paganini Caprices in a single take. Unfortunately, very few violinists produce such exposed recordings, due to the highly technical challenges contained within the Caprices. Therefore, these recordings are not only important research sources but are also valuable to the broader pedagogical string community. By accessing and evaluating these live performances of the Caprices, this provides further evidence that the technical difficulties remain unsolved. This project demonstrates its contribution to the discipline by resolving these technical challenges which exist in the 200-year-old-Caprices.

Pedagogical Sources for the Caprices

Editions of the Paganini Caprices

Emil Kross (1852-1917) produced a unique edition of the Caprices which was first published by Schott in 1897.¹³⁴ The edition provides a pedagogical approach to the Caprices and includes several pictures which illustrate left hand positions. Kross presents the Caprices in order of difficulty and provides fingering and bowing recommendations that are particularly useful for violinists with small hands.¹³⁵ Kross later created a 'newly revised' edition of the Caprices that retained his recommended order of study.¹³⁶ In the manuscript, Kross provides a few brief sentences on how to execute the Caprices. Kross' recommendations are practical and sensible but provide vague and limited solutions to the

N. Paganini, Ueber das Studium der 24 Capricen Paganinis, und die Art und Weise, wie diese durch Paganinis Hand-und -Arm-stellung auch von kleineren Händen überwunden warden können, ed. Emil Kross (Mainz: Schott, 1897), [plate unknown]. English edition trans. Gustav Saenger (New York: Carl Fischer, c.a.1908), [plate unknown].

¹³⁵ Emil Kross arranged in order of difficulty as: 16, 5, 11, 18, 15, 21, 22, 7, 14, 13, 12, 9, 8, 1, 23, 6, 19, 18, 2, 3, 20, 4, 17, 24.

¹³⁶ N. Paganini, Twenty-four Caprices together with Moto Perpetuo and Duo Merveilli for Violin, newly revised by Emil Kross (New York: Carl Fischer, 1922), 15522.

technical challenges found in the Caprices. The reader is regularly encouraged to see his Violin Method volumes I and II,¹³⁷ and his *Album of Studies by Celebrated Masters for Violin* throughout the publication.¹³⁸ Included in the publication are two compositions titled *Moto Perpetuo* and *Duo Merveille* after the final Paganini Caprice. Both pieces appear to be irrelevant to the Caprices.

Another edition which presents the Caprices in a different order is the 1829 Pacini edition (plate 950) which was edited by Henry Bonaventure. Bonaventure regards the twenty-fourth Caprice as the most difficult and lists it as the last Caprice that should be studied.

Instructional Video Recordings

A DVD titled *Les 24 Caprices de Paganini*, was created in 2004 by the French violinist Christophe Boulier (born 1965). Boulier claims that the DVD provides educational instructions on how best to approach the technical challenges found in the Caprices. The DVD also includes a live performance of each Caprice. In the DVD, violinist and musicologist Gérard Thomas-Baruet presents and explains the technical difficulty from a script. Then Christophe Boulier immediately executes these difficulties without hesitation at performance tempo.

It is evident to the viewer that Boulier possesses high-level technical and musical abilities and can execute challenging sections of the Caprices at fast performance tempos. Unfortunately, the examples provided by Boulier are so fast and well-polished, that it is impossible to assess the more intricate movements of the left and right hands.

¹³⁷ Emil Kross, Violinschule, vols. 1 and 2, (Mainz: Schott, 1899), [plate unknown],

Emil Kross, Album of Studies for the Violin: Selection of rapidly advancing studies by the most celebrated masters, in graded progression, thoroughly revised according to modern technical principles, with directions as to fingering etc. and explanatory notes (Leipzig: Bosworth, c.a.1890), [plate unknown], http://ks4.imslp.info/files/imglnks/usimg/d/d0/IMSLP371152-PMLP599416-VSTUD_KROSS_ET_AL_1.pdf.

¹³⁹ N. Paganini, 24 Paganini Caprices, ed. by Henry Bonaventure (Paris: Pacini, 1829), 950.

¹⁴⁰ Christophe Boulier, "Les 24 Caprices de Paganini," produced by Promusica Association Artisque, filmed in Paris 2004, DVD, 3h30, B00LOORP0E.

In a review by Gérard Héry for ResMusica musique Classique et danse, he comments on the issue of Boulier's tempos on the DVD:

A l'occasion du seul caprice N°8, qui présente de grands démanchés, Christophe Boulier effectue lui-même un ralenti. On peut regretter que cela n'intervienne pas plus souvent. De même, on peut regretter la non utilisation du ralenti à la prise de vue, après le passage concerné en temps réel, mais bien sûr sans le son. 141

Apart from the demonstrations being difficult to view, there is also no discussion about possible practice strategies, methods or procedures that aid in executing the technical challenges. Furthermore, the purpose of Gérard Thomas-Baruet reading from a script defining the technique from a selected Caprice seems unclear and is disjointed from Boulier's demonstrations.

In 2019, another pedagogic video series of the Paganini Caprices became publicly available to stream through the internet. They are titled *The Paganini Caprices Unlocked*, ¹⁴² and claim to provide practice strategies to overcome the difficulties found in the 24 Caprices. The Caprices are discussed and performed by Mr. Pavel Berman, who is a previous student of Isaac Stern and Dorothy Delay. The Berman video series are part of an extensive collection of works and online masterclasses that were made available to the public via the iClassical Foundation; a Swiss not-for-profit company which aim to provide resources and knowledge through an eLearning platform.

Berman provides several practice procedures for each of the Caprices. They are helpful recommendations, but most are challenging to execute without adequate preparation. There is also a lack of information and discussion regarding the technique that features in each Caprice. Berman briefly discusses the technique, but there is already an assumption that the violinist is already competent at these skills. These exercises and practice methods would suit an already highly competent student or professional player.

¹⁴¹ Gérard Héry, review of Christophe Boulier Violon: Les 24 Caprices de Paganini, directed by de l'Institut Culturel Italien à Paris, Promusica Association Artistique, December 27, 2004. [Only in Caprice Eight which features challenging stretching does Christophe Boulier perform in slow motion. It is regrettable that this does not happen more often. Similarly, the lack and use of slow-motion shooting, after the relevant passages at performance tempo, but of course without sound.] Translation provided by author, Nov 12th 2019.

Pavel Berman, "Pavel Berman – The Paganini Caprices Unlocked," produced by the iClassical Foundation, video series, last updated 2019, last accessed 30th September 2019, https://iclassical-academy.com/paganini-pavelberman/.

Berman's demonstrations are filmed with alternate camera angles and sections in slow motion which allow the viewer to watch the instructions with greater understanding. However, Berman appears to discuss the Caprices unscripted, and consequently, Berman's spoken delivery is staggered with many 'filler words' being used throughout the recording. Although English is likely a second or third language for Berman, he appears to hesitate during his sentences. This video series is, however, an excellent resource for professional players and teachers.

Ruggiero Ricci's Video Recording

Ruggiero Ricci is famous for re-recording the *24 Paganini Caprices* several times on audio CD. In January 1987, he made a video recording of the Caprices.¹⁴³ After viewing the Caprices on video, one can identify some unusual consistencies in Ricci's playing style. The scroll of the violin is almost always pointing to the ground, the left-hand wrist is collapsed cradling the violin, and the fingers on his bow are straight and leaning towards the index finger. According to Ricci, there are two systems of playing, The Old and The New:

In the pre-chinrest era, the violin was supported primarily by the left hand – not by the chin – and the head was free to move. All of the virtuosi from this era – including Paganini, Ernst, Vieuxtemps, Wieniawski, and Sauret – played without a chinrest and held the violin in this manner. In the old system, the left hand was kept against the ribs of the violin... the thumb remained fixed at what we today regard as approximately third or fourth position. However, there were no such concepts as positions or shifting in the old system. These came about as a result of the chinrest – the violin changed from being handheld to chin held…now the violin is held by the chin, and the hand is free to move. This new device induced players to 'shift'- to move the thumb at the same time as the fingers, whereas in the past they would have crawled…

Unfortunately, the 'Old System' possesses many limitations, most of which concern speed and accuracy - which on the violin is paramount. Even though cradling the violin in the left hand is more comfortable than holding it with the chin, the wrist hinders the ability

65

Ruggiero Ricci, "Complete Paganini 24 Caprices by Ruggiero Ricci," produced by Shar Products Company, The University of Michigan School of Music, recorded 1985 and uploaded to Youtube January 2014, video, 1:17:35, https://www.youtube.com/watch?v=em69H2aE3Wc.

to move up the fingerboard quickly. Crawling up and down the length of the fingerboard with extensions either side of the thumb creates frequent glissandos, which is problematic when playing more elegant works such as Mozart and early Beethoven that require a refined style of playing. Repetitive finger and wrist stretches would be more challenging for a person with short fingers and doing this long term may impact the joints of the player.

Continuing on from an interview with Laurie Niles for *The Violinist*, Ricci commented on the use of the chinrest and shoulder rest and the impact it has on the bow:

I [Niles] asked Ricci, "should people go throw their chinrests and shoulder rests in a lake?"

'No,' "he said." 'You can't make a general rule. Some people have a very short neck, some people have a very long neck. What are they going to do? But the lift should be on the top, with a higher chinrest rather than a higher shoulder rest. If you put the lift on the bottom, you are raising the violin. The higher you raise the violin, the higher you have to raise your bow arm. And the higher you have to hold your bow arm, it becomes that much more difficult. Theoretically, it would be better to hold the violin here,' "Ricci said, holding the violin down on his chest." 'But we have nothing to hold it way down here.' 144

This provides more insight into Ricci's postural choices. By having the scroll at a lower angle, it meant that the bow arm would not have to be lifted so high. This method of playing is more comfortable and 'natural' for the human physique, but the ability to use the upper arm's weight and strength is lost. The consequence of this playing style is a contact point that is regularly over the fingerboard, and a limited amount of pressure onto the bow stick that can only be applied by the right hand. The result of these two postural choices is a loss in sound production and quality.

In comparison, violinist Alexander Markov (born 1963) audio and video recorded the complete Paganini Caprices in a live public concert in 1989 just two years after Ricci's video recording.¹⁴⁵ In Markov's performance, his violin is horizontal with the stage and the bow is parallel with the bridge. In Ricci's defence, Markov's bow arm lifts higher, but it is

¹⁴⁴ Ricci, Ruggiero, Interview by Laurie Niles, *Violinist.com*, December 1st, 2007.

¹⁴⁵ Alexander Markov, "24 Caprices of Paganini," https://www.youtube.com/watch?v=CPVUfcQe9og.

never above his right shoulder. This use of the right upper arm provided Markov with a more powerful bow stroke and an ability to project the sound.

The Sequential Order of Study for the Paganini Caprices

In 2013, Ernst Schliephake made a sequential recommended order of study of the Paganini Caprices for the Henle Verlag app. 146 To classify the pieces according to difficulty, Schliephake provided his method to ensure pieces were categorised appropriately:

I have assigned all of the violin music in G. Henle Publishers' catalogue a level of difficulty, ranging from 'very easy' to 'very difficult'. The model for this was the evaluation system with nine levels developed for Henle's piano catalogue by Rolf Koenen. Unlike the works for solo piano, I have decided against evaluations that lie between two levels (e.g. 4/5 or 7/8).¹⁴⁷

Schliephake classifies the 24 Caprices between levels six to nine, which establishes the Caprices between the medium to difficult level. There are only three Caprices which are classified as a six (medium level of difficulty), and ten Caprices which are classified as nine (difficult level). Provided, is the full list of the 24 Caprices in order of difficulty as determined by Schliephake:

• Level 6 (medium) - Caprices 13, 14, and 20

Professor Rolf Koenen describes the evaluation system as: "I have settled on nine levels of difficulty, which I have divided into three groups: 1-3 (easy), 4-6 (medium), 7-9 (difficult). A number of parameters have been considered when assessing the level of difficulty. I have not just looked at the number of fast or slow notes to be played, or the chord sequences; of central importance are the complexity of the piece's composition, its rhythmic complexities, the difficulty of reading the text the first time, and last but not least, how easy or difficult it is to understand its musical structure... My assessment is measured by the ability to prepare a piece for performance," quoted from: "Piano: Levels of Difficulty" in Seiffert, Henle Library, iPad vers 1.6.0.G, Apple App Store, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8.

¹⁴⁶ Seiffert, Henle Library, iPad vers 1.6.0.G, Apple App Store, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8.

¹⁴⁷ Ernst Schliephake, *Violin: Levels of Difficulty*, 2013, in Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8.

- Level 7 (difficult) Caprices 9, 15, and 16
- Level 8 (difficult) Caprices 4, 8, 10, 18, 19, 21, 22, and 23
- Level 9 (difficult) Caprices 1, 2, 3, 5, 6, 7, 11, 12, 17, and 24

Another sequential order of study was published by *The Violin Channel's* guest violinist Sean Lee, who was a student of Robert Lipsett, Ruggiero Ricci and Itzhak Perlman and a former prize winner of the Paganini International Violin Competition. ¹⁴⁸ Lee categorises the groups into four from easiest to hardest and states that the term 'easiest' is relative to the question and that the Caprices are all difficult. Lee states the first group as Caprices 9, 10, 13, 14, 16, 20, and the second group as Caprices 6, 15, 19, 21, 22, 23. Lee refers to the third group as "nasty territory," and lists the Caprices as 7, 11, 12, 17, 18, 24 and the fourth group as Caprices 1, 2, 3, 4, 5 (with original bowing) and 8. This classification is similar to Schliephake's but appears to establish only five Caprices as the most challenging out of the set of 24.

For comparison, Gregory Shir reveals his sequence of Caprices in his book titled *Paganini Technique: Revealing the secret behind his masterpieces*. Shir states that "the Caprices were a song circle of etudes for his [Paganini's] secret practice regimen," and that "by learning the Caprices with my corrected fingering and bowing, and following the pieces in the order I have designated, I can assure you that any violinist will become a master musician." ¹⁵⁰

Shir splits the 24 Caprices into three levels of difficulty with the first group being the easiest of three.

¹⁴⁸ Sean Lee on behalf of The Violin Channel, "VC WEB BLOG | Sean Lee – "Choosing an Order for Learning Paganini's Caprices" [Video Blog]," produced by Sean Lee, recorded February 26, 2016, video, 5.37, https://theviolinchannel.com/sean-lee-video-web-blog-best-order-paganini-solo-caprices/.

Gregory Shir, Paganini Technique: The secret is that Paganini Concealed the correct Sequence of the Caprices in his Original Manuscript, Revealing the secret behind his masterpieces (Los Angeles: Paganini Technique, 2008). p. 2.

¹⁵⁰ Shir, Paganini Technique: The secret is that Paganini Concealed the correct Sequence of the Caprices in his Original Manuscript, Revealing the secret behind his masterpieces, p. 4.

• Level 1: Caprices 16, 10, 22, 12, 14, 23, 19, 8

• Level 2: Caprices 17, 4, 18, 5, 11, 7, 21, 24

• Level 3: Caprices 1, 9, 3, 15, 20, 2, 13, 6

Some of Shir's fingering and bowing suggestions assist with large intervals and some sections of tricky passagework, but they do not facilitate the player with any additional abilities that may enable them to master the techniques found in the Caprices.

The author provides her recommendation of the Paganini Caprices in order of difficulty which have been divided into four groups. The numbers in bold illustrate the selected Caprices for this project.

• Group 1: **16, 20,** 13, 14, **11, 9,**

• Group 2: **12**, 15, **10**, **19**, 22, 21,

• Group 3: 17, 18, 23, **6**, 2, **24**,

• Group 4: 1, 3, 7, 5, (with original bowing), 8, 4

Irrespective of Shir's opinion, there is no evidence to suggest that learning the Caprices in a specific order will enable the violinist to overcome the challenges in the Caprices. However, given that the Paganini Caprices are very difficult, it is beneficial to begin studying the Caprice which possess the technique which the violinist or pupil is most mastered in.

Recommended Repertoire to Study Prior to the Paganini Caprices

Few authors have provided a sequential order of recommended studies, etudes or caprices. However, a sensible and practical order of study has been provided in **Table 4** by Fischer:

Table 4 Simon Fischer's Logical Order of Study

Logical Order of Study

1 Hans Sitt Op. 32	8 Kreutzer 42 Studies
2 Wohlfahrt Op. 45	9 Rode 24 Caprices
3 Kayser <i>Op. 20</i>	10 Dont <i>Op. 35</i>
4 Dancla <i>Op.</i> 73	11 Gavinies 24 Etudes
5 Mazas <i>Op. 36</i>	12 Wieniawski L'Ecole modern op. 10
6 Fiorillo <i>36 Etüden</i>	13 Paganini Caprices
7 Dont Op. 37	

Source: Adapted from Simon Fischer. *The Violin Lesson: A manual for teaching and self-teaching the violin* (London: Peters, 2013), p. 327.

Fischer acknowledges that "there cannot be any one correct order," and to "use variations of this ladder." The progressive difficulty also overlaps from book to book. Fischer explains, "some of the Dont op. 37, which are meant to be preliminary to the Kreutzer etudes, are more demanding than the Kreutzer themselves; some of the Kreutzer are more demanding than some of the Dont op. 35; some of the Paganini are simpler than some of the Wieniawski." ¹⁵¹

Ivan Galamian also provides an order of study which is illustrated in **Table 5** (p. 71).¹⁵² It is not necessary to study all the etudes, studies or caprices compiled in this list, as the level of difficulty overlaps from one set of studies to the other. However, for the intermediate to advanced player, the study and analysis of most of these works will benefit the player and prepare them for the challenging Wieniawski *L'ecole modern* and the Paganini *24 Caprices*. The objective of these studies is not to learn techniques

¹⁵¹ Fischer, The Violin Lesson: A manual for teaching and self-teaching the violin, p. 327.

¹⁵² Anthony Feinstein, Michael Rabin: America's Virtuoso Violinist (Prompton Plains New Jersey: Amadeus Press, 2005), p. 27-28.

but to exercise both musically and technically, the specific technique that is being refined.

Table 5 Ivan Galamian's Order of Study

Jakob Dont, 24 Preparatory Studies Op. 37 Rodolphe Kreutzer, 42 Etudes Federigo Fiorillo, 36 Studies or Caprices Pierre Rode, 24 Caprices Pierre Gaviniès, 24 Etudes Jakob Dont, Etudes and Caprices Op. 35 Henri Wieniawski, L'école modern Op. 10 Niccolò Paganini, 24 Caprices

Galamian's order of study specialises in high-level studies and eliminates elementary Sitt, Wohlfahrt, Kayser, Dancla and Mazas studies from the list. Interestingly, the Fiorillo and Dont (Op. 35) studies are considered more challenging when compared to Fischer's table. Elementary studies are vital to condition the hands and train the young student for advanced repertoire. They progress systematically and are useful resources for both the student and teacher. **Table 6** provides the authors recommended order of study and includes both elementary and advanced repertoires.

Table 6 Order of Study (Author)

	Order of Study				
1.	Hans Sitt Op. 32 Books I-V	9.	Dancla 20 Etudes Op. 73		
2.	Wohlfahrt Studies Op. 45	10.	Dont 24 Caprices Op. 35		
3.	Dancla 15 Studies Op. 68	11.	Gaviniés 24 Etudes		
4.	Mazas Books I-II Op. 36	12.	Fiorillo 36 Etudes		
5.	Dont Op. 37	13.	De Bériot Op. 123 Concert Studies		
6.	Kayser Op. 20	14.	Rode 24 Caprices		
7.	Kreutzer 42 Studies	15.	Wieniawski Ecole Moderne Op. 10		
8.	Mazas Book III Op. 36	16.	Paganini 24 Caprices		

PART TWO: The Video and Audio CDs

CHAPTER TWO

The Video Demonstrations

Provided in this chapter is a list of video and audio tracks and their durations. The videos contain demonstrations of supplementary exercises and examples which support and enhance the learning process of the Caprices. They form an integral part of the project's performance component and correspond with the video tracks which are listed in Part Two (The Caprices and Their Performance Problems) of the project.

The videos were recorded at The Video Recording Studios at The University of Adelaide in South Australia, between 2017-2020 and were created, produced and edited by the author.

Caprice Three

Video Clip 7 Caprice Three: bb. 1-8, Altered bowing and fingerings	00:83
Video Clip 8 Caprice Three: b. 2, Octave trill in slow motion	00:44
Video Clip 9 Caprice Three: b. 4, Fingered octave trill (exercise 1)	00:89
Video Clip 10 Caprice Three: b. 4, Fingered octave trill (exercise 2)	00:91
Video Clip 11 Caprice Three: bb. 25-50 (Presto), Finger evenness exercises	00:88
Caprice Five	
Video Clip 12 Caprice Five: b. 1, Arpeggio exercises	00:43
Video Clip 13 Caprice Five: b. 1, Arpeggio phrasing	00:82
Video Clip 14 Caprice Five: bb. 2-3, Saltato bowing in slow motion	01:67
Video Clip 15 Caprice Five: bb. 2-7, Saltato bowing	00:14
Video Clip 16 Caprice Five: bb. 2-5, Saltato in four note bounces	00:18
Video Clip 17 Caprice Five: bb. 2-5, Saltato in eight note bounces	00:68
Caprice Six	
Video Clip 18 Caprice Six: bb. 19-21, Measured & unmeasured trill	00:53
Video Clip 19 Caprice Six: bb. 2-3, Vibrato trills	00:59

Video Clip 20 Caprice Six: bb. 1-8, Learning the melodic line
Video Clip 21 Caprice Six: bb. 1-8, Melodic line with double-stops00:91
Video Clip 22 Caprice Six: bb. 1-8, Trills
Video Clip 23 Caprice Six: bb. 1-8, Consolidating the learning Stages00:80
Caprice Nine
Video Clip 24 Caprice Nine: bb. 1-8, Fingering pattern (imitando il flauto)00:27
Video Clip 25 Caprice Nine: bb. 8-12, Fingering pattern (imitando il corno)00:13
Video Clip 26 Caprice Nine: bb. 82-90, Intonation exercise in a single position 00:82
Video Clip 27 Caprice Nine: bb. 82-90, Hand position exercise
Video Clip 28 Caprice Nine: bb. 82-90, Coordination exercise
Video Clip 29 Caprice Nine: bb. 82-90, Consolidating the position changes00:61
Caprice Ten
Video Clip 30 Caprice Ten: Open string accented bowing exercise
Video Clip 31 Caprice Ten: Variations on accented bowing exercises00:88
Video Clip 32 Caprice Ten: Slow motion travelling staccato
Video Clip 33 Caprice Ten: Travelling staccato string crossing exercises00:89

Video Clip 34 Caprice Ten: b. 1, Applying bowing exercises	00:36
Video Clip 35 Caprice Ten: bb. 1-4, Performance tempo	00:12
Caprice Eleven	
Video Clip 36 Caprice Eleven: bb. 1-8, Learning the double-stops	01:98
Video Clip 37 Caprice Eleven: bb. 54-65, Eliminating the hook stroke (initial learning stage)	00:84
Video Clip 38 Caprice Eleven: Articulation in hook stroke bowing	01:04
Video Clip 39 Caprice Eleven: bb. 29-36, Developing secure string crossing	gs00:66
Video Clip 40 Caprice Eleven: bb. 79-85, Managing consecutive string crossings	01:10
Caprice Twelve	
Video Clip 41 Caprice Twelve: bb. 1-8, Double-stop exercise	00:43
Video Clip 42 Caprice Twelve: bb. 1-8, Thumb extensions	00:67
Video Clip 43 Caprice Twelve: String crossing exercise	00:89
Video Clip 44 Caprice Twelve: Slow motion right wrist movements	00:47
Video Clip 45 Caprice Twelve: bb. 20-21, Preparing the hand for tenths	00:73

Caprice Sixteen

Video Clip 46 Caprice Sixteen: bb. 1-8, Détaché with accented notes
Video Clip 47 Caprice Sixteen: bb. 40-44, Articulation
Video Clip 48 Caprice Sixteen: bb. 25-26, Managing difficult shifts
Video Clip 49 Caprice Sixteen: bb. 27-29, Shifting exercise
Video Clip 50 Caprice Sixteen: bb. 27-29, Increasing tempo while maintaining secure shifts
Video Clip 51 Caprice Sixteen: b. 37, String crossing angles
<u>Caprice Nineteen</u>
Video Clip 52 Caprice Nineteen: Spiccato exercise
Video Clip 53 Caprice Nineteen: Open string spiccato & double-stop exercise 00:60
Video Clip 54 Caprice Nineteen: bb. 5-8, Consolidating the bow strokes00:13
Video Clip 55 Caprice Nineteen: bb. 5-13, Double-stop exercise
Video Clip 56 Caprice Nineteen: bb. 27-28 & 35-36, Securing the shifts
Caprice Twenty
Video Clip 57 Caprice Twenty: b. 25, Bowing exercise

Video Clip 58 Caprice Twenty: bb. 25-27, Coordination exercise
Video Clip 59 Caprice Twenty: bb. 25-27, Increasing the tempo
Video Clip 60 Caprice Twenty: bb. 1-16, Phrasing & bow weight distribution 00.79
Video Clip 61 Caprice Twenty: bb. 17-24, Splitting the triple-stops00.28
Video Clip 62 Caprice Twenty: bb. 17-24, Performance tempo
Caprice Twenty-Four
Video Clip 63 Caprice Twenty-Four: bb.5-6 (var. 6), Scales with double-stop fingering
Video Clip 64 Caprice Twenty-Four: bb.5-6 (var. 6), Double-stop-broken-tenths exercise
Video Clip 65 Caprice Twenty-Four: bb. 5-6 (var. 6), Upper/lower note focus in double-stop playing
Video Clip 66 Caprice Twenty-Four: bb. 5-6 (var. 6) Consolidating the learning stages
Video Clip 67 Caprice Twenty-Four: var. 8, Tuning the triple-stops01.26
Video Clip 68 Caprice Twenty-Four: var. 8, Bow management in triple-stops00.20
Video Clip 69 Caprice Twenty-Four: var. 8, Bowing with consecutive

Video Clip 70 Caprice Twenty-Four: var. 8, Bowing variations
Video Clip 71 Caprice Twenty-Four: var. 9, Arco notes
Video Clip 72 Caprice Twenty-Four: var. 9, Organisation of the left-hand00.76
Video Clip 73 Caprice Twenty-Four: var. 9, Increasing the tempo
TOTAL 45:13

The Audio CD

The audio CD consists of twelve tracks which feature recordings of the author performing Caprices 1, 3, 5, 6, 9, 10, 11, 12, 16, 19, 20, and 24. The recordings were created after the author completed the recommended prior repertoire tables and video demonstrations.

The author was recorded live at Professional Music Academy of South Australia by a professional audio engineer between 2017-2019. In 2020, the tracks were consolidated onto a disc.

Track Name	Duration
Track One – Caprice One: Andante, in E Major	2.16
Track Two – Caprice Three: Sostenuto-Presto-Sostenuto, in E Minor	3.35
Track Three – Caprice Five: Prelude-Agitato-Finale, in A Minor	3.09
Track Four – Caprice Six: Lento, in G Minor	5.43
Track Five – Caprice Nine: Allegretto, in E Major	3.32
Track Six – Caprice Ten: Vivace, in G Minor	2.41

Track Seven – Caprice Eleven: Andante-Presto-Tempo I, in C Major	5.34
Track Eight – Caprice Twelve: Allegro, in A Flat Major	3.18
Track Nine – Caprice Sixteen: Presto, in G Minor	1.46
Track Ten – Caprice Nineteen: Lento-Allegro Assai, in E Flat Major	3.14
Track Eleven – Caprice Twenty: Allegro, in D Major	3.41
Track Twelve – Caprice Twenty-Four: Theme & Variations, in A minor	5.45
TOTAL 4	11:74

PART THREE: The Caprices and Their Performance
Problems

CHAPTER THREE

Part Three presents the outcome of the project's methodology. It aims to provide the reader with a clear description of the challenging techniques used in the selected Caprices, forensically examines how to play them, and provides several exercises and step by step solutions to overcome these difficulties. The solutions presented in this project can be adjusted to serve similar problems which exist not only in violin-specific-repertoire, but also in repertoire for other bowed string instruments.

Caprice Number One

Caprice One features a challenging bow stroke called ricochet, which is featured continuously throughout the work. Therefore, a thorough understanding of the physics and behaviour of the ricochet movement is required. In addition to this chapter providing recommendations and exercises to help support the development of the ricochet bowing, topics such as note discrepancies and problems relating to the left and right hands are also explored. A list of recommended works that can be attempted after the completion of Caprice One is also presented.

Note Discrepancies

Table 7 (p. 81) illustrates eight bars that contain note discrepancies within Caprice One. Bar 22, in particular, is worth discussing. The eleventh note of bar 22 was originally a B-natural but was later changed to a D-natural in the Peters and IMC editions. The note change served a technical purpose and decreased the interval from a thirteenth to an eleventh when measured with the following note (G-natural).

¹⁵³ Paganini (Leipzig: Peters, c.a.1910), 9703; Paganini (New York: International Music Company, 1973), 2292.

Pedagogues Auer,¹⁵⁴ Flesch,¹⁵⁵ and Galamian,¹⁵⁶ state that double-stopped-tenths are challenging to play due to the excessive stretching and strain placed on the left hand. Therefore, an interval of a thirteenth is almost impossible to manage, unless the violinist has large hands and long flexible fingers.

There are no footnotes in the Peters or IMC editions providing a reason for the note change. ¹⁵⁷ However, the editors Flesch and Galamian likely changed the note so that the interval has less strain on the left-hand.

 Table 7
 Caprice One: Comparison of Note Discrepancies

Editions of the Paganini Caprices								
Bar	Original	Ricordi,	Breitkopf	Richault	Ricordi,	Peters	IMC	Urtext
Number	Score	1st ed.	& Härtel	c.1825	2 nd ed.	c.1910	1973	1990
	c.1817	c.1820	c.1823		c.1836			
11, 7th note	C sharp	E natural	E natural	E natural	C sharp	C sharp	C sharp	C sharp
14, 8th	E natural, C	C sharp,	E natural, C	C sharp,	C sharp,	E natural,	E natural,	E natural,
note	sharp, A	A natural	sharp, A	A natural	A natural	C sharp,	C sharp,	C sharp,
(chord)	natural		natural			A natural	A natural	A natural
16, 2nd	B natural,	G sharp,	B natural,	G sharp,	G sharp,	B natural,	B natural,	B natural,
note	G sharp, E	G sharp	G sharp, E	G sharp	G sharp	G sharp,	G sharp,	G sharp,
(chord)	natural	(8ve), E natural	natural	(8ve), E natural	(8ve), E natural	E natural	E natural	E natural
22, 11th & 14th note	B natural	B natural	B natural	D natural	B natural	D natural	D natural	B natural
25, 2nd note	C natural	C natural	B natural	C natural	C natural	B natural	B natural	C natural
26, 4th	G sharp,	G sharp,	G sharp,	G sharp,	G sharp,	G sharp,	G sharp,	G sharp,
note	E natural,	E natural,	E natural,	E natural,	E natural,	E natural,	E natural,	E natural,
(chord)	C natural	D natural	D natural	D natural	D natural	C natural	C natural	C natural
66, 9th note	C sharp	C sharp	C natural	C sharp	C sharp	C natural	C natural	C sharp
75, 7 th -8 th	G sharp,	B natural,	B natural,	B natural,	B natural,	B natural,	B natural,	G sharp,
and 15 th - 16 th notes	E natural	G sharp	G sharp	G sharp	G sharp	G sharp	G sharp	E natural

Data from Dr. Wolf-Dieter Seiffert, Henle Library, iPad vers 1.6.0.G, Apple App Store, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8 and Nicolò Paganini, 24 Capricci Für Violine Solo (Urtext), ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

¹⁵⁴ Auer, Violin Playing as I Teach It, p. 50.

¹⁵⁵ Flesch, The Art of Violin Playing, p. 29.

¹⁵⁶ Galamian, Principles of Violin Playing & Teaching, p. 29.

¹⁵⁷ Paganini (Leipzig: C.F. Peters, c.a.1910), 9703; Paganini (New York: IMC, 1973), 2292.

Recommended Exercises, Studies and Scales Before Learning Caprice One

The repertoire listed in **Table 8** aims to assist with the development of the ricochet bow stroke and left-hand finger groupings in preparation for Caprice One.

 Table 8
 Caprice One: Recommended Repertoire

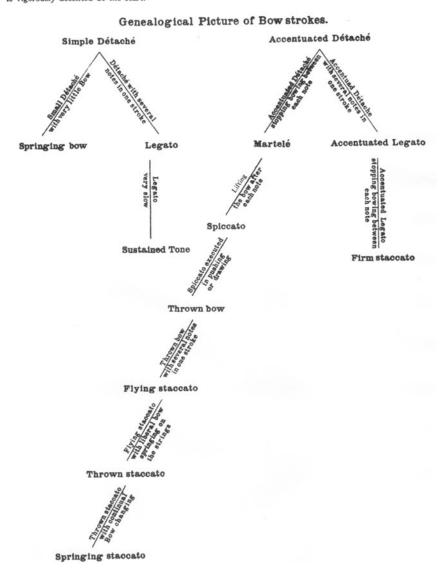
Scale Systems	Exercises	Studies
Flesch: E major, p.	Fischer Double Stops: G major	Wohlfahrt: 29 Moderato – slurs over four
81-85	Thirds, p. 319-321 and A flat major	strings, 40 Allegro scherzando –
	Thirds, p. 123-125 and A major	preparatory study for ricochet
	Thirds, p. 263-265	
Granat: Heifetz Scale	Fischer Basics: Springing	Kayser: 10 Allegro ma non tanto – two and
Book E major and E	Arpeggios exercises 110-112, p.	four note slurs with focus on the flexibility
<i>minor</i> , p. 48-52	76-77	of the wrist
Galamian Vol 2: IV	Fischer Practice: Ricochet exercises	Mazas Heft II: 46 Allegro moderato –
Quadruple Stops, p.	<i>76-80,</i> p. 99-104	preparatory study for ricochet bowing
41		
Fischer Scales:	Ševčík School of Violin Technique	Mazas Heft III: 70 Allegro, 71 Allegretto,
Three-octave scales,	Op. 1 Part 1: No. 18, 20, 21, 22,	72 Allegro, 73 Allegro, 74 Moderato, 75
arpeggios and	Part 2: No. 6, 8, 17, 23, 26, 33, Part	Allegretto, - (Suite d'arpèges) a suite of
chromatic scales, p.	3: No. 3, 4, 5, 7, 10, 13, Part 4: No.	arpeggio studies that begin using three
138	1, 13, 14, 15, 22	strings, then four
	Dounis The Staccato Op. 21,	Dancla Op. 73: 18 Allegro – four note
	Chapter Two, p. 258-262	slurred ricochet bowing
	Ševčík School of Bowing	Dont (Op. 35): 10 Allegro, 19 Vivace –
	Technique Op. 2 Part 5: No. 37	staccato slurs in combination with double
	with bowing exercises 999-1010	stops
	(Jerked or thrown staccato), p. 71	
	& 87-88	
	Yanshinov: Exercise 13, p. 6	De Bériot: <i>I Moderato</i> – ricochet and triple
		stops, 30 Tempo di Marcia Maestoso –
		slurs and ricochet bowing
		Wieniawski: 3 Moderato –double-stopped
		3rds and ricochet bowing

The Springing Staccato exercises in the *Dounis Collection* are worth investigating as Dounis provides specific instructions and recommendations on his exercises. Particularly useful is his Genealogical Picture of Bow Strokes (see **Figure 2**); where he claims that the entire technique of bowing is based on the simple and accentuated détaché.

Figure 2 Genealogical Picture of Bow Strokes by Dounis

Deuxième Partie. Zweiter Teil. Second Part. L'archet. Der Bogen. The Bow.

As I have said in the first part of this method, "THE ENTIRE TECHNIQUE OF BOWING IS BASED ON THE SIMPLE AND THE ACCENTUATED DÉTACHÉ." When the bow is pushed or drawn without accenting the change of bow, it is called simple détaché. It becomes accentuated détaché when every stroke is vigorously accented at the start.



Source: Demetrius Dounis, "Second Part. The Bow: Genealogical Picture of Bow Strokes," in *The Artist's Technique of Violin Playing Op. 12* (New York: Fischer 1921), p. 78.

While researching the technical ancestry of bow strokes is not the project's aim, it is certainly likely that the ricochet; or 'Springing Staccato' as Dounis refers to it, 158 evolved from the spiccato bow stroke. Therefore, to comprehend the ricochet bow stroke, the spiccato stroke should be mastered before the ricochet bow stroke is attempted.

The recommended Mazas studies in **Table 8** (p. 82) are particularly useful when preparing for Caprice One, as they progress in difficulty. ¹⁵⁹ Mazas advises practising using a détaché bow stroke before introducing the ricochet bowing to the studies.

Operating the Ricochet Bow Stroke

The operation of the ricochet bow stroke requires three main principles:

- A relaxed and supple bow hold
- An understanding of the mechanical movements of the right fingers and thumb
- Knowledge of the bow's balance-point, weight distribution and awareness of the bow's tension

Achieving a ricochet bow stroke that is even and consistent requires a bow hold that is evenly balanced and free of tension. Producing this requires the fingers of the right-hand to lay on the bow in a relaxed manner with small spaces between them. The little finger of the bow should remain bent at the knuckle to form a semi-circle shape when the bow is used in the lower half of the bow. The right thumb should occupy the space between the lapping and frog and should always remain bent at the knuckle (see **Figure 3** The Franco-Belgian bow hold, p. 85). ¹⁶⁰A delicate balance between the second finger and the thumb keeps the bow from falling out of the hand.

¹⁵⁸ Dounis, "Second Part. The Bow: Genealogical Picture of Bow Strokes," in *The Artist's Technique of Violin Playing Op.* 112, p. 78.

¹⁵⁹ Mazas, Mazas Etüdes Opus 36 Heft II-III, p. 38-51.

¹⁶⁰ Fischer, "Right Arm and Hand: Part A" in Basics: 300 exercises and practice routines for the violin by Simon Fischer, p.3.

The function of the thumb is important in the bow hold as it not only aids in fluid horizontal bow changes, but also diagonal and vertical movements.¹⁶¹ The direction is dependent on the bowing markings and string crossing.

Figure 3 The Franco-Belgian bow hold. 162



When playing in the upper half of the bow, it is common for the little finger to become straight; as the hand must extend to ensure the bow remains straight. When returning to the lower half of the bow, the little finger relieves the index finger of weight and returns to its original position to form a semi-circle shape. During the ricochet bow stroke, the thumb acts as a suspension to the bow hitting the strings. This bow hold allows the string to vibrate without force; producing a clear, immediate response from the instrument.

When performing the ricochet bow stroke, the violinist must have a clear understanding of the mechanical movements of the fingers and thumb. To initiate the ricochet bow stroke, the bow must begin in the air, approximately 5cm above the string, and just below the middle part of the bow. Balancing the weight of the bow between the thumb and little finger will control the bow in the air. However, the little finger needs to apply pressure downwards on the bow stick to counteract the heaviness of the bow to keep

Robin Stowell, "Violin Bowing in Transition: A survey of Technique as Related in Instruction Books C1760-c1830," Early Music 12, no. 3 (1984): p. 325, https://www.jstor.org/stable/3137768.

¹⁶² The bow hold described, is known as the Franco-Belgian bow hold.

Itzhak Perlman, "Itzhak on Bow Grip," produced by Itzhak Perlman, uploaded to Youtube August 2011, video, 3:10, https://www.youtube.com/watch?v=6r0WW-KN6VM.

Magdalena Rut, "The Influence of the Franco-Belgian Violin School on Violin Didactics in Poland from the Mid-19th to the Mid-20th Century," Revue Belge De Musicologie / Belgisch Tijdschrift Voor Muziekwetenschap 60 (2006): p. 134, https://www.jstor.org/stable/25486000.

it stable in the air. The right arm should be slightly lower than the wrist, and the fingers should be relaxed and heavy.

The little finger that rests on the bow plays a significant role in the ricochet stroke, as it controls the height of the bounce and the pivot point. From this starting position, the hand completely relaxes, allowing the bow to fall onto the string. After the first bounce, the hand moves the bow in a sideways direction, allowing the bow to continue bouncing on the string. The bounces eventually become smaller as the energy of the bow movement decreases; until it ultimately becomes stationary. To view the demonstration of this movement, please see **Video Clip 1** on the DVD.

Video Clip 1 Caprice One: Ricochet Down Bow

The ricochet bow stroke works best just below the middle to the upper half of the bow. The exact point-of-bounce is dependent on the individual's bow, its weight, and location of balance-point. **Figure 4** illustrates the measurement and location of the balance point on a violin bow.

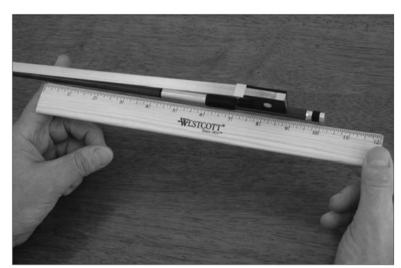


Figure 4 Measurement of the Balance Point

The balance point is measured from the point of balance to the end of the stick, not including the button. 9.5 inches is considered the optimum.

Source: Roger Treat, "Choosing a Bow: Understanding Weight, Balance, and Strength," *Fiddler Magazine* 16, no. 2 (2009):34, http://www.rogertreat.net/documents/Choosing_a_Bow.pdf.

The balance point of the bow is located approximately 7cm to 11cm above the bow lapping. The tightness of the bow hair affects the bounce of the ricochet; therefore, it is better to play with slightly tighter bow hair as the momentum of the ricochet movement is easier to maintain. Tightening the bow hair should be conducted with caution as hair that is too tight will damage the bow and cause the ricochet bounces to sound harsh.

Caprice One: Right-Hand Problems & Solutions

The string crossings in Caprice One are challenging for the following reasons:

- 1. The ricochet must bounce evenly across four strings
- 2. The right hand must deliver 329 ricochet slurs without tiring

Due to the severe angles of the string crossing, the right elbow and bow hand must work together to create seamless string crossings and direction changes. The first downbow note of the ricochet slur requires a small accent to initiate the ricochet bow stroke. Throwing the bow in a downward direction by moving the wrist quickly, provides the bow with enough momentum to carry over the four strings in a down and up-bow direction.

The weight of the right elbow will support the ricochet action if it begins the stroke at the D string level. This adjustment of the string level allows the arm to anticipate the string crossings which provide a more seamless and continuous ricochet bow stroke. Lowering the elbow for the down-bow also conserves energy for the player.

Similarly, in the up-bow slur, the right elbow should be slightly higher than the bow hand when playing on the A or E strings; as this helps the momentum of the ricochet bounce back over to the G and D strings. This bowing technique enables the right elbow to move minimally while the bow hand moves past the elbow joint. This string crossing technique enables the performer to play the ricochet stroke without tiring quickly. For a demonstration of the ricochet bow stroke, please see **Video Clip 2.**

Video Clip 2 Caprice One: bb.1-4, Ricochet bowing in slow motion

In bars 14 to 16, Paganini breaks the monotonous arpeggiated rhythm by introducing triple-stops. **Music Score 4** provides the notation of the triple-stops from bars 12 to 19.

Music Score 4 Caprice One, Triple-Stops, bb. 12-19,



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 2, bb.12-19.

The section concludes with a series of triple-stops that resolve in the tonic key. In addition to the original score, editions such as the IMC, Peters, Ricordi (first and second editions), and Breitkopf & Hartël edition, recommend that the single note and the triple-stop slur in the same direction. Hartel edition, recommend that the single note and the triple-stop slur in the same direction. Hartel edition pattern requires fast adjustment of the right elbow and insulates the reverberation of the triple-stop. A better bowing pattern is a downbow on the single note and an up-bow on the triple-stop. This bowing pattern allows the bow to adjust to the string angle in preparation for the triple-stop with minimal movement. It also enables the bow to lift slightly at the end of the triple-stop; releasing the strings which provide more volume.

Music Score 5 (p. 89) illustrates an exercise that can help the player correctly articulate the triple-stops. The X-notes are preparation chords which require the player to correctly angle the bow onto three open strings. The comma written after the triple-stop indicates that the bow is taken off at the end of the bow stroke. The pattern repeats until the end of the passage. For a demonstration of Music Score 5 (p. 89), please see Video Clip 3 (p. 89) on the DVD.

88

¹⁶⁴ Paganini (New York: International Music Company, 1973), 2292; Paganini (Leipzig: C.F. Peters, c.a.1910), 9703; Paganini, 1st ed. (Milan: Ricordi, c.a.1920), 403; Paganini, 2nd ed. (Milan: Ricordi, c.a.1836), 9036; Paganini (Leipzig: Breitkopf & Härtel, c.a.1823), 3936.

Music Score 5 Caprice One, Exercise, Triple-Stop Bowing



Video Clip 3 Caprice One: bb. 14-16, Triple-strop bowing exercise

Caprice One: Left Hand Problems & Solutions

Bars of interjecting descending scale thirds interrupt the monotonous arpeggios between bars 27 and 37. **Music Score 6** provides an excerpt.

Music Score 6 Caprice One, Descending Thirds, bb. 24-37



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 2, bb.24-37.

There are three reasons why these double-stops are challenging to play; these include:

- 1. Playing with secure intonation
- 2. Playing musically with articulate phrases
- 3. Maintaining tempo

Playing with secure intonation

Double-stops are usually tuned against the lower note of the double-stop. However, in the context of the Caprice, the double-stop must be tuned against the note of the melodic line. Tuning the double-stops requires careful listening, as they are technically played out-of-tune. It is necessary to tune each of the double-stops in context to ensure tonal stability. An exercise to develop this skill is provided:

Exercise One: Caprice One Descending Scale Thirds (Hand Groupings)

The exercise presented in **Music Score 7** (p. 91) aims to develop technical proficiency in skills such as shifting and intonation. The exercise also prepares the left-hand for fast playing by arranging the double-stops into hand positions.

The exercise should be practised slowly at S = 60 in the initial stages of learning and gradually increased to S = 75. Listening to the higher notes of the double-stops will keep the intonation secure and help the left-hand prepare for the upcoming groups of double-stops.

¹⁶⁵ Fischer, "Double Stops" in Practice: 250 step-by-step practice methods for the violin by Simon Fischer, p. 218.

Music Score 7 Caprice One, Exercise, Descending Double-stops



Phrasing and interpretation

The phrasing in this section of the Caprice significantly affects the technical delivery of the ricochet and double-stops. Therefore, the phrasing is organised first, ahead of the tempo, in these early stages of learning.

Harmonically, this section of the Caprice evokes unrest as it moves through several keys, including; a G major and minor duel (b.27 to 32), Ab major (b. 33), Ab minor (b. 34), G# major (b.35), A major and minor (b. 36), and Bb major (b. 37). This chromaticism urges the music to continue searching for the tonic key and continue its monotonous perpetuum mobile.

Six phrases exist between bars 27 to 37, and each one begins from the second double-stopped semiquaver (bb. 27, 29, 31, 33, 35 and 37). The arpeggiated bars that exist between bars 27 to 37 modulate and form the middle of the phrase. This modulation creates momentum that leads to the first double-stopped semiquaver and the completion of the phrase.

Due to the repetitive nature of the section, there should be variation in the amount of time between phrases. Only the IMC edition contains a tempo suggestion; a *poco rit* in bar 37.¹⁶⁶ This tempo marking suggested by Galamian helps provide shape to the section which would otherwise be played in tempo. Taking this idea from Galamian and expanding it to the ends of the phrases across the section (bb. 27-37) is beneficial, as it not only serves to benefit the Caprice from a musical perspective but also enables the highly technical double-stops to be played with better efficiency due to the fluctuating tempo. An exercise to assist consolidating the passage is provided:

Exercise Two: Caprice One Phrases (bars 27 to 37)

Exercise two aims to consolidate the left and right hands while incorporating the six phrases in the section. The phrases should be practised with a metronome at approximately ($\Gamma = 75$). Once comfortable, the metronome should be turned off, and the accelerandos and ritardandos can be inserted.

Maintaining Tempo

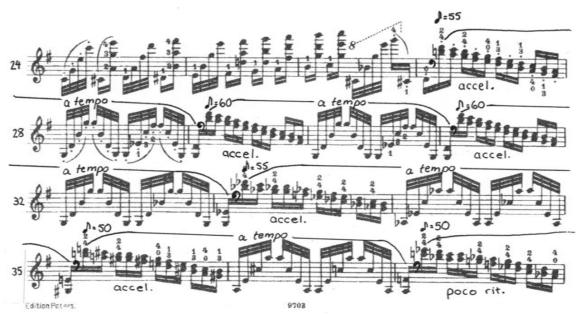
The descending double-stops are grouped in three's, which suggest a triplet rhythm. These bars of triplets are challenging to play without the use of ritardandos and accelerandos, due to the challenging speed of the performance tempo.

Music Score 8 (p. 93) defines the beginning of the accelerandos from the fourth double-stop to the first note of the ricochet bar. The bars of ricochet maintain the tempo of the Caprice and keep the section moving forward. Please see **Video Clip 4** (p. 93), which illustrates **Music Score 8** (p. 93) with accelerandos and ritardandos at a practice tempo, followed by a performance tempo.

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¹⁶⁶ Paganini (New York: International Music Company, 1973), 2292, p. 3.

Music Score 8 Caprice One, Descending Thirds & Phrasing, bb. 24-37



Source adapted from: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 2, bb.24-37.

Video Clip 4 Caprice One: bb. 27-37, Phrasing

Recommendations to Consolidate Caprice One

Coordinating the left and right hands in preparation for a performance of Caprice One involves working through a series of steps. These steps include practising in slurs, rhythms, and with a metronome.

Step One: Arpeggiated Four Note Slurs

The first exercise involves playing the demi-semiquavers as a slur with four notes per bow stroke. This exercise aims to develop smooth and seamless string changes while ensuring the right elbow adjusts to the correct string level as if it were playing ricochet.

Step Two: Developing Controlled Ricochet Bowing

Step two involves manipulating the ricochet bow so that the violinist has control over the bounces. The exercise supports the development of even four-note ricochet bounces across the G-D-A and E strings in a down and up-bow direction.

Before applying the exercise on multiple strings, it is necessary to first practice a measured four-note ricochet bounce on a single string. The first bounce of the ricochet requires energy to initiate the ricochet movement. Therefore, it is essential that the right wrist rotates quickly in an anticlockwise direction so that it can apply downwards force via the index finger onto the string. The energy which is initiated from the right wrist facilitates the bow so that it can sustain the ricochet bounces on the string.

During the third and fourth bounces of the ricochet bow stroke, the energy of the bounces diminishes quickly. To compensate for this problem, the violinist will need to manipulate the bow so that it bounces evenly at the same height. To do this, the little finger of the right-hand will need to push down on the end of the bow stick to encourage the bow to lift. Taking the index finger off the bow can assist in developing even bounces.

The up-bow ricochet must be as competent as the down-bow to ensure evenness in sound. To assist with the momentum of the bounce in an up-bow direction, the right-hand must accent the first bounce with more force using the wrist and move the bow at a consistent speed. Once the down and up-bow four-note ricochet bounces are comfortable, it can be practised one after the other without stopping.

Step Three: Controlled Ricochet on the Open Strings.

At a tempo of J=80 - 129, the wrist can apply two accents in each bar; one for the down-bow on the first beat, and the other for the up-bow on the second beat. Once the tempo reaches J=130+, only one accent at the beginning of the bar is necessary. At this speed, there is enough momentum from the first

accent to carry the bow over to the E string and back. Using the metronome while practising open strings will help maintain the evenness of the ricochet bow stroke.

• J = 80 - 129 each bar requires two accents

• J = 130 - 170 each bar requires one accent

Step Four: Arpeggiated Four and Eight Note Bounces

The aim of step four is to combine the ricochet bowing and left-hand positions so that over time, it can be played with fluidity. This exercise requires a rhythmic change to the Caprice. By converting the Caprice into semiquaver triplets and inserting two semiquaver-rests after each group of four notes, this provides the violinist with enough time to prepare the left-hand for the next group of notes.

Once the exercise is comfortable to play, the exercise can be varied so that a rest is inserted after every group of eight notes. This exercise should be played at a comfortable tempo suitable to the violinist's abilities and brought up to a performance tempo using a metronome. **Video Clip 5** provides a demonstration of this exercise.

Video Clip 5 Caprice One: bb. 1-4, Ricochet exercise

Step Five: Timing the Left and Right Hands

Ensuring the left-hand finger patterns prepare ahead of the right-hand is essential for a successful performance of Caprice One. The left-hand fingers need to arrange into position just before the down-bow ricochet. In some instances (depending on the extensions required in the left hand), the left-hand fingers will press the string down just before the bow arrives at the note. The timing of the left-hand is critical and should always be ahead of the right-hand

wherever possible. Video Clip 6 provides a demonstration of the first sixteen bars at performance tempo.

Video Clip 6 Caprice One: bb. 1-16, Timing the left and right hands

Recommended Repertoire Post Caprice One

Following the completion of Caprice One, the violinist is now proficient at the ricochet bowing pattern and can pursue other works that include the same bowing technique. **Table 9** provides a list of repertoires that feature the ricochet bowing.

 Table 9
 Recommended Repertoire Post Caprice One

Composer	Repertoire
Casella, A.	Violin Concerto, Op. 48
Mendelssohn, F.	Violin Concerto in E minor, Op. 64
Rachmaninoff, S.	Hungarian Dance No. 2, from 2 Morceaux de salon, Op. 6
Schubert, (François)	L'Abeille (No. 9), from Bagatelles, Op. 13
Saint-Saëns, C.	Violin Concerto in B minor, No. 3, Op. 61
Sarasate, P.	Caprice sur Roméo et Juliette, Op. 5
Sibelius, J.	Violin concerto in D minor, Op. 47

Works that include an identical bowing pattern to Caprice One can be found in the movements of the Casella, ¹⁶⁷ and Sibelius Violin Concertos. ¹⁶⁸ Other smaller works that include an identical bowing pattern include Rachmaninoff's *Hungarian Dance*, ¹⁶⁹ and Sarasate's *Caprice Sur Roméo et Juliette*. ¹⁷⁰

The Cadenza featured in the first movement of Mendelssohn's famous violin concerto in E minor, Op. 64, *Allegro, molto appassionato*, ¹⁷¹ is not only identical to

¹⁶⁷ Alfredo Casella, Violin Concerto, Op. 48 (Wien: Universal Edition, 1929), 8841.

¹⁶⁸ Jean Sibelius, Concerto in D minor, Opus 47 (Berlin: Schlesinger, 1905), S.9336.

¹⁶⁹ Sergei Rachmaninoff, "Hungarian Dance No. 2" in *2 Morceaux de Salon, Op. 6* (Moscow: A. Gutheil, c.a.1894), [plate unknown].

¹⁷⁰ Pablo de Sarasate, Caprice Sur Roméo et Juliette, Op. 2 (Paris: Choudens, c.a.1868), 1536.

¹⁷¹ Felix Mendelssohn, Violin Concerto in E minor, Op. 64, (Leipzig: Breitkopf & Härtel, 1845), IFM196.

Paganini's ricochet bowing in Caprice One but is also an excellent illustration of how the recommended exercises found in this project can be adapted to suit another piece.

CHAPTER FOUR

Caprice Number Three

Caprice Three is in ternary form with the following sections; sostenuto, presto, and a returning sostenuto section. The sostenuto sections comprise of octaves and fingered-octave trills, while the presto section features fast left-hand passagework and long slurred bow strokes. This chapter addresses the following issues: note discrepancies, octaves and fingered octaves, fingered octave trills, and slow bow control.

Note Discrepancies

There are many differences concerning bowings, dynamics, and symbols within the multiple editions of Caprice Three, however, only note discrepancies have been provided. There are two note discrepancies within **Table 10**; the first in bar 14, and the second in bar 15.

Table 10 Caprice Three: Comparison of Note Discrepancies

Editions of the Paganini Caprices								
Bar	Origina	Ricordi,	Breitkopf	Richault	Ricordi,	Peters	IMC	Urtext
Number	1 Score	1st ed.	& Härtel	c.1825	2 nd ed.	c.1910	1973	1990
	c.1817	c.1820	c.1823		c.1836			
14, 3 rd note	F natural	F natural	F sharp	F natural	F natural	F sharp	*F sharp ¹⁷²	F natural
15, upper note of first appoggiatura	E natural,	E natural	C natural	C natural	E natural	C natural	C natural	C natural

Data from Dr. Wolf-Dieter Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8 and Nicolò Paganini, *24 Capricci Für Violine Solo (Urtext)*, ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

¹⁷² F-sharp in the IMC score, but footnote states "F natural in the autograph," found in Paganini (New York: International Music Company, 1973), 2292, p. 6.

Recommended Exercises, Studies and Scales Before Learning Caprice Three

Table 11 contains preparatory studies and exercises that focus on the preparation and execution of octaves and fast left-hand passagework. Repertoire that also focuses on finger extensions and contractions is included.

 Table 11
 Caprice Three: Recommended Repertoire

Scale Systems	Exercises	Studies
Flesch: <i>E minor</i> , p. 116-120	Fischer Double Stops: <i>Octaves in E minor</i> , p. 339-341 and <i>Fingered Octaves in E minor</i> , p. 342-344	Herrmann: 14 Presto – study in octaves and unisons
Granat: Heifetz Scale Book E major and E minor, p. 48-52	Fischer Basics: Fast Fingers exercises 168, 178, p. 120-124.	Wohlfahrt: 60 Allegro con fuoco – octaves with hook stroke bowing
Galamian Vol 1: 3. Three-octave Scales, with bowings B6. (1), B12. (1), p. 11-12	Fischer Practice: <i>Trills</i> exercises <i>95-103</i> , p. 123-128 Ševčík School of Bowing Technique Op. 1 Part 3: <i>No. 9, 12</i> , Part 4: <i>No. 2, 3, 4, 7</i> Yanshinov: <i>Exercise 34-40</i> , p. 21-23	Kreutzer: 9 Allegro moderato – fast passagework suitable for the presto section of Paganini Caprice Three, 24A Allegro, 24B Allegro, 25 Allegro moderato – suitable for the development of double-stop octaves,
Galamian Vol 2: <i>III</i> Octaves, p. 14-17	Dounis The Higher Development of Thirds and Fingered Octaves Op. 30: Fingered Octaves, p. 297-303	Dont Op. 35: 22 Allegro brillante – preparatory study for fast passagework
Fischer Scales: Three- octave scales, arpeggios and chromatic scales, p. 138	Dounis The Artist's Technique of Violin Playing Op. 12, First Part The Left Hand: IV The Technique of Double Stop Playing, Exercise A Octaves, p. 41-43	
	Ševčík Preparatory Studies in Double Stopping Op. 9: <i>No. 1-6, 9-10, 19-20, 29-30, 40-41, 50-51 Octaves,</i> p. 1-4, 6-7, 12-13, 18, 24-25, 30-31	

Sections of Caprice Three are in the same key as Caprice One (E minor and E major); therefore, it is beneficial to practise the scale systems from Caprice One (see scale systems **Table 8** p. 82).

Galamian's chapter titled *Octaves* is a particularly valuable resource in preparation for Caprice Three. ¹⁷³ Galamian provides traditional fingering patterns and alternate fingering options for fingered octaves, and exercises using octaves in chromatic and whole-tone scales. Even though the octaves presented in Galamian's book *(Contemporary Violin Technique Vol. 2)* are presented with a détaché bowing pattern, Galamian recommends the following bowing patterns:

Double stops, by their nature, require fewer bowing and rhythm patterns than do the sing stop exercisers of the first volume. However, the introduction of a few patterns is highly beneficial, once the exercise is mastered in its simplest form. The patterns add a new dimension of technical challenge and besides minimize the danger of mechanical, unthinking repetition, which is the chief cause of wasteful and inefficient practice habits.

The exercises are arranged in groups of either 6, 8, 9, or 12 notes. In order to avoid needless repetition within the text, the basic Bowing (B) and Rhythm (R) patterns for each of these categories are listed here...¹⁷⁴

Transferring these bowing patterns to the octaves in the sostenuto section of Caprice three is a useful exercise to work on consolidating the phrases and incrementally increasing the tempo.

The studies listed in **Table 11** (p. 99), aim to improve octaves and fingered octaves in a musical context. The Wohlfahrt study *No. 60 Allegro con fuoco* and Kreutzer studies *No. 24a/b Allegro* and *No. 25 Allegro moderato*, ¹⁷⁵ are ideally suited for the preparation and execution of octaves. Kreutzer also includes additional bowing exercises that can be applied to *Study No. 25* to further the coordination of both the left and right hands.

¹⁷³ Galamian, "III Octaves" in *Contemporary Violin Technique: Double and Multiple Stops in Scales and Arpeggio Exercises*, vol. 2, p. 14-17.

¹⁷⁴ ibid., p. iv.

Wohlfahrt, "No. 60 Allegro con fuoco," in *Sixty Studies for the Violin Op. 45: Complete Books I and II*, p. 54-55; Kreutzer, "No. 24a/b Allegro and No. 25 Allegro moderato," in *42 Studies for Violin*, p. 42-47.

Provided in **Table 12** is a list of studies that are suitable for Caprices Three and Six. The studies aim to improve finger dexterity, rhythmic finger control, and flexibility, which are necessary skills to perform the trilling double-stops, which are featured in both of the Caprices. The studies offer trills in a variety of contexts, which include trills on single strings, in double-stops and various rhythms.

 Table 12
 Recommended Studies for Caprice Three and Caprice Six

Studies

Sitt Book I: 15 Moderato - trill study focusing on even finger movements

Herrmann: 1 Moderato, 2 Allegro, 3, Moderato, 4 Allegro, 5 Vivace – Five studies for the trill, 12 Allegro moderato – double-stops and trills

Mazas Heft I: 13 Allegro, 14 Allegro moderato – preparatory study for the trill

Dont Op. 37: 17 Andante con moto – alternating notes in various rhythms

Kayser: 22 Allegro assai – alternating notes in various rhythms

Kreutzer: 15 Allegro non troppo, 16 Moderato, 19 Moderato, 21 Moderato e sempre marcato, 22

Moderato – preparatory studies for trills, 40 [No name] – trills throughout the study, 41 Adagio – trills feature on both notes of double-stop

Dont Op. 35: 6 Allegretto scherzo – development of trill movements

Fiorillo: 2 Maestoso - continuous trills with an independent melodic line

De Bériot: 5A With a firmly sustained sound – alternating double-stop 3rds in different rhythm patterns

Rode: 16 Andante - double-stop 3rds, 20 Grave e sostenuto - contains fast groups of twelve notes per beat

Wieniawski: 10. Exercices en trilles – continuous trills with an independent melodic line

Octaves & Supplementary Exercises

The sostenuto sections of Caprice Three contain challenging octave and fingered octave passagework. Considering the following points will improve the execution of the octaves:

- Placement of the left thumb on the neck of the violin
- Finger pressure
- Finger angle

• Shifting pressure

The placement of the left-hand thumb is one of the most important factors to consider when trying to alleviate tension in the left-hand. If the thumb is behind the fingers pointing towards the scroll, the muscles will tighten. It will also cause the palm to raise against the neck of the violin, which will cause the intonation to suffer. Correcting intonation with muscle tightness in the left-hand is ineffective as the intonation will be inconsistent. The position of the thumb should be between the index finger and the ring finger (or little finger depending on the fingering of the octave). This thumb position should immediately relieve the hand of any muscle tightness, and the octave should feel supported by the palm and wrist.

It is also important to consider the finger pressure. A fingertip that is pressing too hard on the fingerboard will change to a white colour resulting from blood moving out of the capillaries. The fingers return to normal colouration once the skin releases from pressure. This change of colour in the fingertips is known as skin blanching.¹⁷⁶

Pressing the fingerboard harder causes the finger pad to expand on the fingerboard, which results in the note becoming sharper.¹⁷⁷ Instead, the finger should be placed down with only enough pressure so that the note is clean and audible. The fingertips should not turn white as a result of skin blanching.

Often, incorrect finger angles are responsible for intonation errors during octaves. When looking at the scroll of the violin, with the violin under the chin, the player should see the entire nail of the finger in both fingers of the octave. This angle is often most difficult for the little finger to accomplish, as the natural angle of the finger points toward the ring finger. It is possible to overcome this difficulty by controlling the little finger from the base of the knuckle and by practising independent finger exercises. It is possible to tune an octave with an unfavourable finger angle correctly; however, it is usually the cause of intonation problems on the arrival of the next consecutive octave.

¹⁷⁶ P. Smit, H. Neumann and H. Thio, "The Skin-blanching Assay (Report)," *Journal of the European Academy of Dermatology and Venerology* 26 (2012), p. 1197, https://doi:10.1111/j.1468-3083.2012.04449 x.

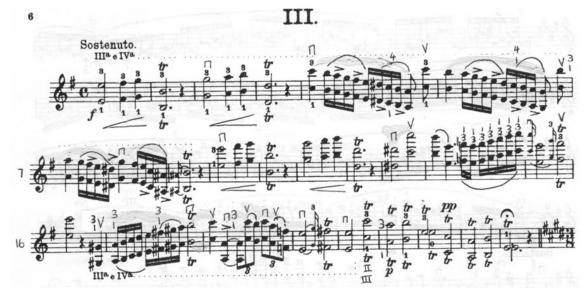
¹⁷⁷ Flesch, *The Art of Violin Playing*, p. 6-7.

Shifts are the primary reason for intonation problems in octaves due to the consecutive position changes. When a position shift occurs during consecutive octaves, the left-hand must release the string but remain in contact with the instrument while the hand and thumb move towards the new position. During the shift, it is essential that the hand frame remains the same as it did in the previous octave so that the following octave is in tune. Once the left-hand is in position, the fingers must press the string at the appropriate angle ensuring both fingernails can be seen by the player. Being aware of the tone and semitone distances and having a comprehensive understanding of the fingerboard's geography is an essential part of performing octaves. This knowledge will help the player navigate the shifts during a consecutive octave passage.

Presented on page 104, is a range of exercises that aim to improve intonation, clarity and consistency in the octave passages fingered one and four, within Caprice Three. The fingerings and bowings have been adjusted to support the technical and musical interpretations of the author; however, these changes will not suit all violinists. The teacher and student should seek to implement their fingerings and bowings, which are unique to their playing style.

Music Score 9 (p. 104) presents an adapted version of the Peters edition, which illustrates the author's bowings and fingering choices in the opening Sostenuto section of Caprice Three. A video recording of these changes is also provided in **Video Clip 7** (p. 104).

Music Score 9 Caprice Three, Alternate bowing and fingering options, bb. 1-24



Source: Adapted from Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 6, bb. 1-24.

Video Clip 7 Caprice Three: bb.1-8, Altered bowings and fingerings

Octave Exercises (Fingered One-Four)

Exercise One: Analysis of tone and semitone spacing

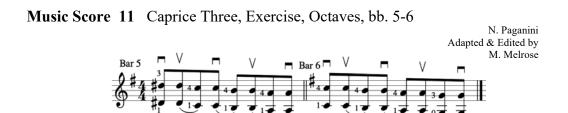
The analysis illustrated in **Music Score 10** (p. 105) comprises of tone and semitone markings (T and S) and directional spacing markings (+). One plus (+) symbol indicates a small expansion of the hand position and two plus symbols (++) illustrate a significant increase of expansion in the hand position. The plus symbols relate to the direction that the left hand is moving. The further the left-hand moves towards the scroll, the wider the fingers have to adjust for each octave.

Music Score 10 Caprice Three, Exercise, Fingering options, bb. 5-6



Exercise Two: Chain Bowing Exercise

The bowing exercise shown in **Music Score 11** illustrates a bowing pattern typically referred to as 'chain bowing'. The 'link' of the chain metaphor represents the shift in the slurred bow. Practising in slurs enables the left-hand to slide through the shift, feeling and measuring the distance.



Fingered Octaves & Supplementary Exercises

In Caprice Three, the choice of fingering is often limited due to the high number of trilled octaves; which must employ a one-three fingering. In bars 5 and 14, a systematic fingering is illustrated in **Music Score 12** (p. 106), which utilises a consecutive one-three fingering pattern (bar 5) and a one-three, two-four fingering pattern (bar 14). This fingering is recommended by Carl Flesch who edited the Peters edition of the Paganini Caprices.¹⁷⁸

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¹⁷⁸ Paganini (Leipzig: Peters, c.a.1910), 9703.

Music Score 12 Caprice Three, Flesch Fingering, bb. 5 and 14



Source: Carl Flesch, *The Art of Violin Playing*, translated and edited by Eric Rosenblith, foreword by Anne-Sophie Mutter, 1924; Reprint (New York: Carl Fischer, 2000), p. 124.

The two-four and one-three fingering pattern which is recommended by Carl Flesch, enables the left-hand to shift less frequently. This fingering option avoids consecutive slides and aims to secure the intonation by reducing the number of shifts.¹⁷⁹

Flesch provides information on octaves in his book titled, *The Art of Violin Playing*, ¹⁸⁰ and presents several circumstances where players may choose to select fingered octaves over 'ordinary octaves'. ¹⁸¹ He claims that, "ordinary octaves have the drawback of constant changes of position," and that "in ascending diatonic scales, fingered octaves are appropriate, in descending direction, ordinary octaves." ¹⁸²

Unfortunately, this fingering pattern is subject to the flexibility and length of the left-hand fingers and is therefore not suitable for every individual. In high positions, Flesch states that "fingered octaves are best avoided." However, it is difficult to determine at what position Flesch defines as a high position. In bar 14 of Caprice three, the left-hand reaches the eighth hand position when played with fingered octave fingering. This fingering pattern contradicts Flesch's earlier statements that fingered octaves are appropriate in ascending diatonic scales, but not appropriate for high positions. Therefore, a consecutive one-three fingering is recommended for bar 14. This fingering prevents the left-hand from straining and only requires the hand to adjust according to the semitone and

¹⁷⁹ Paganini (Leipzig: Peters, c.a.1910), 9703.

¹⁸⁰ Flesch, The Art of Violin Playing, p. 124.

¹⁸¹ ibid. - Flesch's reference to the 'ordinary octave' describes a specific fingering pattern which is used during a consecutive octave passage. The fingering is a consecutive one-four or one-three fingering. A fingered octave refers to the alternating fingering pattern of one-three, two-four during a consecutive octave passage.

¹⁸² ibid.

¹⁸³ ibid.

tone distances. The bow can be slightly pulsed for every octave, to ensure there is no sliding sound between each octave.

The lower violin positions are particularly challenging to play with a one-three fingering pattern, as the stretches can strain the left-hand, which can cause intonation problems. Therefore, Flesch's suggestion is not always appropriate for diatonic scales in a descending direction. A more practical fingering for the octaves which utilise the half, first, second, and third positions is a one-four fingering pattern. This fingering pattern can be used in parts of bars 5, 6, and 7 of Caprice Three.

The following exercises assist with the development of the fingered octave fingering pattern. This fingering pattern is not the same as Carl Flesch's which is previously mentioned on page 105, and is defined as the following:

Octave: The interval of an octave which utilises the fingering zero-

three or one-four depending if an open string is included.

This fingering pattern requires a position shift for each

consecutive octave.

Fingered Octave: The interval of an octave which utilises a consecutive one-

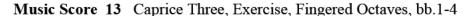
three fingering pattern, or an alternating one-three, two-four

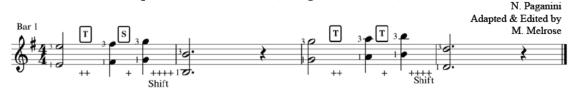
fingering pattern.

Fingered Octave Exercises (Fingered One-Three)

Exercise One: Analysis of tone and semitone spacing

The octave exercise mentioned previously (see *Exercise One: Analysis of tone and semitone spacing* – **Music Score 10** p. 105), can also be applied to fingered octaves. **Music Score 13** (p. 108) illustrates the tones and semitones (pictured as T and S) and the directional spacing (indicated as +) in the fingered octaves from bars 1 to 4. The shifts at the end of bar 1 and 3 require an extension in the left-hand due to the spacing becoming wider as the hand moves towards the scroll.





Exercise Two: Chain Bowing Exercise (Bowed Lower/Upper Notes)

Practising fingered octaves in a chain bowing pattern is a useful exercise that allows the violinist to measure the tone and semitone distances correctly. The slurred bowing pattern allows the violinist to hear the slide of each shift between the octaves; which improves muscle memory and accuracy in consecutive octave passages. **Music Score 14** illustrates this exercise.

Music Score 14 Caprice Three, Exercise, Fingered Octaves, bb. 1-6

N. Paganini Adapted & Edited by M. Melrose





To develop the skill of performing consecutive octaves further, the chain bowing exercise can be varied to include the following:

Exercise: 2.A Fingered Octaves (Bowed Lower Notes)

This exercise aims to develop secure intonation while maintaining the hand frame of the left-hand during the shifts of the consecutive octaves. In this exercise, both the notes of the octave are placed on the fingerboard, but only the lower note of the octave is played with the bow. A chain bowing pattern is used, to ensure the lower note is shifting to the next position correctly.

Exercise: 2.B Fingered Octaves (Bowed Upper Notes)

The left-hand places both notes of the octave on the fingerboard as

previously done in exercise 2.A. However, this time only the upper note of the

octave is played with the bow. Performing this variation allows the violinist to

check the intonation of the upper note and ensure that it is moving correctly.

Fingered Octave Trills & Supplementary Exercises

The fingered octave trills in the sostenuto sections of Caprice Three can be organised

into two categories; tone and semitone trills. The fingered octave semitone trill is

particularly demanding on the left-hand due to the large stretches. Without adequate

preparation, the player may experience pain. So, exercises that encourage flexibility and

independent finger movement must be practised before the fingered octave trills are

attempted.

When comparing the tone and semitone trills, the octave tone trills are more

comfortable to manage as the left-hand notes can be played without tension due to the

finger spacings. Therefore, controlling the intonation in the octave tone trills is easier to

manage.

In comparison, the fingered octave semitone trill is exceptionally demanding on the

left-hand and requires a considerable stretch between the middle and ring fingers. This

stretch creates a significant amount of stress and tension in the left-hand. There are no

alternative fingering options, nor movements, that can relieve the left-hand of such stress;

it must undergo tension in order to execute the semitone trill.

Exercises and stretches can help the fingers remain flexible in preparation for the

Caprice. Presented are several practice strategies that can be varied and applied to all the

fingered octave trills within Caprice Three.

Exercise One: Finger Stretches

109

A simple finger stretch can help prepare the left-hand for the demanding fingered octave trills. Without the instrument, place the index and middle fingers together and the ring and little finger together. Try to stretch the middle and ring fingers as far apart as possible. Using the other hand, gently widen the stretch slowly. This exercise can help the muscles within the palm to become more flexible.

Exercise 1.A: Variation on Finger Stretches

The middle finger and ring finger should make contact, while the index and little finger stretch away from the middle fingers. The other hand can be used to widen the stretch of the fingers gently.

Exercise Two: The Fingered Octave Semitone Trill

Ensuring that the intonation in the fingered octave semitone trills is correct is extremely challenging. Nevertheless, there are some recommendations which can support the intonation in the trill.

The first fingered octave semitone trill is a B-natural-octave which is located in bar 2 of Caprice Three. Using the first and third fingers, place them both on the fingerboard; ensuring that the third finger is deliberately sharp. While holding these two fingers in place, move the second finger from the base of the knuckle and position it so that it is touching the index finger (first finger). The placement of the second finger will cause the angle of the third finger to change, resulting in it becoming flat and the octave now in tune. It is crucial that the first and second fingers make contact during the duration of the trill, as the ring finger (third finger) will try to pull the second finger towards it. The little finger (fourth finger) should rest alongside the ring finger for the trill.

Using a vibrato trill will ensure that the first and third fingers keep the second and fourth fingers in position. Therefore, it is important to ensure that the second and fourth fingers are close to the string so that the trill operates correctly with clear

oscillations. **Video Clip 8** provides a demonstration of the fingered octave semitone trills in slow motion, so the finger placements are viewable.

Video Clip 8 Caprice Three: b. 2, Octave trill in slow motion

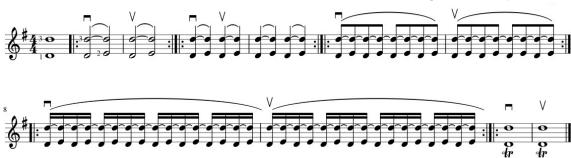
Exercise Three: Fingered Octave Trill Preparation

Music Score 15 illustrates an exercise that helps support the independent finger movements in the fingered octave vibrato trills. The rhythmic exercise supports the development of the trill movements by trilling only one finger at a time while simultaneously playing an octave. The exercise can be adapted so that the upper note of the octave is employed through the rhythmic trills as well. Video Clip 9 provides a demonstration of Music Score 15, which illustrates the lower note of the octave being exercised through the rhythmic trills.

Music Score 15 Paganini, Caprice Three, Exercise, Fingered Octave Trills

N. Paganini

Adapted & Edited by M. Melrose

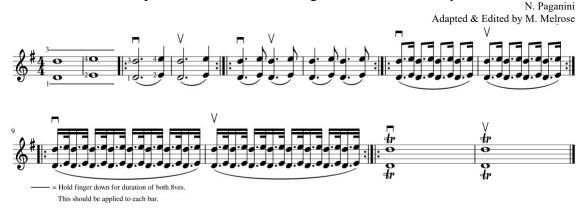


Video Clip 9 Caprice Three: b. 4, Fingered octave trill (exercise 1)

Exercise Four: Rhythmic Patterns in Fingered Octave Trills

Illustrated in **Music Score 16** (p. 112) is an exercise which employs the octave trill in a variety of rhythmic patterns. Practising rhythmic patterns in this context helps develop independent finger movement and finger coordination. **Video Clip 10** (p. 112) provides a demonstrates of **Music Score 16** (p. 112).

Music Score 16 Caprice Three, Exercise, Fingered Octave Trill Rhythms



Video Clip 10 Caprice Three: b. 4, Fingered octave trill (exercise 2)

Exercise Three *Fingered Octave Trill Preparation* and Exercise Four *Rhythmic Patterns in Fingered Octave Trills* (p. 111), can be adapted to suit both the tone and semitone trills. The semitone octave trills will require more practice than the tone trills as they are straining on the left-hand and therefore, more challenging to play. Frequent breaks should be taken to avoid the left-hand developing tendonitis.

Controlling Slow Bows

The long four-bar and two-bar slurs in the *Presto* section of Caprice Three, require the performer to navigate through fast left-hand passagework and difficult string crossings. An example of the score is provided in **Music Score 17** (p. 113). It is essential that the right arm anticipates the string crossings so that the left and right hands are coordinated throughout the section. In cases where string crossings are farthest, the right elbow can help lead the string crossing by moving in the direction of the string ahead of the left fingers.



Source: Adapted from Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 6, bb. 25-60.

Controlling the bow during the presto section requires attention to bow speed, arm levels, and bow pressure. These three components can be adjusted and varied to create various sounds in the presto section.

A consistent bow speed is essential to manage the phrases correctly. Any sudden fast movements in the bow speed will create a sudden swell in the sound, and the violinist is likely to run out of bow. Sudden swells or crescendos usually occur at the beginning of the bow stroke, so it is best to manage these areas of the bow carefully.

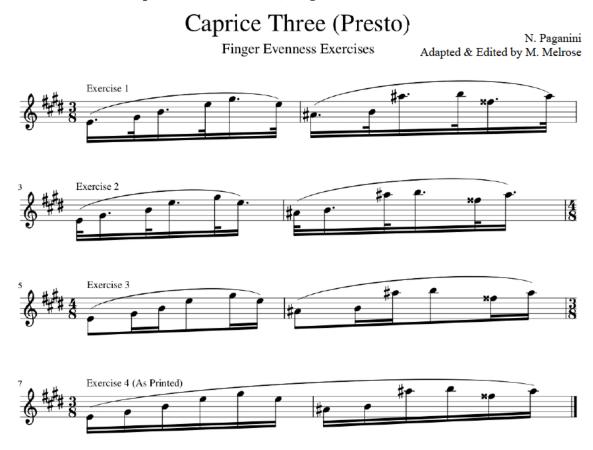
For string crossings that involve multiple crossings over neighbouring strings, it is beneficial to use the right wrist to negotiate the string crossings rather than the right elbow. The height of the right elbow is dependent on the number of notes per string and the severity of the string crossing.

The left-hand is also responsible for ensuring the bow can play long legato phrases. The notes in the left-hand contribute to the bowing because they dictate the string crossings. Therefore, the notes in the presto section must be fast, even and well-

coordinated with the bow. To improve these skills, the left-hand should work through a series of rhythmic exercises.

The exercises are based on dotted rhythms and quaver-semiquaver combinations which serve to consolidate the fast passagework into even notes. **Music Score 18** provides the notation of the exercises.

Music Score 18 Caprice Three, Exercise, Finger Evenness, bb. 1-2



There are four exercises which should be applied to the entire Presto section of Caprice Three. The tempo of the exercises can be slightly slower than the performance tempo, and the bowing can be changed to accommodate six notes in a slur; however, exercise four should contain the performance bowing. **Video Clip 11** provides a demonstration of the Finger-Evenness-Exercises

Video Clip 11 Caprice Three: bb. 25-50 (Presto), Finger evenness exercises

Recommended Repertoire Post Caprice Three

The unison trill found in bar 24 and 112 of Paganini's Caprice Three remains to this day, to be the only example in existence within the entire literature of violin repertoire. Borer writes, "On the other hand, the double trill in unison which appears in bars 24 and 112, is no doubt, the first specimen of its kind in the whole violin literature." 184

While Paganini's Caprice three is the only piece that features the unison trill, many works feature trills on a single note of a double-stop. Even though many composers have used the double-stopped-trill within their pieces, one composer used this feature repeatedly. The works of the Polish violinist and composer Henryk Wieniawski (1835-1880) are some of the most virtuosic compositions written for violin. They feature Paganini-like flamboyant techniques and are usually only ever attempted by skilled violinists. Upon completion of Caprice Three, the violinist should find the following works listed in **Table 13** more accessible.

 Table 13
 Recommended Repertoire Post Caprice Three

Composer	Repertoire	
Brahms, J.	Violin Concerto in D major, Op. 77	
De Falla, M.	Danza del Terror (No. 5), from El Amor Brujo	
Gershwin, G.	Summertime and A Woman is a Sometime Thing, arr. J. Heifetz, from	
	Porgy and Bess for Violin and Piano	
Hindemith, P.	Sonata, Op. 31, No. 1	
Mendelssohn, F.	Violin Concerto in E minor, Op. 64	
Ravel, M.	Sonate Posthume, Violin Sonata No. 1	
Sibelius, J.	Violin Concerto in D minor, Op. 47	
Tchaikovsky, P.	Violin concerto in D major, Op. 35	
Vieuxtemps, H.	Violin Concerto in D minor, No. 4, Op. 31	
Wieniawski, H.	Le Carnaval Russe, Op. 11	
Wieniawski, H.	Légende, Op. 17	
Wieniawski, H.	Polonaise brillante, Op. 21	

115

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¹⁸⁴ Borer, "The Twenty-four Caprices of Niccolo Paganini: their significance for the history of violin playing and the music of the Romantic era," p. 188-189.

CHAPTER FIVE

Caprice Number Five

Caprice Five is an incredibly virtuosic Caprice and is often used as an encore by many celebrity violinists due to its extravagant techniques.¹⁸⁵ The techniques featured within the Caprice are:

- Three and four-octave ascending arpeggios
- Descending scales
- Chromatic scales
- Saltato bowing

In the context of a study, piece, or concerto, these techniques are usually manageable for a competent violinist when used sparingly throughout the work. When attempting Paganini's Caprice Five, these techniques take on a new degree of difficulty even for the professional violinist. The sections in this chapter address why the techniques are so challenging to play and provide practical solutions to overcome them.

Note Discrepancies

Within the seven editions presented in **Table 14** (p. 117), there are several note discrepancies in Caprice Five. Most errors made in the publications are due to the original manuscript containing errors, including incorrect pitches and rhythms, articulations, phrasing, bowing, accidentals, missing notes, rests, and tempo markings.¹⁸⁶

¹⁸⁵ Shlomo Mintz, "Shlomo Mintz plays Paganini Caprice nr 5," recorded 2014, uploaded to Youtube 2014, video, 2:40, https://www.youtube.com/watch?v=Dsiu Z2bDVc.

¹⁸⁶ Stowell, "Paganini: 24 Capricci per il Violino solo, dedicati agli Artisti Op. 1 – Robin Stowell," http://mhm hud.ac.uk/chase/article/paganini-24-capricci-per-il-violino-solo-dedicati-agli-artisti-op-1-robin-stowell/Ivan.

Table 14 Caprice Five: Note Discrepancies

		Ed	itions of th	e Paganii	ni Capric	es		
Bar	Original	Ricordi,	Breitkopf &	Richault	Ricordi,	Peters	IMC	Urtext
Number	Score c.1817	1 st ed.	Härtel	c.1825	2 nd ed.	c.1910	1973	1990
		c.1820	c.1823		c.1836			
1, Second slur descending A minor scale. Last two notes of scale.	C and B are omitted from the descending A minor scale	C and B are omitted from the descending A minor scale	C and B are included in the descending A minor scale	C and B are omitted from the descending A minor scale	C and B are omitted from the descending A minor scale	C and B are included in the descending A minor scale	C and B are included in the descending A minor scale	C and B are included in the descending A minor scale
1, Fourth slur, descending A minor scale, 5th note, E	E natural	E natural	E natural	E natural	E natural	*E natural ¹⁸⁷	E natural	E natural
1, Chromatic scale, 9th slur	Score is unclear.	Additional F natural between 37th and 38th notes.	Continuation of normal chromatic scale. Additional F natural is removed.	Additional F natural between 37th and 38th notes.	Continuati on of normal chromatic scale. Additional F natural is removed.	Continuati on of normal chromatic scale. Additional F natural is removed.	Continuati on of normal chromatic scale. Additional F natural is removed.	Continuati on of normal chromatic scale. Additional F natural is removed.
16, 8th note	G natural	A natural	G natural	A natural	G natural	G natural	G natural	G natural
25, 2nd note	E flat	E sharp	E flat	E flat	E flat	E flat	E flat	E flat
31, 9th note	C natural	B flat	B flat	B flat	B flat	B flat	C natural	C natural
58, 5th slur, 5th note	D natural	D natural	E natural	D natural	D natural	E natural	E natural	E natural

Data from Dr. Wolf-Dieter Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8 and Nicolò Paganini, *24 Capricci Für Violine Solo (Urtext)*, ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

The footnote in the Peters edition which concerns the 5th note of the fourth slur in bar 1, is somewhat unclear. 188 The instruction prescribed implies that the note E should not

¹⁸⁷ Footnote within score states: "The two notes written one above the other indicate that the note E need not be taken at all, as in the quick time the open string sounds an octave higher," in Paganini (Leipzig: C.F. Peters, c.a.1910), 9703, p. 10.

¹⁸⁸ ibid.

be played at all and that the movement of the shift will make the E-string whistle an octave higher. The success of this theory is somewhat questionable as there are several issues concerning the deliberate action of making the E string whistle, including volume, changes in bow and string tension, and string diameter.¹⁸⁹ Controlling these factors is very difficult, so it is better to use a harmonic or a fingered note.

It should also be noted that in bar 58, the slur is omitted from the final descending Amajor scale. This is only presented in Paganini's original score and Ricordi's first edition. ¹⁹⁰ Later publications include the slur over the final descending Amajor scale.

Recommended Exercises, Studies, and Scales Before Learning Caprice Five

Caprice Five has two main technical components that need to be prepared and practised – arpeggios and saltato bowing. **Table 15** (p. 119) consists of scales, exercises and studies that will aid in the preparation of both of these techniques.

¹⁸⁹ Bruce Stough, "E string whistles," Catgut Acoust. Society (CAS Journal) 3, no. 7 (1999), 31. https://stacks.stanford.edu/file/druid:hk964vd2139/CAS hk964vd2139.pdf.

¹⁹⁰ Paganini (Original Score, c.a.1817), p. 11; Paganini (Milan: Ricordi, c.a.1820), 403, p. 13.

 Table 15
 Caprice Five: Recommended Repertoire

Scale Systems	Exercises	Studies
Flesch: A Minor, p. 6-10	Fischer Basics: Springing	Sitt Book IV: 73 Moderato, 74 Andantino,
	Bowings: Sautillé exercises	75 Moderato – preparatory studies for
	104 -106, p. 74	developing good intonation in the 6 th and 7 th
		positions (slur bowing)
Granat: Heifetz Scale	Fischer Practice: Sautillé	Mazas Heft I: 12 Allegro moderato –
Book A major and A	exercises 71-75 p. 97-99 and	suitable for the development of the original
minor, p. 13-17	Ricochet exercises 76-78, p.	bowing found in Paganini's autograph, 14
	99-100	Scherzo molto leggiero – features 5 note
		slurs, sautille and ricochet bow stroke
Galamian Vol 1: 1.	Dounis The Artist's	Mazas Heft II: 45 Allegro non troppo – to
Scales in One Position p.	Technique of Violin Playing	develop the springing bow stroke
1-4 with bowings <i>B4 (5.)</i>	Op. 12, Part Two The Bow:	
and 8. Four-Octave	VI Thrown Staccato-Springing	Kreutzer: 23 Adagio – features cadenza
Arpeggios p. 46 with	Staccato (Tremolo), p. 85-86	writing, suitable for preparation of the
bowings B1, B2, B3, B4,		opening and closing sections of Caprice Five
B6, B12, B16 and		Firiollo: 15 Allegro – study provides two
rhythms R1, R2, R3, R4,		alternate bowing patterns that develop the
R6, R12		springing bow
Fischer Scales: Three-	Ševčík School of Bowing	Wieniawski: 1 Presto (Le Sautillé) –
octave scales, arpeggios	Technique Op. 2 Part 6: No.	contains same bowing pattern as Paganini
and chromatic scales, p.	38 with bowing exercises 679-	Caprice Five, 7 Largo (La Cadenza) –
131	692 (staccato e saltando), p. 2	features arpeggios
	& 21	

The opening and closing sections of Caprice Five contain three and four-octave arpeggios in the A minor and major keys. Fischer's chapter on *Timing the Shift* is particularly useful and discusses problems that result from shifting when the tempo is increased.¹⁹¹ The recommended exercises found in Fischer's chapter should be applied to the scale systems, as the combination of these two resources will help secure the difficult

¹⁹¹ Fischer, "Timing the Shift" in *Practice: 250 step-by-step practice methods for violin by Simon Fischer*, p. 172-182.

shifts in the arpeggio sequences. To develop the arpeggios further in a musical context, the Kreutzer study *No.23 Adagio*, and Dont (Op. 35) *No. 17 Allegro*, should be studied.¹⁹²

Arpeggios and Supplementary Exercises

The opening and closing sections of Caprice Five feature three and four-octave ascending arpeggios. At the peak of each ascending arpeggio, a descending scale connects into the next arpeggio. They are first presented in the key of A minor and then in the parallel major.

As the arpeggios continue to invert, the top note of the arpeggio becomes higher in register. These arpeggios become more challenging to execute because of the tempo and shifts. Each shift needs to be precise so that the notes in the following position are in tune. Therefore, the left-hand must be prepared for groups of notes rather than individual ones, so that they can be played quickly.

Usually, rhythmic exercises are used to develop left-hand finger independence in fast passagework; however, they can also be used to develop and secure intonation. The exercises presented in **Music Score 19** (p. 121) aim to improve the shifts, and intonation, by progressing through a series of rhythmic exercises.

There are four exercises in **Music Score 19** (p. 121). Each exercise should be practised in a slurred bow stroke beginning in a three-note slur, followed by six, and then nine-note slurs. Even though the arpeggios ascend, it is beneficial to practise the arpeggios

¹⁹² Kreutzer, "No. 23 Adagio," in 42 Studies for Violin, p. 40-41; Dont, "No. 17 Allegro," in 24 Etudes and Caprices Op. 35 for Violin, p. 28-29.

¹⁹³ Fischer, "Rhythm Practice" in *The Violin Lesson: A manual for teaching and self-teaching the violin*, p. 114-115.

descending as it helps measure the distance of the shifts and assists with the development of muscle memory. Video Clip 12 provides a demonstration of the four exercises which are illustrated in Music Score 19.

Music Score 19 Caprice Five, Exercise, Rhythms for Arpeggios

Arpeggio Rhythmic Exercises for Intonation Caprice Five N. Paganini Adapted & Edited by M. Melrose Exercise Two Exercise Three Again Adapted & Edited by M. Melrose Exercise Two Adapted & Edited by M. Melrose Exercise Two Adapted & Edited by M. Melrose Exercise Two Adapted & Edited by M. Melrose

Video Clip 12 Caprice Five: b. 1, Arpeggio exercises

Exercise One focuses on tuning the tonic in each octave of the arpeggio. The shifts in the arpeggio occur after every three notes, and they are usually the cause of intonation errors due to poor left-hand preparation. It is best to evaluate the shifts using the following checklist:

- A. Does the left-hand thumb move with the hand as a unit?
- B. How much tension is in the left hand during the shift?

- C. Does the shifting finger release enough during the shift?
- D. What position is the hand moving to?

The second and third exercises focus on tuning the dominant and mediant notes in the arpeggio. Both the dominant and mediant notes fall on string crossings in the second exercise, so the right-hand must time the string changes accurately to sustain continuity throughout the arpeggio. During the exercises, the left fingers must hover above their corresponding notes on the fingerboard so that the arpeggios can be practised at faster tempos.

The final exercise in **Music Score 19** (p. 121) illustrates the arpeggio pattern as it is presented in the score. At this stage of the exercise, the left-hand should operate as a unit, with all shifts and string crossings becoming smoother and more relaxed. Slur patterns should still be practised in this final stage before performance bowings are studied.

Once the arpeggio sections have been practised from a technical perspective, it is important to study them in a musical context. Both the opening and closing sections of Caprice Five are cadenzas which mean they require virtuosity and rhythmic freedom. The musical writing of the pillar-like crotchet notes encourage the phrases to rise and fall, each time rising higher than the last until the peak is reached in the fourth phrase.

The crotchets in the cadenzas require flat bow hair and firm bow contact to create a sound that is full and strong. A vibrato which is wide and consistent will complement this powerful tone and support the phrases.

As the arpeggios become higher in pitch, the bow's point of contact will need to move closer to the bridge. This adjustment is especially important for the crotchet notes at the top of the arpeggios, which require a powerful, yet expressive sound.

The phrases in the cadenza must be played with elasticity and with a sense of rhythmic freedom. Each of the four phrases should accelerate more than the previous; however, it is necessary to carefully consider the tempo of the final phrase so that it is still manageable for the left fingers.

In Paganini's score,¹⁹⁴ the chromatic scale is written in a single slurred bow stroke. However, changing the bow stroke just before the top note of the chromatic scale can change the direction of the phrase. This change of bow direction directs the phrase toward the bottom note of the chromatic scale. The build-up of tension in the phrase finally releases through the final triple-stop; which should be played aggressively with a fast bow stroke. **Video Clip 13** provides a demonstration of the opening cadenza.

Video Clip 13 Caprice Five: b. 1, Arpeggio phrasing

Descending Shifts

The purpose of a shift is to reach a note that is in another position. Shifts require excellent left-hand preparation and control to ensure precise intonation on the arrival note.

In the cadenzas of Caprice Five, there are descending scales that connect from the top of the arpeggios. These descending scales are particularly challenging because they require a high level of accuracy at a fast tempo.

In the case of a descending shift, the left-hand will move towards the scroll. A common bodily reaction to descending shifts is for the left shoulder to raise against the shoulder rest or back of the violin (if a shoulder rest is not being used). Long term repeated movements of the shoulder can cause permanent damage to the nerve and muscular-skeletal systems which usually results in surgery being necessary. 195

Another problem that affects shifting is tension in the left-hand. Often string players grip the neck of the instrument tightly and squeeze with their thumb and index finger. This tension causes the left-hand to move with difficulty to a new position, inhibits the ability to play fast, and also affects intonation.

195 Ranelli Straker and Smith "Playing-related

¹⁹⁴ Paganini (Original Score, c.a.1817), p. 10-11.

A solution to fix these problems is to secure the violin with the weight of the head. An adult human head is approximately 4.5 to 5 kilograms. This weight on one end of the violin creates a see-saw motion and pivots the violin to a horizontal level when weight is applied on the chin rest. Therefore, it is unnecessary to lift the left shoulder towards the violin while shifting. 197

This 'chin-held' system of playing allows the left-hand to move freely along the neck of the violin without the need to cradle or balance the violin in the fingers. Varying shoulder rests, and chinrests should be experimented with so that the players head can apply the most comfortable amount of downward force.

Silent Shifts

A silent shift means that the movement from one hand position to another is inaudible. Shifting without glissando is a system of violin playing that was born from the introduction and invention of the chinrest invented in the early eighteenth century by the German composer Louis Spohr (1784-1859).¹⁹⁸ Ruggiero Ricci, a celebrated master of the violin and more specifically, a master of the Paganini Caprices, explains:

In the time of Paganini and Wieniawski, the thumb remained fixed at what we today regard as approximately third or fourth position. However, there were no such concepts as positions or shifting in the old system. These came about as a result of the chin-rest - the violin changed from being handheld to chin held. One of the best features of this old system was that the practice of keeping your wrist against the ribs forced you to use glissando technique.¹⁹⁹

Controversially, this system replaced a style of playing that used fingering choices as a leading source of expression. Ricci continues:

¹⁹⁶ Danny Yee, "Average Human Head Weight," The Physics Factbook: An encyclopedia of scientific essays, 2006, http://danny.oz.au/anthropology/notes/human-head-weight html.

¹⁹⁷ Fischer, "Holding the Violin and Bow," in *The Violin Lesson: A manual for teaching and self-teaching the violin*, p. 27.

¹⁹⁸ Satoshi Obata, and Hiroshi Kinoshita, "Chin Force in Violin Playing." European Journal of Applied Physiology 112, No. 6 (2012): 2085, https://doi:10.1007/s00421-011-2178-7.

¹⁹⁹ Ricci, Ricci on Glissando: The Shortcut to Violin Technique, p. 1.

The old system of playing had its limitations, but these limitations kept the player from using just any choice of fingerings - including bad ones. One important advantage of the old system is that the left hand was not allowed to jump, an action that involves moving the whole hand. Instead, going up or down the fingerboard was done cautiously by crawling around and measuring from a fixed base (i.e., our most important "finger," the thumb).²⁰⁰

Naturally, the 'new-system-of-playing' (as Ricci describes) created a new system of fingering; a method of hand positions, inaudible shifts and position changes of convenience and comfort rather than expression. There are certainly pros and cons with both systems of playing. But for this study, the examination of the silent-shift is analysed in the context of the 'new-system-of-playing' or chin-rest-era.

In Caprice Five, the descending scales in the opening and closing cadenzas, require quick, silent shifts. **Music Score 20** illustrates the first descending scale in Caprice.

Music Score 20 Caprice Five, Exercise, Descending A Minor Scale



In the cadenza, the first descending shift appears to be located in the scale between the E-natural first finger and the D-natural fourth finger. However, shifting between these fingers requires a finger change partway through the movement, which is almost impossible to play silently and in tune. Therefore, it is best to shift using the first finger and slide down into the third position. Just before the first finger arrives at the A-natural, the fourth, third, and second fingers should be placed on the fingerboard simultaneously. A

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²⁰⁰ Ricci, Ricci on Glissando: The Shortcut to Violin Technique, p. 6-7.

bracket including the words *first finger silent shift* indicates the silent shift movement in **Music Score 20** (p. 125).

The time it takes to shift and arrange the left fingers in their correct semitone-tone positions is taken from the note before the shift. Fischer explains the timing of the shift:

You can easily demonstrate that the time for the shift must be stolen from the note before the shift. Play a slurred arpeggio with a metronome click on each beat... The only way that the note before the shift can sound as if it has been shortened is if you play the arrive-note too early.²⁰¹

The arrival-note must be played precisely in time, to ensure the shortened note before the shift is unnoticeable. The timing of the arrival note becomes even more critical when playing faster. So long as the player concentrates on the rhythm of the notes, the shift will arrive successfully. Shifting earlier allows the player to feel that there is plenty of time to move; ultimately providing sufficient time to accurately land on the arrival note.

Saltato Bowing Variations

Bars 2 to 57 of Caprice Five, features an unusual bowing pattern called 'saltato'. The word saltato is of Italian heritage and means to leap, jump or bounce. Similar to the ricochet bow stroke, the bow is required to hop along the string with multiple bounces in a single bow stroke.

The bowing in Paganini's original score illustrates that three notes move in a down-bow direction, and the fourth note in an up-bow direction. The interpretation and bowing changes that have derived from this bow stroke have differed significantly among many concert violinists. **Table 16** (p. 127) provides examples of various bowing patterns from several editions. Included, are names of violinists who have used these specific bowing patterns in live performances.

126

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²⁰¹ Fischer, "Understanding Timing" in *The Violin Lesson: A manual for teaching and self-teaching the violin*, p. 244.

Table 16 Caprice Five: Variations of Saltato Bowing

Notation	Description	Performed By
Source: Niccolo Paganini, <i>Opus 1 24 Capricci per Violino Solo</i> , (Holograph Manuscript, c.a.1817), p. 11, b.2.	Three notes are played with a ricochet bowing in a down- bow direction. A single up- bow bounce follows after every down-bow.	Ruggiero Ricci, ²⁰² Sumina Studer ²⁰³ Ray Chen ²⁰⁴
Source: Niccolo Paganini, 24 Capricci Per Violino solo Composti e Dedicati Agli Artisti da Nicolo Paganini, 2 nd ed. (Milan: G. Ricordi, 1836), 9036, p. 10, b.2.	Four notes are played ricochet in the same bowing direction. The same pattern is repeated in the opposite direction.	Alexander Markov ²⁰⁵
Source: Niccolo. Paganini, Paganini Capricen Opus 1 Violine, ed. Carl Flesch (Leipzig: C.F. Peters, c.a.1910?), 9703, p. 10, b. 2.	Paganini's original bowing is applied on the first and second beats of the bar. The third and fourth beats contain a four-note ricochet slur.	No known live recordings
Adapted from: Niccolo Paganini, <i>Opus 1 24 Capricci per Violino Solo</i> , (Holograph Manuscript, c.a.1817), p. 11, b. 2.	The agitato section is played with separate bows and a sautillé bow stroke is used.	Antal Zalai ²⁰⁶ Shlomo Mintz ²⁰⁷ Itzhak Perlman ²⁰⁸

Interestingly, many famous violinists performed Caprice Five with separate bow strokes. In Perlman's video, he recalls a recording of himself playing Paganini's Caprice Five in a concert hall and discusses a critical problem of the piece:

²⁰² Ricci, "Complete Paganini 24 Caprices by Ruggiero Ricci," https://www.youtube.com/watch?v=em69H2aE3Wc.

²⁰³ Sumina Studer, "N. Paganini Caprice no.5 | Sumina Studer," *Berlin*, Recorded 2016 and uploaded to Youtube 2017, Video, 2:45, https://www.youtube.com/watch?v=0jXXWBt5URw.

²⁰⁴ Ray Chen, "Ray Chen – Paganini – Caprice No. 5 for solo violin, Op. 1," Produced by Menuhin Competition, *London*. Recorded in 2013 and uploaded to Youtube 2013, Video, 2:25, https://www.youtube.com/watch?v=i-U6DjbMS4I.

²⁰⁵ Alexander Markov, "Paganini Caprice no.5 [HQ]," Licensed to WMG on behalf of Erato Disques, and 2 Music Rights Societies, [Location Unknown], [Recorded date unknown,] Uploaded to Youtube 2009, Video, 3:05, https://www.youtube.com/watch?v=HLgBejh5TLA.

²⁰⁶ Antal Zalai, "PAGANINI: Caprice No. 5 – Antal Zalai, violin – classical music," *Budapest*, Recorded 2015 and uploaded to Youtube 2016, Video, 2:11, https://www.youtube.com/watch?v=tdejexPK8rk.

²⁰⁷ Shlomo Mintz, "Paganini: Caprice No. 5 Shlomo Mintz," Recorded 1981 and uploaded to Youtube 2007, 2:19, https://www.youtube.com/watch?v=amfCqFUMBkY.

²⁰⁸ Itzhak Perlman, "Itzhak Perlman: Antonio Bazzini, Niccolò Paganini (Excerpts)," *London*, Recorded 1978 and uploaded to Youtube 2016, Video, 2:52, https://www.youtube.com/watch?v=HwUGpMT47z0.

I once played Paganini number five, you know [demonstrates with separate bowing] - very fast, and I once heard a tape of it in a very echo-ey hall and it sounded [demonstrates messy playing], and I know I played every note. But see the problem was that I played too may notes. There was a note here and there [points] plus these notes [points to violin].²⁰⁹

Playing the agitato section with separate bow strokes is not only much easier to manage, but also sounds much clearer when performing in a concert hall. While there are many options and alternatives to the original bowing indication, it is simply impossible to sustain the original bowing pattern throughout the Caprice due to the string crossings. In sections of the Caprice, there are difficult string crossings which require the bow to change direction to grip the angle of the string properly. Continuation of the original bowing pattern through these sections encourages the bow to 'double-bounce' on the same string or miss the string entirely. The bars that require bowing changes are illustrated in **Appendix 2** (p. 303). A recommendation of new bowing patterns is also provided.

Saltato Bowing Technique

The bow must begin the saltato stroke just below the middle in the air. With a small horizontal movement, the bow will ricochet in a downwards direction losing momentum as it moves into the upper half of the bow. The flexibility of the right fingers is most important in the ricochet movement as they absorb the bounce of the bow; Auer explains:

For this bowing the bow should be held as lightly as possible, the fingers hardly touching the stick. The bow should be raised a quarter of an inch or more above the strings (depending on the weight and the elasticity of the stick as much as on the skills with which the movement is executed). Let it fall with an elastic movement of the wrist, and you will find that it will rebound as far as you freely allow it to. At first you will find that this gives you a certain number of unequally hurried tones. But after working for a time along the lines laid down you will succeed in guiding this irregular movement and will be able to play two, three, six

²⁰⁹ Transcription by author of: "Itzhak Perlman: Antonio Bazzini, Niccolò Paganini (Excerpts)," *London*, Recorded 1978 and uploaded to Youtube 2016, Video, 2:52, https://www.youtube.com/watch?v=HwUGpMT47z0.

and eight notes in an absolutely rhythmic manner with one bow-stroke, according as you may shorten or lengthen it.²¹⁰

The single up-bow is vital to reset the down-bow ricochet in Caprice Five. The up-bow should be hit with energy so that the hand is in the original position it was when it began the down-bow. The accent on the up-bow provides the right-hand with enough momentum to keep repeating the bowing pattern without tiring or forcing the bow to bounce. **Video Clip 14** provides a demonstration of the saltato bowing technique in slow motion.

Video Clip 14 Caprice Five: bb. 2-3, Saltato bowing in slow motion

Ricci describes the up-bow in Caprice Five as a 'kick,' which he demonstrates in his video, "you got to kick it going that way [demonstrates up-bow]." He goes on to demonstrate the dotted rhythm that the saltato bowing pattern creates (dotted quaver followed by a semiquaver). "You can hear this rhythm within; you can hear three and one." The speed and bowing pattern of the saltato stroke creates a continuous dotted beat. This dotted rhythm is lost if the player chooses to play with separate bows as the bow frequently changes direction. Video Clip 15 demonstrates the saltato bowing at performance tempo.

Video Clip 15 Caprice Five: bb. 2-7, Saltato bowing

In the learning stages of Caprice Five, the saltato bowing pattern illustrated in **Music**Score 21 (p. 130) should be practised to develop the timing and organisation of both the left and right hands. Converting the tune into triplets allows the violinist to emphasise the

211 Transcription from: "Track 24: Bowing in Paganini's Fifth Caprice," in Ruggiero Ricci, "Right Hand Violin Technique:

²¹⁰ Auer, Violin Playing as I Teach It, p. 29.

A Companion to Ricci on Glissando by Ruggiero Ricci," produced by Indiana University Press, *Bloomington and Indianapolis*, 2007, video (DVD), 1:23:51, 978-0-253-21933-6.

up-bow easily and prepare the left-hand for the upcoming groups of notes during the quaver rests. A video demonstration of this exercise is also presented in Video Clip 16.

Music Score 21 Caprice Five, Exercise, Saltato Bowing in Four-Note Bounces

Caprice Five

Saltato Bowing Exercise



Video Clip 16 Caprice Five: bb. 2-5, Saltato in four note bounces

The saltato bowing exercise can be varied to accommodate the saltato bow stroke over several notes. Practising an eight-note saltato bowing exercise is recommended before attempting Paganini's original bowing in the agitato section. **Video Clip 17** provides a demonstration of this exercise.

Video Clip 17 Caprice Five: bb. 2-5, Saltato in eight note bounces

Recommended Repertoire Post Caprice Five

The practice, analysis, and study of the saltato bowing found in Caprice Five also benefits other works that feature a ricochet and saltato bow stroke. 'Le Sautillé No. 1' from *Wieniawski's Ecole Moderne*, ²¹² features a bow stroke that is almost identical to the saltato section of Caprice Five.

Included in the same suite of pieces is 'Les Arpéges No. 9,' which is structured in theme and variation format. Variation 3 (poco più lento) contains cadenza-like arpeggios with simultaneous left-hand pizzicato. There is a remarkable similarity between Wieniawski's Les Arpéges and Paganini's Caprice Five. While there are no simultaneous

²¹² Wieniawski, Ecole Moderne (Etudes-Caprices) Opus 10 for Violin Solo (1854; reprint, USA: IMC, 1973), 645.

arpeggios and left-hand pizzicatos in Paganini's Caprice Five, both works contain a chromatic scale shortly before the conclusion of the section.

Other works which contain techniques such as arpeggiated passages and saltato bowing, can be found in **Table 17**.

Table 17 Recommended Repertoire Post Caprice Five

Composer	Repertoire		
Bazzini, A.	Scherzo Fantastique, (The Dance of the Goblins), Op. 25		
Casella, A.	Rondo, 3 rd movements from Violin Concerto, Op. 48		
Falla, M. De.	Danza del Terror (No. 5) arr. P. Kochanski, from El Amor Brujo		
Kreisler, F.	Tambourin Chinois, for violin and piano, Op. 3		
Mendelssohn, F.	Violin Concerto in E minor, Op. 64		
Nováček, O.	Perpetuum Mobile, for violin and piano		
Kreisler, F.	Sicilienne and Rigaudon in the style of Francoeur		
Sarasate, P.	Zigeunerweisen, Op. 20		
Sarasate, P.	Caprice Basque, for violin and piano, Op. 24		
Saint-Saëns, C.	Violin Concerto in B minor, Op. 61, No. 3		
Sinding, C.	Suite in A minor, Op. 10		

CHAPTER SIX

Caprice Number Six

Chapter Six focuses on the performance problems that can occur when playing Caprice Six. These performance problems consist of both technical and musical issues that, without correction, organisation, and practice, cause sections of Caprice Six to become unplayable at performance tempo.

All of the performance problems derive from the trills, which are a unique feature of the work. Performing the trills measured or unmeasured is a crucial decision that must first be deliberated by the violinist. Playing them in either manner causes additional problems that must be managed and solved. Some of these include issues with clarity, string height, left-hand finger pressure and intonation. These problems are addressed in this chapter and solutions are provided.

Note Discrepancies

Table 18 which is presented on page 133, illustrates five note discrepancies among seven editions of the Paganini Caprices. These are located in bars 9, 13, 14, 38 and 43.

Table 18 Caprice Six: Note Discrepancies

Editions of the Paganini Caprices								
Bar	Original	Ricordi,	Breitkopf	Richault	Ricordi,	Peters	IMC	Urtext
Number	Score	1st ed.	& Härtel	c.1825	2 nd ed.	c.1910	1973	1990
	c.1817	c.1820	c.1823		c.1836			
9, 5 th	D natural	D	D flat	D natural	D natural	D flat	D flat	D flat
quaver		natural						
beat, 1st								
note								
13, 2 nd	F natural	A	F natural	A natural	A natural	F natural	F natural	F natural
note,		natural						
upper part								
14, 3 rd	E flat	E flat	E flat	E flat	E flat	D natural	D natural	E flat
quaver,								
upper part								
38, 6 th	D natural	B flat	D natural	B flat	B flat	D natural	D natural	D natural
quaver,								
lower part								
43, 3 rd	E natural	E flat	E natural	E natural	E flat	E natural	E natural	E natural
quaver								
beat,								
upper part								

Data from Dr. Wolf-Dieter Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8 and Nicolò Paganini, *24 Capricci Für Violine Solo (Urtext)*, ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

The tempo indication of Caprice Six is titled *Lento* in Paganini's score.²¹³ However, both the IMC and Peters editions replace Lento with the word *Adagio*, suggesting a faster tempo than the original version.²¹⁴ The Adagio tempo is more comfortable to play because the left-hand can manage measured trills in the accompaniment line. There is much deliberation over the length and measurement of the trills, and this has caused tempo choices to differ amongst various editions. It is worth noting that the Breitkopf & Härtel edition of the Paganini Caprices contains no tempo indication at all.²¹⁵

²¹³ Paganini (Original Score, c.a.1817).

²¹⁴ Paganini (New York: IMC, 1973), 2292, p. 12; Paganini (Leipzig: C. F. Peters, c.a.1910), 9703, p. 12.

²¹⁵ Paganini (Leipzig: Breitkopf & Härtel, c.a.1823), 3936, p. 12.

Recommended Exercises, Studies and Scales Before Learning Caprice Six

The previous studies which were recommended for Caprice Three and Caprice Six are illustrated in **Table 12** (p. 101). As Caprice Three and Six both contain continuous trill movements, it is recommended that the studies presented in **Table 12** (p. 101) are studied in addition to the works listed in **Table 19**. The studies listed in **Table 19** are not suitable for Caprice Three as they contain alternating double-stops, which are not relevant to the Caprice. A selection of scale systems and exercises are also presented in **Table 19** which aim to support the development of finger dexterity.

 Table 19
 Caprice Six: Recommended Repertoire

Scale Systems	Exercises	Studies
Flesch: G Minor, p.	Fischer Double Stops: Thirds p. 81-	Sitt Book V: 10 Allegro moderato –
26-30	83, Sixths p. 84-86, Octaves p. 87-	double-stop 3rds
	89 in the key of G minor	
Granat: Heifetz Scale	Fischer Basics: Trills exercises	Wohlfahrt: 59 Moderato assai – alternating
Book G minor and G	191-196 p. 134-138, and	double-stops
<i>major</i> , p. 3-7	Intonation: Double Stops exercises	
	263-267, p. 204-206	
Galamian Vol 2: II	Fischer Practice: Trills exercises	Rode: 16 Andante – double-stop 3rds
Various Intervals, p.	95-103 p. 123-128, and Double	
32-38	Stops exercises 174-180, p. 218-	
	226	
Fischer Scales:	Ševčík Op. 1 Part 1: No. 17, 23, 24,	Giorgetti: Studio III Allegro moderato,
Three-octave scales,	25, 26, Part 2: No. 2, 10, 14, 19, 22,	Studio V Largo espressivo – alternating
arpeggios and	28, 31, 37, 40	double-stops (very similar to Paganini
chromatic scales, p.	Dounis Fundamental Trill Studies	Caprice Six)
129	Op. 18, p. 220-229	
	Dounis The Violin Players' Daily	
	Dozen Op. 20, Second exercise, p.	
	236	
	Yanshinov: Exercise 9-11, p. 4-5,	
	and 37, p. 22	

The exercises found in Dounis' *The Violin Players' Daily Dozen'*, ²¹⁶ are a valuable resource for the preparation of Caprice Six. The exercises are similar in context to Caprice Six and feature double-stops and held notes.

Kayser studies *No. 4 Allegro*, and *No. 22 Allegro Assai*,²¹⁷ are both useful studies that aim to develop the movements of individual fingers. These studies can also be used to apply the tips and recommendations found in Fischer's chapter titled, *Widening the hand at the base joints*.²¹⁸

Investing a portion of practise time into Schradieck's 13 Exercises on the First, Second, Third and Fourth Positions will significantly improve left-hand technique, as the exercises focus on developing independent left-hand finger control, agility and strength.²¹⁹ Left-hand techniques such as vibrato and double-stops are often more challenging to play with the fourth finger because of its length and natural inability to move independently from the other fingers. Practising the Schradieck exercises will help to overcome these difficulties.

Dr Claudine Bigelow (Head of viola studies and Graduate Studies at the University School of Music in Provo, Utah), recommends the following process:

...The beauty of Schradieck is that each etude is organized in smaller segments so the assignments can easily be expanded or contracted to meet the student's needs at the moment. The sixteenth note notation can leave the student with the mistaken impression that these need to be done fast. It really is best to start slow. Working up to the faster tempo is good, even fun, keeping the requirement that maintaining the curve of the fingers is the most important goal...²²⁰

Bigelow's recommendations to practise slowly first and ensure the left fingers

²¹⁶ Dounis, "The Violin Players' Daily Dozen: Twelve Fundamental Exercises for the Left Hand and the Bow; Op. 20," in *The Dounis Collection Op. 15*, p. 236.

²¹⁷ Kayser, "No. 4 Allegro and No. 22 Allegro assai," in 36 Etudes/Studies Op. 20 Violine, p. 5 and 28.

²¹⁸ Fischer, "Widening the hand at the base joints" in *Practice: 250 step-by-step practice methods for violin by Simon Fischer*, p. 246-252.

²¹⁹ Schradieck, *The School of Violin-Technics, Book 1: Exercises for Promoting Dexterity in the Various Positions,* (1900, reprint; USA: Schirmer Inc., 1967), HL50255380.

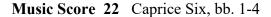
²²⁰ Claudine Bigelow, "Double Trouble," *American String Teacher* 56, no. 4 (2006): 55, https://doi.org/10.1177/000313130605600420.

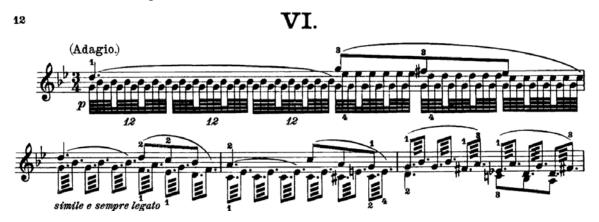
maintain the correct shape angle are beneficial. Students who practise Schradieck's exercises with thought and purpose will see the longevity of their work return with higher standards of technical accuracy and proficiency.

Measured and Unmeasured Trills

Paganini's Caprice Six combines a single melodic line with an accompaniment of continuous alternating trills.

Within the editions of Caprice Six, the continuous alternating trills present as measured notes. **Music Score 22** illustrates an excerpt of Caprice Six.





Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 12, bb. 1-4.

Even though the score of Caprice Six illustrates measured alternating notes, it is rarely performed this way. **Table 20** (p. 137) presents a list of violinists, including Mintz, ²²¹

²²¹ Shlomo Mintz, *Paganini: 24 Capricci Shlomo Mintz*, with Shlomo Mintz (Violin) recorded 1982, Deutsche Grammophon, 415-043-2, 1984, CD.

Kaler,²²² Ricci,²²³ Perlman,²²⁴ Rabin,²²⁵ Fischer,²²⁶ Zalai,²²⁷ Hadelich,²²⁸ and Jacobs,²²⁹ who perform the trills of Caprice Six with various numbers of oscillations in their recordings.

The data that is presented in **Table 20** was recorded by slowing down the audio tracks and counting the number of times the upper note of the trill was played.

 Table 20
 Measuring the Alternating Notes in Caprice Six

Original Score	Bar 1	Bar 2 (first 3 quaver beats)
N. Paganini 1820	Bb Eb D C	Bb
	18 6 6 6	18
Recordings	Bar 1	Bar 2 (first 3 quaver beats)
Shlomo Mintz 1982	Bb Eb D C	Bb
	19 4 4 5	19
Ilya Kaler 1993	Bb Eb D C	Bb
	19 5 5 7	21
Ruggerio Ricci 1947	Bb Eb D C	Bb
	16 4 4 5	16
Itzhak Perlman 1972	Bb Eb D C	Bb
	17 3 4 4	14
Michael Rabin 1950-58	Bb Eb D C	Bb
	11 3 3 3	10
Julia Fischer 2008-09	Bb Eb D C	Bb
	? 6 6 6	18
Antal Zalai 2017	Bb Eb D C	Bb
	20 4 5 7	20
Augustin Hadelich 2018	Bb Eb D C	Bb
	14 3 4 5	16
Lisa Jacobs 2018	Bb Eb D C	Bb
	18 3 4 5	16

²²² Ilya Kaler, *Paganini 24 Caprices, Op. 1*, with Ilya Kaler (Violin) recorded 1993, Naxos, 8.550717, 1994, CD.

²²³ Ruggerio Ricci, First Complete Recording of the 24 Caprices Op. 1, with Ruggiero Ricci (Violin) recorded 1947, CEDAR, IDIS309, 1998, CD.

²²⁴ Itzhak Perlman, *Great Recordings of the Century Paganini 24 Caprices Itzhak Perlman*, with Itzhak Perlman (Violin) recorded 1972, EMI Classics, 67257, 2000, CD.

²²⁵ Michael Rabin, *Paganini: Caprices Op 1*, with. Michael Rabin (Violin) recorded 1950-58, EMI Classics, 67462, 2001, CD.

²²⁶ Julia Fischer, *Julia Fischer Paganini 24 Caprices*, with Julia Fischer (Violin) recorded 2008-09, Decca Music Group Limited, LC00171, 2010, CD.

²²⁷ Antal Zalai, *24 Caprices Paganini*, with Antal Zalai (Violin) recorded 2016, released 2017, https://music.apple.com/us/album/paganini-24-caprices-op-1/1213873358.

²²⁸ Augustin Hadelich, Augustin Hadelich Paganini 24 Caprices, with Augustin Hadelich (Violin) recording date unknown, Rhino Warner Classics, LC02822, 2018, CD.

²²⁹ Lisa Jacobs, *Paganini 24 Caprices Opus 1 for Violin Solo Lisa Jacobs Violin*, wish Lisa Jacobs (Violin) recording date unknown, Cobra Records, COBRA0064, 2018, CD.

In Caprice Six, the first phrase begins at bar 1 and finishes on the third quaver beat of bar 2. In bar 1, Paganini's original score includes 18 B-flats, six E-flats, six D naturals and six C naturals. Bar two consists of 18 B-flats over the duration of three quaver beats.

Interestingly, only Fischer performs Caprice Six with measured trills.²³⁰ However, the first note of the piece (B-flat) is edited so much that it is difficult to distinguish exactly where it starts. Fischer's studio recording starts with a fade-in, which is a technique used by audio recording engineers. A fade-in means that the volume gradually increases from silence,²³¹ which is why the number of times Fischer plays the B-flat is inconclusive.

Fischer's recording of Caprice Six is rhythmically measured and accurate. In spite of her recordings usually remaining true-to-score, she has recorded the Caprice using a mute. To explain and defend her decision to use a mute, Clements records her opinion in a review:

"Fischer states 'the one with the mute clearly sounded better and more logical.' She further remarks, correctly in my view, 'why shouldn't a composer who spent his whole life exhaustively exploring the possibilities of violin playing... not also have used a mute?'..."²³²

One of the difficulties of Caprice Six is ensuring the left-hand fingers maintain firm finger pressure on the violin. When the finger pressure is inconsistent, harmonics usually sound due to the lack of contact between the finger, string and fingerboard.²³³ This problem usually occurs in higher positions due to the space between the string and fingerboard increasing.

Fischer's decision to record Caprice Six with a mute not only creates an ominous atmosphere but also assists with delivering a more technically proficient performance.

Although the mute does not eliminate the sound of a harmonic completely, it does reduce the

²³⁰ Julia Fischer, *Julia Fischer Paganini 24 Caprices*, with Julia Fischer (Violin) recorded 2008-09, Decca Music Group Limited, LC00171, 2010, CD.

²³¹ Lachlan Melrose (recording engineer), email message to author, August 5th, 2019.

²³² Dominy Clements, 2010, Review of Julia Fischer Paganini 24 Caprices, *musicweb international*, October 2010, http://www.musicweb-international.com/classrev/2010/Oct10/paganini 4782274 htm.

²³³ Fischer, "Height of Fingers" in *Practice: 250 step-by-step practice methods for violin by Simon Fischer*, p. 298.

number of frequencies by 1.5-2.5kHz; which makes the accidental harmonic sounds almost inaudible.²³⁴

The decision to play with measured or unmeasured trills (muted or unmuted) depends entirely on the violinist's abilities and their interpretation of the score. However, this chapter will analyse both methods of playing and evaluate the outcomes. **Video Clip 18** demonstrates bars 19-21 from Caprice Six with measured and unmeasured trills.

Video Clip 18 Caprice Six: bb. 19-21, Measured and unmeasured trills

Musically, the demonstration with unmeasured trills in **Video Clip 18** defines the phrase with more intensity when compared to the measured-trill version. The unmeasured trills begin the phrase as a gentle rumbling that slowly develops into a more heightened accompaniment line. As the phrase becomes restless, the trills increase speed and build towards the apex of the phrase in bar 20 before returning to a more relaxed accompaniment line.

Comparatively, the measured trills reflect Paganini's true intentions and possess a more gradual and calmer approach to the apex of the phrase. The sense of beat is continual, monotonous and approached with a mechanical style that expresses greater importance on the accompaniment line rather than the melodic line.

Both forms of trill contain positive qualities and express the phrases differently. However, one cannot dispute that the unmeasured trills provide the melodic line with a sense of freedom and expression that cannot be replicated with measured notes.

²³⁴ Sina Mousavion and Suchetana Sarkar, "Empirical study of violin acoustics and its perception under various mutes," *The Journal of the Acoustical Society of America* 138, no. 3 (2015): 1935, https://doi.org/10.1121/1.4934103.

The Vibrato Trill

Throughout history, various string pedagogues such as Leopold Mozart,²³⁵ Ivan Galamian,²³⁶ Leopold Auer,²³⁷ and Carl Flesch,²³⁸ have studied the technique and application of violin vibrato and trills. The study of these two techniques written by these iconic pedagogues has produced a wealth of knowledge on the topics and created historic instructions on how best to execute the techniques. However, rarely have the vibrato and trill techniques been discussed as a single movement.

There is one exercise written by Fischer titled *Using the vibrato trill as an exercise*, ²³⁹ that trains the player to vibrate the finger without tension. The rocking movement of the hand causes the finger angle to rotate down a semitone. The continuation of the movement replicates the sound of a trill.

Fischer's application of the vibrato-trill does not use the two techniques simultaneously. The sound of the trill is a consequence of the vibrato movement rocking back and forth. The vibrato-trill that relates to Caprice Six is a simultaneous movement of the two techniques; a trill caused by the action of vibrato.

Performing a vibrato-trill requires the use of two fingers which are responsible for each note of the trill. The finger closest to the scroll presses the note down and holds it for the duration of the movement, while the other finger hovers just above the string and its corresponding note. Using a vibrato movement, the upper-note presses on and off the string continuously while the left-hand maintains the hand frame for the duration of the trill. This movement is unlike a regular trill because the finger does not lift from the base of the knuckle. **Video Clip 19** demonstrates several vibrato-trills within bars 2-3 of Caprice Six.

Video Clip 19 Caprice Six: bb. 2-3, Vibrato trills

²³⁵ Mozart, A Treatise on the Fundamental Principals of Violin Playing, p. 186-202 (trills) and 203-204 (tremolo)

²³⁶ Galamian, Principles of Violin Playing and Teaching, p. 30 (trills) and 37-43 (vibrato).

²³⁷ Auer, Violin Playing as I Teach It, p. 22-23 (vibrato) and 50-52 (trills).

²³⁸ Flesch, *The Art of Violin Playing*, p. 20-23 (vibrato) and 29-31 (trills).

²³⁹ Fischer, "Using the vibrato trill as an exercise" from *The Violin Lesson: A manual for teaching and self-teaching the violin*, p. 258.

The vibrato-trills benefit Caprice Six in the following ways:

- To enhance and express the musical phrases with more intensity by varying the speed of the trills
- To improve the intonation and accuracy of finger extensions
- To maintain a relaxed left-hand
- To apply more force to the downward motion of the trilling fingers, especially when trilling further up the fingerboard

In some instances, players may find it advantageous to use a combination of lifted-finger-trills and vibrato-trills. Examples of where a lifted-finger-trill may be preferred can occur in bars 17, 18, 26, 28, 30, 32, 36, 37, 39 and 47. Some of these bars include trills that are in high positions (above the third position), and other bars include trills that contain an open string. Both of these cases require additional force from the trilling fingers to avoid any harmonic sounds. While the vibrato-trill may assist in the downward force of the fingers, the decision to use a lifted-finger-trill or a vibrato-trill is dependent on the instrument setup. The height of the bridge and the flexibility of the strings significantly affects the violinist's ability to trill; especially in higher positions.

The Ideal Instrument Setup for Caprice Six

To consider the set-up of the modern-day violin, it is necessary first to analyse Paganini's instrument. The Guarneri violin known as 'The Paganini Violin' or 'Il Cannone' (The Canon) is considered to be one of Guarneri's masterpieces and was owned by Nicolò Paganini.²⁴⁰

Since 2000, Bruce Carlson has been The Cannons restorer and violin conservator. His assistant curator Alberto Giordano wrote an article that shared some unusual characteristics of the violin:

²⁴⁰ Alberto Giordano, "The Paganini 'Cannon' Violin," Tarisio Fine Instruments and Bows, New York and London, 2000, accessed 7th August 2019, https://tarisio.com/cozio-archive/cozio-carteggio/the-paganini-cannon-violin/.

... it seems that the neck projection of the violin, which is very low at 25.5mm, was never significantly altered. The particular kind of neck-set nailed to the neck root and the uncut belly edge that is set directly on it, hold the neck firmly, avoiding any significant change in the projection; this low neck projection and the neck overhang determine a low angle on the bridge that enables the 'Canon' to work with less pressure than a violin mounted with a modern neck set. This is an intriguing matter if we consider the 'Canon's unconventionally thick plates and ribs, which give it a considerable weight of 434 grams (including fittings).²⁴¹

Giordano's comments provide a fascinating insight into the Canon's ability to project sound with less bow pressure when compared to a modern instrument. This 'low' set-up would have provided Paganini with an advantageous ability to play double-stops quickly with far less bow pressure. An important detail to point out is that Paganini would have used gut strings on the Canon which are far more flexible than steel strings.

To comprehend how the set-up affects the violin's ability to project when it is fitted with gut strings, Antonie Lespets (a violin maker and luthier from France) states, "for gut strings we need to allow more clearance because of the distance the string covers when vibrating. So, bridges were slightly higher and flatter."²⁴²

From the sixteenth to the seventeenth century, the craftsmanship of the Amati, Guarneris and Stradivari violins remained relatively similar.²⁴³ It was not until the eighteenth century that modifications were made to the violin set-up to explore greater possibilities of projection and power.²⁴⁴ Respected London-based violin makers Rattray and Woolston comment:

...new performance requirements of attack and articulation were achieved through string tension; raised and angled necks compensated for the resulting increased downward pressure; the extra clearance provided above the table also

²⁴¹ Giordano, "The Paganini 'Cannon' Violin," Tarisio Fine Instruments and Bows, accessed 7th August 2019, https://tarisio.com/cozio-archive/cozio-carteggio/the-paganini-cannon-violin/.

²⁴² Antonine Lespets, email message to author, September 13th, 2018.

²⁴³ David Rattray and Jonathan Woolston, "Classical Bridges" from *The Becket Collection of Historical Musical Instruments* (London: The Royal Academy of Music, 2010), p. 70

²⁴⁴ Edward Heron-Allen, *Violin-Making: A Historical and Practical Guide* (1885; Reprint, New York: Dover Publications, 2005), p. 159-161.

helped with position shifting. In addition, tapered fingerboard became parallel, bass bars became longer and stronger, and bridges were more openly cut and flexible.²⁴⁵

The ideal violin set-up to perform Caprice Six with greater ease would consist of a relatively flat bridge and a low string height. This 'perfect' scenario would solve any contact problems between the finger, string, and fingerboard in higher positions and would easily allow the bow to move across two strings. It cannot be proven if The Cannon had this exact set-up, but Giordano's description seams it was likely.

Figure 5 provides a picture of the Canon with a "tiny bridge,"²⁴⁶ as it is referred to in the description which was written by Alberto Giordano.

The tiny bridge possibly used by Paganini, shown on the belly of the 'Cannon' and (right) the neck root. Photos: Bruce Carlson, Photographic Archive, City of Genoa

Figure 5 Paganini's Violin (Il Canon)

Source: Description by Alberto Giordano, and photo by Bruce Carlson, from the Photographic Archive, City of Genoa, taken from the website: "The Paganini 'Cannon' Violin," Tarisio Fine Instruments and Bows, New York and London, 2000, accessed 7th August 2019, https://tarisio.com/cozio-archive/cozio-carteggio/the-paganini-cannon-violin/.

Learning Stages

There are a series of stages that the violinist should work through in order to perform Caprice Six successfully. These stages isolate the techniques, exercise them and then gradually

²⁴⁵ Rattray and Woolston, "Classical Bridges" from *The Becket Collection of Historical Musical Instruments* p. 70

²⁴⁶ Giordano, "The Paganini 'Cannon' Violin," Tarisio Fine Instruments and Bows, accessed 7th August 2019, https://tarisio.com/cozio-archive/cozio-carteggio/the-paganini-cannon-violin/.

incorporate them with the other technical problems; all while maintaining the musical phrases and continuing to explore the expressive qualities within the Caprice. Four stages require the

analysis and practise from the individual; they are as follows:

Step One: The Melodic Line

In this preliminary stage, the objective is to perform an expressive melodic

line using a combination of bow pressure, and speed. The tilt of the bow and

placement also require consideration as this affects the timbre of the sound. The

expression of the phrases must be carried out by the bow and not the left-hand; so,

the use of vibrato in this stage is not permitted as it is not possible for the left-hand

fingers to independently vibrate the notes in the melodic line and trill

simultaneously. A demonstration of this step is provided in Video Clip 20.

Video Clip 20 Caprice Six: bb. 1-8, Learning the melodic line

Step Two: The Melodic Line with Double-Stops

Step two introduces the double-stops with the melodic line and should be

used to practise tuning the double-stops. The expression and intentions of the

musical phrases need to be communicated and displayed in this step despite the

left-hand now playing double-stops. Video Clip 21 demonstrates this step.

Video Clip 21 Caprice Six: bb. 1-8, Melodic line with double-stops

Step Three: Introduction of the Trills

The trills are introduced in step three and require independent practice

without the melodic line and double-stops. Although the violinist may choose to

use vibrato-trills within the Caprice, it is still useful for the player to practise

measured finger-lifted trills with a metronome. The trills should be practised

slowly at first (approximately Γ =43 to begin) and gradually increase in tempo.

144

This type of practice benefits the left-hand's dexterity, flexibility, suppleness,

muscle-memory and control. A video demonstration is provided in Video Clip 22.

Video Clip 22 Caprice Six: bb. 1-8, Trills

Step Four: Consolidating the learning stages

Step four is the final step and involves putting the melodic line, double-stops

and trills together. The combination of playing these techniques collectively is

difficult, and so should be done carefully and slowly in the initial stages of this

step. As the violinist becomes more familiar with performing the simultaneous

techniques associated with this Caprice, the phrases studied in step one should

gradually become more evident. The ratio of bow weight should not be evenly

distributed across two strings but should be slightly more substantial on the string

with the melodic line (bow weight ratio of 70/30). This bow-weight distribution

can be achieved by adjusting the height of the right arm so that the bow hair is

predominantly on the string that contains the melodic line. To simultaneously play

the string that contains the trills, the bow hair should touch it lightly. This will help

bring the sound of the melodic line out so that there are defined structures and

correctly balanced melodic and accompaniment lines. A demonstration of the

stage is provided in Video Clip 23.

Video Clip 23 Caprice Six: bb. 1-8, Consolidating the learning stages

Recommended Repertoire Post Caprice Six

Provided in Table 21 (p. 146) is a list of works that feature double-stops and trills.

Although the works listed in the table were written after the Paganini Caprices, the double-

stops and trills in Caprice Six also benefit works from the Baroque period; including

145

movements from Bach's Solo Partitas for Violin.²⁴⁷ The chapter titled *The Learning Stages* (p. 143) can be adapted and applied to the movements of the Bach Partitas.

 Table 21
 Recommended Repertoire Post Caprice Six

Composer	Repertoire			
Bazzini, A.	Scherzo Fantastique, Op. 25			
Bloch, N.	II Nigun (Improvisation), from Three Pictures of Chassidic Life for			
	violin and piano			
Brahms, J.	Hungarian Dance, No. 1			
Hindemith, P.	Sehr langsame Viertel, 2 nd movement from Sonata, Op. 31, No. 1			
Kreisler, F.	Recitativo and Scherzo-Caprice, Op. 6			
Mendelssohn, F.	Andante 2 nd movement from Violin Concerto in E minor, Op. 64			
Sauret, E.	Suite for Violin Solo, Op. 68			
Szymanowski, K.	Mythes Trois Poèms, Op. 30			
Ysaye, E.	Six Sonates for Violin Solo, Op. 27			
Wieniawski, H.	Souvenir de Moscow, Op. 6			

²⁴⁷ J.S. Bach, *Three Sonatas and three Partitas for Solo Violin BWV 1001-1006*, edited by G. Haußwald (Kassel: Bärenreiter-Verlag, 2001), BA5116.

CHAPTER SEVEN

Caprice Number Nine

Chapter Seven of the project presents historical, musical and technical knowledge on Paganini's Caprice Nine. The section provides information on the Caprice's compositional structure and its unusual mimesis. An analysis of the various fingering choices in several editions is presented and practical recommendations on the fingerings are provided. A range of supplementary exercises are also illustrated to combat the challenging techniques found in the Caprice.

Note Discrepancies

There are no known note discrepancies among the selected editions of Caprice Nine.²⁴⁸ There are, however, some bowing discrepancies which concern the ricochet bowing pattern in bars 52-94. Paganini's original score,²⁴⁹ the first and second Ricordi editions,²⁵⁰ and the Breitkopf and Härtel edition,²⁵¹ illustrate a five-note-ricochet pattern. **Music Score 23** provides an example of this bowing pattern.

Music Score 23 Caprice Nine, Example of Original Ricochet Bowing Pattern



²⁴⁸ Seiffert, Henle Library, iPad vers 1.6.0.G, Apple App Store, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8; Nicolò Paganini, 24 Capricci Für Violine Solo (Urtext), ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

²⁴⁹ Paganini (Original Score, c.a.1817), p. 18-19.

²⁵⁰ Paganini, (Milan: G. Ricordi, c.a.1820), 403, p. 18-19; Paganini, (Milan: G. Ricordi, c.a.1836), 9036, p. 18-19.

²⁵¹ Paganini (Leipzig: Breitkopf & Härtel, c.a.1823), 3936, p. 17-18.

In comparison, the Peters,²⁵² and IMC editions,²⁵³ contain a four-note-ricochet bowing pattern which is followed by an up-bow on the last note. By changing the bowing pattern and ensuring each ricochet begins on a down-bow, the bowing forms a repetitive pattern which is predictable and therefore more manageable.

Another suggestion can be found in the final theme of Caprice Nine (bb. 94-111) in the Peters edition.²⁵⁴ Flesch recommends performing the last section in double harmonics.

Music Score 24 illustrates this notation.

Music Score 24 Caprice Nine, bb. 94-111



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 19, bb. 94-111.

Borer claims, "several editors (including Von Reuter, Wronski, Flesch, Gulli and Berkley) suggest playing this last section in harmonics. It is very likely that this performing tradition is based on personal accounts of musicians who, like Eugène Sauzay (the teacher of

²⁵² Paganini (Leipzig: C.F. Peters, c.a.1910), 9703, p. 18-19.

²⁵³ Paganini (New York: International Music Company, 1973), 2292, p. 18-19.

²⁵⁴ Paganini (Leipzig: C.F. Peters, c.a.1910), 9703, p. 19.

Carl Flesch at the Paris Conservatoire), heard Paganini play in concert."²⁵⁵ Although there is evidence of Paganini employing various techniques like harmonics, left-hand pizzicato, and ricochet in his concerts,²⁵⁶ there is no documentation that suggests that Paganini preferred the ending of Caprice Nine to be played in harmonics.

Recommended Exercises, Studies and Scales Before Learning Caprice Nine

Double-stops feature as the Primary Technique within Caprice Nine and occur regularly throughout the Caprice. Other secondary techniques include ricochet bowing and fast left-hand shifts. The recommended scale systems and exercises presented in **Table 22** (p. 150) focus on scales in the tonic key of the Caprice and exercises which prepare the hand for double-stops and shifts. The recommended studies which are listed in the table contain multiple techniques, so it is beneficial to practise these after the scale systems and exercises.

²⁵⁵ Borer, "The Twenty-four Caprices of Niccolo Paganini: their significance for the history of violin playing and the music of the Romantic era," p. 200.

²⁵⁶ Kawabata, *Paganini The 'Demonic' Virtuoso*, p. 12.

Table 22 Caprice Nine: Recommended Repertoire

Scale Systems	Exercises	Studies			
Flesch: E major, p.	Fischer Double Stops:	Sitt Book V: 11 Moderato – double-stops, string			
81-85	<i>Thirds</i> p. 235-237, <i>Sixths</i> p.	crossings with spiccato bowing			
	238-240 in the key of E	Herrmann: 6 Grazioso – double-stop 3rds, 4ths and			
	major	6ths			
Granat: Heifetz	Fischer Basics: Scales and	Mazas Heft I: 25 Allegro moderato – double-stop			
Scale Book E major	Arpeggios exercises 123-124	thirds with spiccato bowing			
<i>and E minor</i> , p. 48-52	p. 143-144, and <i>Timing the Shift</i> exercises <i>140-145</i> p. 172-182, and <i>Lightening the Shift</i> exercises <i>146-148</i> p. 182-183	Kayser: 20 Allegretto and 27 Moderato – double- stops with contrasting dynamic markings and string crossings Kreutzer: 33 Andante and 26 Allegretto – double- stops in various intervals			
Galamian Vol 2: I	Fischer Practice: Double	Mazas III: 60 Allegretto and 66 Vivace – double-			
Thirds, p. 2-6	Stops exercises 174-180, p. 218-225	stops, spiccato, and string crossings			
Fischer Scales:	Dounis The Higher	Dancla Op. 73: 3 Allegro moderato – staccato and			
Three-octave	Development of Thirds and	string crossings14 Scherzo molto leggiero –			
scales, arpeggios	Fingered Octaves Op. 30,	combination of ricochet and spiccato			
and chromatic	Second Part The Bow:	De Bériot: 2 Allegretto moderato – triple-stops, 8			
scales, p. 138	Thirds, p. 292-296	Moderato – spiccato and double-stops, 14			
		Allegretto Moderato – double-stops and string crossings			
	Yanshinov: Exercise 33, p.	Giorgetti: Studio I Moderato, Studio II Allegro			
	20	moderato - double-stops, string crossings and			
		difficult position changes			

The recommended chapters in the *Dounis Collection* are worth investigating as many of the exercises explore different shifting combinations in double-stopped thirds which aim to support intonation and shifting.²⁵⁷ Dounis claims that his exercises will provide the player with control over the fingerboard when shifting:

²⁵⁷ Dounis, "The Higher Development of Thirds and Fingered Octaves: Twenty-four Advanced Formulas for the Violin, Op. 30," in *The Dounis Collection*, p. 292-296.

For the development of shifting in double stops, the following exercises will give the player an absolute control over the entire fingerboard, no matter how intricate the double stops may be.²⁵⁸

There are numerous studies which contain double-stops. The studies listed in **Table 22** (p. 150) progress in order of difficulty, so selecting a range of studies from the list is beneficial to practise double-stops in a musical context. The Mazas,²⁵⁹ Dancla,²⁶⁰ and De Bériot studies,²⁶¹ are particularly beneficial to study before commencing Caprice Nine as the studies contain spiccato, ricochet, and string crossings in addition to double-stops.

The Horn Fifth

Caprice Nine is in the tonic key of E major and consists of 111 bars. The time signature is simple duple (2/4), and the tempo marking is *Allegretto*. The structure of the Caprice is in Rondo form (A, B, A, C, A), with each section commencing at the following bars:

- Section A bb.1-16
- Section B bb.17-36
- Section A bb. 36-52
- Section C bb. 52-94
- Section A bb. 94-111

²⁵⁸ Dounis, "IV: The technique of double stop playing" from *The Artist's Technique of Violin Playing Op. 12*, in *The Dounis Collection Op. 12*, p. 41.

²⁵⁹ Mazas, *Mazas Etüdes Opus 36, Heft I*, p. 35.

²⁶⁰ Dancla, 20 Etudes Brillantes, Op. 73 for Violin Solo, p. 6 and 28-29.

²⁶¹ De Bériot, *The First Thirty Concert Studies for the Violin, Op. 123*, p. 6-7, 15, and 26-27.

Borer points out that, "the three A sections (or ritornello) consist of a double period of sixteen bars (except for a one bar extension on the last repetition) and are entirely scored in thirds, fifths and sixths."²⁶²

This particular pattern of double-stops that continuously reappears in section A creates a progression which is called the 'horn fifth'. This type of harmonic progression was typically used by the natural horn; which is a type of horn that does not have a valve.

The horn fifth is an acceptable form of writing which would otherwise be considered contrapuntally weak.²⁶³ **Figure 6** illustrates a horn-fifth progression that was typical at the time of the natural horn. The fifth is in the middle of the progression.

Figure 6 Horn Fifth Progression

	Horn Fifth Typical Progression				
Horn 1	Mediant	Supertonic	Tonic		
Horn 2	Tonic	Dominant	Mediant		

Other examples of horn fifths can be found in Mozart's duet for violin and viola K. 423 (see **Music Score 25**, p. 153),²⁶⁴ and Scarlatti's Piano Sonata in C major, (see **Music Score 26**, p. 153).²⁶⁵

²⁶² Borer, "The Twenty-four Caprices of Niccolo Paganini: their significance for the history of violin playing and the music of the Romantic era," p. 198.

²⁶³ Grove Music Online [author unknown], *Horn Fifths (Ger. Hornquinten)*, Grove Music Online: published online 2001, published in print 2001, https://doi.org/10.1093/gmo/9781561592630.article.13363.

Wolfgang Amadeus Mozart, Zwei Duos füe Violine und Viola, ed. by Werner Icking (1783; Reprint, Siegburg: Werner Icking, 1996), D-53721, p. 9.

²⁶⁵ Domenico Scarlatti, *Piano Sonata in C Major, K. 159*, ed. Alessandro Longo (c.a.1752; Reprint, Leipzig: D. Rahter, 1897), 856, p. 1.

Music Score 25 Mozart duet for Violin and Viola, K.423, bb. 33-36.



Source: "Rondo-Allegro" from Wolfgang Amadeus Mozart, *Zwei Duos füe Violine und Viola*, ed. by Werner Icking (1783; Reprint, Siegburg: Werner Icking, 1996), D-53721, p. 9, bb.33-36.

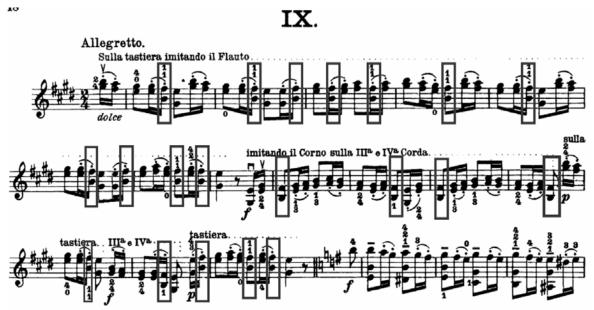
Music Score 26 Scarlatti Piano Sonata in C Major, K. 159, bb. 1-2



Source: "Vivacissimo" from Domenico Scarlatti, *Piano Sonata in C Major, K. 159*, ed. Alessandro Longo (c.a.1752; Reprint, Leipzig: D. Rahter, 1897), 856, p. 1, bb.1-2.

Music Score 27 (p. 154) illustrates all the horn-fifth progressions within section A (bb.1-16) of Caprice Nine. The score also illustrates Paganini's instructions, *dolce, sulla tastiera imitando il Flauto* (sweetly, imitating a flute), and *forte, imitando il Corno sulla D and G Corda* (loudly, imitating a horn on the D and G strings). The interplay between the two voices possesses a noble quality, which is a consequence of the horn fifths — these harmonic sequences, in combination with the tonic to dominant interactions, beautifully demonstrates Paganini's compositional strengths.

Music Score 27 Caprice Nine, horn fifths locations, bb. 1-19



Source: Adapted from Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 18, bb. 1-19.

The Hunting Horn and its Purpose in the Hunt

To understand the story of Caprice Nine, we first have to explore the hunting horn as an instrument, its role it played in the hunt and its purpose.

There is evidence that the tradition of hunting or coursing existed as early as the fifth century. The term *bucina* has been found in passages from the Hebrew Bible, which often refers to a type of hunting horn.²⁶⁶

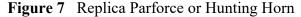
Since the fifth century, the role and purpose of the horn remained the same up until the 17th century. According to Monelle, "the medieval hunting horn, was a natural oxhorn called *cor de chasse* or *Hifthorn* (because it hung at the owner's hip). A very luxurious version, the *oliphant*, was made from ivory."²⁶⁷ These instruments were 20 to 40cm in

²⁶⁶ Eva Heater, "Early Hunting Horn Calls and Their Transmissions: Some New Discoveries," *Historic Brass Society Journal* no. 7, (1995): p. 125, https://www.historicbrass.org/edocman/hbj-1995/HBSJ 1995 JL01 007 Heater.pdf.

²⁶⁷ Raymond Monelle, *The Musical Topic Hunt, Military and Pastoral: Music Meaning and Interpretation* (Bloomington: Indiana University Press, 2006), p. 35.

length and could play only one or two notes; therefore, the sounds were more rhythmic and played in a style similar to Morse code.²⁶⁸

During the 17th century, the instrument continued to change shape. In France, the instrument developed into a large circular instrument that was used to hang over the rider's shoulder and body (see **figure 7**).²⁶⁹





Source: Picture taken by Emma Gregan, August 28th, 2019. Sent to author via email correspondence on September 1st, 2019.

In Britain, the hunting horn remained relatively short and straight, but in Germany, the instrument required more material for its coils, which began to resemble a posthorn.²⁷⁰

The ancient practice of hunting during the 17th to 19th centuries is well documented throughout Europe. Hunting was considered not just a necessary skill of survival but was also a well-respected tradition which was passed down through generations by nobles from aristocratic society.²⁷¹

²⁶⁸ Jennifer Hemken, "The Mystery of the Althorn (alto Horn) Sonata (1943) by Paul Hindemith," (Doctor of Musical Arts, University of North Texas, 2015), p. 16.

²⁶⁹ Professor Drew Stephen, "The Natural Horn A Brief History of the Valveless Horn," Uploaded to Youtube 2016, Video, 22:50, https://www.youtube.com/watch?v=lWxVtp6heUM.

²⁷⁰ Jeremy Montagu, "Hunting Horn," The Oxford Companion to Music (Oxford University Press: online version 2011), accessed 16th August 2019, https://www-oxfordreference-com.proxy.library.adelaide.edu.au/view/10.1093/acref/9780199579037.001.0001/acref-9780199579037-e-3357.

²⁷¹ Hemken, "The Mystery of the Althorn (alto Horn) Sonata (1943) by Paul Hindemith," p. 123.

The hunt itself took place in the royal forest; a large portion of land that was ruled by the kingdom and not by common law.²⁷² The hunt involved a party of men on horseback, sometimes aided by the individual's loyal hounds and hawks. The prize of a successful pursuit was often a deer, bear or boar.²⁷³ During the hunt, communicating through visually poor conditions was critical to the success of the pursuit, and so hunting horns were used to communicate with members of the hunting party.²⁷⁴

The communication between riders and their horns consisted of rhythmic blows; long and short sounds — the sequences of these sounds communicated highly complex information. In a journal written by Putter,²⁷⁵ the author of *The Master of Game* (Edward of York) provided a detailed scripture about the sequence of notes (or 'motes' as they are called) that signal the success or failure of a hunt (see **Figure 8**).

Figure 8 The Master of Game excerpt (Edward of York)

And if þe kyng wil hunt no more þan shuld þe mayster of his game if þe kyng wil not blow blow a moot and strake wiþ a mote in the myddel and þe sergeaunt or who so bloweb next hym ne non man ellis shuld blow þe fyrst moot but⁷¹ þe myddel and so euery man as oft as hym lust to strake if þei haue had what þei hunted for, and ellys þe myddil moot shuld not be blowe saue of hym þat blowethe next þe mayster and *þerbi may a man wit as þei here men strake homward wher þey han wel-spedde or none.* (101; italics mine)

And if the king will hunt no longer, then the master of game, if the king will not blow, should blow a mote and blast with a mote in the middle, and so should the sergeant or whoever blows after him, but no other man should blow the first mote but only the middle one, and so every man should blow as often as he likes if they have captured what they hunted after, and if not the middle mote should only be blown by the man who blows after the master; and in this way people will know whether they have fared well or not.

Source: Putter Ad, "The Ways and Words of the Hunt: Notes on" Sir Gawain and the Green Knight, the Master of Game, Sir Tristrem, Pearl," and "Saint Erkenwald", *The Chaucer Review* 40, no. 4 (2006): p. 371, https://doi:10.1353/cr.2006.0008.

²⁷² Charles Young, *The Royal Forests of Medieval England* (Leicester: University Press, 1979), p. 186.

²⁷³ Yannick Bureau, "History of the French Hunting Horn," Pèrinet Paris 1829 Fabrication and Restoration de Trompe de Chasse, 2014, accessed 12th Januar, 2020, https://perinet fr/perinet/history-of-the-french-hunting-horn?lang=en.

²⁷⁴ Hemken, "The Mystery of the Althorn (alto Horn) Sonata (1943) by Paul Hindemith," p. 123.

Ad Putter, "The Ways and Words of the Hunt: Notes on Sir Gawain and the Green Knight, the Master of Game, Sir Tristrem, Pearl," and "Saint Erkenwald," *The Chaucer Review* 40, no. 4 (2006): 371, https://doi:10.1353/cr.2006.0008.

These 'real-world' hunting horn calls relate to Caprice Nine by appearing as horns and flutes in Paganini's manuscript (*imitando il Flauto* and *imitando il Corno*). They are elaborate calls from riders of the hunting party communicating their calculated moves within the acres of the forest.

'The Hunt' - The Story of Caprice Nine

Within the first sixteen bars of Caprice Nine, the score lists several instructions; *sulla tastiera imitando il Flauto, imitando il Corno sulla D e G corda, tastiera, dolce, piano,* and *forte*. These instructions that Paganini wrote create such significant and unique sounds that they can resemble characters in a mimesis.

The terms; *sulla tastiera imitando il Flauto* (over the fingerboard imitating a flute), and *imitando il Corno sulla D e G corda* (imitating a horn, on the D and G strings), represent men of the Royal Empire blowing horns during their hunts in the royal forests. Paganini's use of *piano* and *forte's* in combination with the flute and horn imitations, create virtual distance in an imaginary forest of nobles echoing each other's hunting calls on mounts. Peter Sheppard Skærved describes his interpretation of Paganini's writing:

Caprice No 9 seems to take place in a forest, though of course this is not stated. This piece is the only place in Paganini's cycle, where the composer demands *mimesis*. He offers tools to achieve this. The 'imitation of flutes' is achieved by played the upper two strings *piano*, *sul tasto* (on the fingerboard). The sound of horns is evoked by playing *forte* high on the two low strings. A division is immediately established between the two halves of the violin, which I imagine would not be far from the effect, which Paganini achieved in his two-stringed *Scena Amorosa*, which, if it was based on the story of Venus and Adonis, as Paganini suggested, also takes place in a wood. But in this *Capriccio* the imitation is working on two layers for we players, this is easy to overlook.²⁷⁶

Flutes, or medieval instruments that were similar in shape, were not used in hunts. Paganini's use of the term flute *(imitando il Flauto)*, is peculiar and seems to be misplaced in the hunting scenario. One suggestion by Skaevard is that "the Capriccio is not so much a

157

²⁷⁶ Peter Sheppard Skærved, "Paganini Caprice No 9," December 22nd, 2009, last updated 2019 and accessed October 3rd, 2019, http://www.peter-sheppard-Skærved.com/2009/12/paganini-caprice-no-9/.

representation of a hunt, but a representation of a group of instruments imitating a hunt, an orchestra, in point of fact." Skaevard also points out that "Paganini destroyed the possibility of hearing the *piano* as the imitation of echoes; after all, these gestures <u>begin</u> the piece: and are answered *forte*...The 'horns' it seems, gradually cotton on and 'echo' the flutes, albeit, transposed down an octave."²⁷⁷

Putting aside the debate of which instrument answers whom, there is, no doubt, a sense of space between the two voices, creating a cleverly imaginative dialogue between the two horsemen.

Bars 53-94 comprises of a technically demanding ricochet section. Although there are no notated instructions by Paganini, the segment seems to represent the pursuit of the hunting party in the forest. The combination of the slurred ricochet bows with sudden high and low pitch changes create immediate urges forward, which could illustrate the mounts jumping over forest debris.

The final recapitulation of the hunt returns in bars 95-111. However, there is no outcome in the score that tells if the pursuit was successful or not. The Caprice ends with the sound of a distant flute (tastiera, il flauto), signalling the final call.

Fingering Patterns and Double-Stops

The main challenge of playing double-stops is to perform them in tune. They are also challenging to manage as bow pressure, and speed can affect pitch. In a chapter on double-stops in Spohr's Grand Violin School, he says, "that the greatest difficulty in these various stoppings is *perfect intonation*." He goes on to include that "the perfect intonation in these stoppings is not only difficult, requiring both ear and finger to produce several tones at once, but, because of the position changes so frequently."²⁷⁸

²⁷⁷ Peter Sheppard Skærved, "Paganini Caprice No 9," December 22nd, 2009, last updated 2019 and accessed October 3rd, 2019, http://www.peter-sheppard-Skærved.com/2009/12/paganini-caprice-no-9/.

²⁷⁸ Spohr, Louis Spohr's Grand Violin School, p. 124.

Apart from the intonation difficulties, the technique of shifting in consecutive double-stop passages is equally as challenging.²⁷⁹ Managing the thirds, fifths and sixths in Caprice Nine requires careful consideration to the fingering patterns and shifting locations.

Among the numerous publications of the Paganini Caprices, there are many combinations of fingering patterns that are offered in Caprice Nine. The fingering choices often illustrate the editor's pedigree and stylistic influences that were typical of the period.

Music Score 28 (p. 160) illustrates the first sixteen bars of the Richault edition of Caprice Nine. 280 There are some discrepancies regarding the publication date of the Richault edition as well as who the annotator is. Borer lists the year of publication as "1826(?)" with the editor listed as "H. Auteur", 281 while Stowell lists the first edition of the Richault publication as "c.1825?" and the editor as Henry Bonaventure. 282 Further documentation is provided by Uhde who states the Richault publication date as "1824" with annotations added, "by the French violinist Bonaventure Henry (dates unknown)". 283 Although there is no documentation of Bonaventure playing the violin, there are some short biographical details published by The British Museum that state that a person by the name of Bonaventure also went by the names Henry Monnier, and Henry Bonaventure Monnier. 284 Monnier (1799-1877) was a French printmaker, painter and draughtsman and was well known for his published caricature drawings. Given Monnier's interest in the arts, he was likely skilled in music but decided to make a profession out of his artwork.

²⁷⁹ Flesch, *The Art of Violin Playing*, p. 12.

²⁸⁰ Paganini, (Paris: Richault, c.a. 1824), 1028.

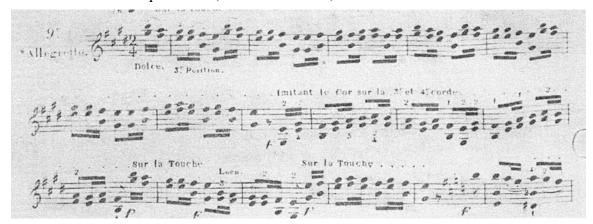
²⁸¹ Borer, "The Twenty-four Caprices of Niccolo Paganini: their significance for the history of violin playing and the music of the Romantic era," p. 268.

²⁸² Stowell, "Paganini: 24 Capricci per il Violino solo, dedicati agli Artisti Op. 1 – Robin Stowell," site updated 2011 and accessed 1st Oct, 2019, http://mhm hud.ac.uk/chase/article/paganini-24-capricci-per-il-violino-solo-dedicati-agli-artisti-op-1-robin-stowell/Ivan.

²⁸³ Katharina Uhde, "24 Capricci per Violino solo op. 1; 24 Contradanze Inglesi per Violino Solo," *Nineteenth Century Music Review* 14, no. 1 (2017): 154, https://doi:10.1017/S1479409816000665.

²⁸⁴ The British Museum, Henry Monnier (Biographical Details), last updated 2019, accessed 27th Aug 2019, https://research.britishmuseum.org/research/search_the_collection_database/term_details.aspx?bioId=11446
2.

Music Score 28 Caprice Nine, Richault Edition, bb. 1-17



Source: Niccolo Paganini, *Caprices on Studes Pour Le Violon*, ed. by Henry Bonaventure (Paris: Richault c.a.1824), 1028, p. 20, bb.1-17.

Bonaventure's third position fingering instructions are undesirable because the E-string will ring out during the major third (E and G sharp, third double stop of **Music Score 28**). Written in Leopold Mozart's treatise, he urges caution to the violinist when considering using an open string in a double stop:

With one or two notes in double-stopping the open string can often be used, but to speak the truth it pleases me not greatly. The tone of the open strings contrasts too sharply with that of the stopped notes, and the inequality arising therefrom offends the ears of the listener. Make the experiment yourself.²⁸⁵

The choice of using the E-string in the double-stops also conflicts with Paganini's instructions; *to play over the fingerboard, imitating a flute*. Therefore, it is best to utilise other positions during this section.

Bonaventure's fingering suggestion during the *imitando il Corno* section is symbolic of the 19th century.²⁸⁶ This fingering suggestion is located in the 9th bar of the Caprice from the fourth to fifth double stops (see **Music Score 28** - G sharp and B moving to A and C sharp fingered 2, 4 - 2, 4). This fingering, which requires the violinist to use the second and fourth fingers for both double-stops creates a slide. Slides were considered pleasing during the 19th century and were fundamental features of shifts. In an article by Stowell,

²⁸⁵ Mozart, A Treatise on the Fundamental Principles of Violin Playing, p. 158.

²⁸⁶ Uhde, "24 Capricci per Violino solo op. 1; 24 Contradanze Inglesi per Violino Solo," p. 155.

he confirms that Baillot's notable treatise L'Art de Violin (written 1834) approves the desire for portamentos to be used in ascending and descending shifts:

He [Baillot] approves of tasteful portamentos, especially in slow movements and sustained melodies. He also permits a descending portamento in which the finger of the lower note is dragged so that it barely sounds the note a semitone above.²⁸⁷

The slide that occurs as a consequence of Bonaventure's fingering can be avoided by separating the bow stroke. However, this must be methodically practised as the left-hand must not release the neck of the violin as this causes the violinist to lose their sense of geographical reference.

The edition presented in **Music Score 29** has annotated fingerings by the Hungarian violinist and teacher Carl Flesch (1873-1944),²⁸⁸ which appear to be motivated by his violin method, *The Art of Violin Playing*.²⁸⁹

Music Score 29 Caprice Nine, bb. 1-19



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C. F. Peters, c.a.1910), 9703, p. 18, bb. 1-19.

²⁸⁷ Robin Stowell, "In Principle: Violin Pedagogy through the Ages – 3: Pierre Baillot's L'art de violon," *The Strad* 118 (2007): 77.

²⁸⁸ Boris Schwarz, *Flesch, Carl*, Revised by Margaret Campbell, Grove Muisc Online, published in print 2001, published online 2001, website accessed 27th August 2019, https://doi.org/10.1093/gmo/9781561592630.

²⁸⁹ Flesch, *The Art of Violin Playing*, 1924 Reprint (New York: Carl Fischer, 2000).

In contrast to Bonaventure's suggested portamento fingering (encouraged throughout the complete edition of the Paganini Caprices),²⁹⁰ Flesch makes it clear in his method, that there are two types of slides [Flesch refers to slides and glides]:

The first type of glide can be executed either slowly or rapidly, according to personal taste and feeling; for the second type of glide, the less noticeable it is, the better. Thus, there is a fundamental difference between technical and expressive glides; all too often this is disregarded. Since I believe this differentiation should be made clear, even as far as terminology is concerned, I propose that the technical shift be called *glissando* and the expressive shift *portamento*.²⁹¹

This division of the glides described by Flesch was a significant development during the 20th century. Other notable pedagogues who adopted this discipline, include Auer (1845-1930) who advises students in his method *Violin Playing as I teach It* (written 1921) to change positions in an "inaudible manner,"²⁹² and Galamian (1903-1981) who discusses how to "eliminate a great amount of sliding sound" in his method, *Principles of Violin Playing & Teaching* (written 1962).²⁹³

This style of playing is presented in the fingering choices offered by Flesch in his edition of Caprice 9 (see **Music Score 29** p. 161). The avoidance of consecutive double-stops, which utilise the same fingering and his systematic approach in the ascending scale fragments are both examples of fingering choices that are stylistic of the 20th century.

In his method, *The Art of Violin Playing*, Flesch strongly recommends shifting on the strong beats of the bar, or between bow articulations or pauses.²⁹⁴ However, he considers the utilisation of the open string in a descending direction, an exception to this rule.²⁹⁵

²⁹⁰ Uhde, "24 Capricci per Violino solo op. 1; 24 Contradanze Inglesi per Violino Solo," p. 155.

²⁹¹ Flesch, *The Art of Violin Playing*, p. 14.

²⁹² Auer, Violin Playing as I Teach It, p. 34.

²⁹³ Galamian, *Principles of Violin Playing & Teaching*, p. 27.

²⁹⁴ Flesch, *The Art of Violin Playing*, p. 15.

²⁹⁵ ibid., p. 118.

For the ascending scale of thirds, Flesch recommends a one-three, two-four fingering pattern.²⁹⁶ For the descending scale of thirds, he recommends using a two-four, one-three fingering pattern and provides an alternate option to use the open strings.²⁹⁷ He claims that this fingering is "the best,"²⁹⁸ and has several merits including; "uniformity of hand movements, simplicity and convenience as far as learning the sequential movements of the fingers is concerned, as well as the appropriate emphasis within the rhythmic structure of the music."²⁹⁹ He does, however, caution the use of open strings in certain keys, but does not stipulate which ones.³⁰⁰

While Flesch's fingering system is a more conventional system by modern standards,³⁰¹ the use of the open string is not appropriate for the tonal quality Paganini specifies (*imitando il Flauto*), as the open strings provide too much tonal variety that is intrusive to the alternating voices. Galamian provides a better fingering in the IMC edition of the Paganini Caprices with several options for the violinist.³⁰² The third double-stop of the Caprice employs a two-four or one-three fingering option, eliminating the need for the open string. Galamian's fingerings are uniform, systematic and appropriate for the flute and horn voicing. He makes every effort to ensure the double-stops remain on the same strings for as long as possible, which in turn, provides a consistent tonal quality. This distinct difference in timbre and sound enables the listener to instantly recognise the two voices, which is a crucial element of the Caprice.

The excerpt presented in **Music Score 30** (p. 164) illustrates the fingering choices presented in the audio CD of this project.

²⁹⁶ Flesch, *The Art of Violin Playing*, p. 118-119.

²⁹⁷ ibid.

²⁹⁸ ibid., p. 118.

²⁹⁹ ibid., p. 119.

³⁰⁰ ibid., p. 178.

³⁰¹ ibid., p. 15.

³⁰² Paganini (New York: IMC, 1973), 2292, p. 18-19.

Music Score 30 Caprice Nine, Adaptation of Peters Edition, bb.1-19



Source: Adapted from Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 18, bb. 1-19.

Both Flesch and Galamian's fingering options found in their editions influence the fingering choices presented in **Music Score 30**. The tried and tested fingering options are advantages and improve the chances of correct and secure intonation. The following points illustrate how the fingering choices are advantages:

- The perfect fifths occupy either a first or second finger which is repeated
- A single position is utilised for several double-stops, unless the fifth cannot be played with a first or second finger
- The same fingering choices are used for repeated passages, which secures the intonation
- The section avoids same finger shifts which ensure the double-stops are performed without glissandi
- The section retrospectively considers Paganini's instructions and obliges the directions by performing the *imitando il Corno sull III e IV Corda*, on the third and fourth strings
- With consideration for the *imitando il Corno* theme, the fingering choices for the
 first theme (*il Flauto*) remain on the first and second strings wherever possible,

maintaining the tonal quality and splitting the two voices (*il Flauto e il Corno*) through string allocation.

Video Clip 24 and **25** provides a performance of the selected fingerings which are illustrated in **Music Score 30** (p. 164). Both the *fluto* and *corno* imitations are demonstrated as separate video clips.

Video Clip 24 Caprice Nine: bb. 1-8, Fingering pattern (imitando il flauto)

Video Clip 25 Caprice Nine: bb. 8-12, Fingering pattern (imitando il corno)

Ricochet Bowing, Fast Position Changes and Supplementary Exercises

Section C of Caprice Nine (bb. 52-94) is a challenging part of the Caprice and features numerous ricochet bowing patterns, ascending scales, and fast left-hand position changes. Tackling this section should begin by isolating one technique at a time, mastering it, and then applying the next.

Beginning with the ricochet and fast position changes which take effect from bar 61, the violinist must cast aside the ricochet bowing and focus only on the position changes.

The following exercises support the learning and development of this section:

Supplementary Exercises

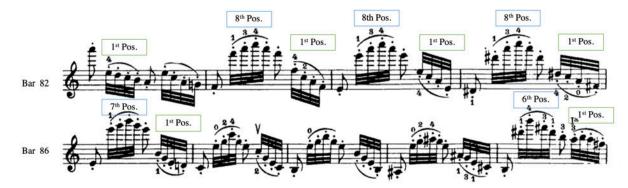
For the purposes of these exercises, the term *group* refers to the four demisemiquavers and single quaver in one position. These exist between bars 61-94 in Caprice Nine.

Step One:

Step one begins by analysing the position of each scale fragment. An understanding of the hand positions creates a geographical map of the notes

and the shifts. **Music Score 31** provides the position numbers for the scale fragments from bars 82 to 90.

Music Score 31 Caprice Nine, Locations of Positions, bb. 82-90



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 18, bb. 82-90.

Step Two:

The second step involves isolating the positions and practising each group slowly with a legato slurred bow; playing precisely as if the ricochet dots were removed. Precise intonation comes from the violinist's awareness of the tone and semitone spacing; therefore, it is a good idea to take all the groups in the first position and practise them one after the other.

Similarly, the same practice can be applied for groups in the sixth, seventh, and eighth positions. **Video Clip 26** provides a demonstration of these instructions:

Video Clip 26 Caprice Nine: bb. 82-90, Intonation exercise in a single position

Step Three:

Securing the first finger in each position provides security to the group of descending notes. Therefore, it is worth practising the groups forwards and backwards as this improves the recognition of the tone and semitone spaces

and also increases awareness of the hand positions. During this step, it is crucial to hold down as many fingers as possible on the fingerboard. This prepares the hand for fast playing when it is played at the performance tempo. **Video Clip 27** provides a demonstration of this step:

Video Clip 27 Caprice Nine: bb. 82-90, Hand position exercise

Step Four:

Beginning the bow stroke just below the middle of the bow is ideal for the ricochet bowing. The bow should not travel far along the string during the ricochet movement as it can very quickly become uncontrollable. The single quaver which falls on an up-bow will effectively reset the stroke for the next group so that each group of demi-semiquavers begins on a down-bow just below the middle of the bow. Initially, the ricochet bowing should be practised repetitively on an open string without the printed notes.

Step Five:

Applying the techniques together is the objective of this step. Initially, it is beneficial to repetitively practice a group with the ricochet bowing until it is mastered in both hands. The second phase of this step is to connect the groups one after the other with seamless position changes. Applying a rest between the groups provides enough time for the left-hand to prepare for the upcoming group of notes. As the violinist becomes more proficient at this step, the value of the rest should decrease. **Video Clip 28** provides a demonstration of this exercise.

Video Clip 28 Caprice Nine: bb. 82-90, Coordination exercise

Practising these exercises repetitively without evaluation of one's actions should be avoided as most of the problems exist in the planning of the left and right hands. Therefore,

there must be equal parts of both physical and mental practice. **Video Clip 29** provides a demonstration of bars 82 to 90 at performance tempo.

Video Clip 29 Caprice Nine: bb. 82-90, Consolidating the position changes

Recommended Repertoire Post Caprice Nine

Double-stops are a feature in most of the violin repertoire, especially within the numerous violin concerti. Listed in **Table 23** are works that would benefit from the exercises that are presented within this chapter, as the pieces feature double-stops.

 Table 23
 Recommended Repertoire Post Caprice Nine

Composer	Repertoire			
Casella, A.	Violin Concerto, Op. 48			
Bartok, B.	Romanian Folk Dances			
Brahms, J.	Violin Concerto in D major, Op. 77			
Bruch, M.	Violin Concerto in G minor, Op. 26, No. 1			
Glazunov, A.	Violin Concerto in A minor, Op. 82			
Khachaturian, A.	Violin Concerto in D minor, Op. 46			
Kreisler, F.	Caprice Viennois, Op. 2 for violin and piano			
Kreisler, F.	La Chasse, (Caprice)			
Saint-Saëns, C.	Introduction and Rondo Capriccioso, Op. 28			
Sarasate, P.	Caprice Basque, Op. 24 for violin and piano			
Sauret, E.	Suite pour Violin Solo, Op. 68			
Vieuxtemps, H.	Violin Concerto No. 5, Op. 37			

CHAPTER EIGHT

Caprice Number Ten

Caprice Ten contains a challenging violin technique called Flying Staccato.

However, this term is sometimes confused with other names such as Up-bow or Downbow-Staccato or Martelé-Staccato.³⁰³

The Flying Staccato stroke is a challenging bow stroke to perform as it requires a flexible right wrist and fingers, and is therefore limited in speed.³⁰⁴ However, if the stroke is performed with tense muscles in the right upper and lower arm, it is possible to perform the stroke faster.

Due to the terminology used to describe the bow stroke in Caprice Ten differing, a portion of this chapter presents the terms, definitions, and instructions that are recommended by various pedagogues. The chapter also provides a discussion on how to execute the bowing in Caprice Ten with supporting exercises and demonstrations. In addition, the chapter also contains lists of repertoires that are suitable to study prior and post learning the Caprice.

Note Discrepancies

Table 24 (p. 170) contains the note discrepancies found in several editions of the Paganini Caprices. Considering the Caprice is 75 bars long, there are only five note discrepancies which are located in bars 3, 9, 49, 59, and 70. Bars 59 and 70 concern the notes in the appoggiatura which appear differently in the Peters, IMC, and Urtext editions.³⁰⁵

³⁰³ Flesch, *The Art of Violin Playing*, p. 52.

³⁰⁴ David Boyden, Aufheben [absetzen 'to lift up'], Grove Music Online: published online 2013, published in print 2014, https://doi-org.proxy.library.adelaide.edu.au/10.1093/gmo/9781561592630.article.L2232256.

³⁰⁵ Paganini (Leipzig: C.F. Peters, c.a.1910), 9703; Paganini (New York: IMC, 1973), 2292; Paganini (München: G. Henle Verlag, 1990), 405.

Table 24 Caprice Ten: Note Discrepancies

	Editions of the Paganini Caprices							
Bar	Original	Ricordi,	Breitkopf	Richault	Ricordi,	Peters	IMC	Urtext
Number	Score	1st ed.	& Härtel	c.1825	2 nd ed.	c.1910	1973	1990
	c.1817	c.1820	c.1823		c.1836			
3,	G, B flat,	G, D, B	G, D, B	G, D, B	G, D, B	G, D, B	G, D, B	G, D, B
quadruple	G	flat, G	flat, G	flat, G	flat, G	flat, G	flat, G	flat, G
stop								
9,	G, B flat,	G, B flat,	G, B flat, G	G, B flat,	G, B flat,	G, D, B	G, D, B	G, D, B
quadruple stop	G	G		G	G	flat, G	flat, G	flat, G
49, 2 nd note	C natural	C sharp	C natural	C sharp	C sharp	C natural	C natural	C sharp
59,	G, D?	B flat, D	B flat, D	B flat, D	B flat, D	G natural	G natural	G natural
appoggiatur	(unclear)	natural	natural	natural	natural			
a								
70,	B flat, D	B flat, D	B flat, D	B flat, D	B flat, D	G, D	G, D	G, D
appoggiatur a	natural	natural	natural	natural	natural	natural	natural	natural

Data from Dr. Wolf-Dieter Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8 and Nicolò Paganini, *24 Capricci Für Violine Solo (Urtext)*, ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

Recommended Exercises, Studies and Scales Before Learning Caprice Ten

The resources presented in **Table 25** (p. 171) focus on up and down-bow scales in a Flying Staccato bow stroke. Although the Caprice requires the player to perform descending and ascending scales in an up-bow direction, exercises for down-bow Flying Staccato are also included. Learning the stroke in both up and down-bow directions is beneficial as it not only provides the player with a better understanding of the bow stroke, but also prepares the player for future works with down-bow staccato.

 Table 25
 Caprice Ten: Recommended Repertoire

Flesch: G Minor, p. 26-30 Fischer Basis: Staccato exercises 92- 97, p. 65-69 Granat: Heifetz Scale Book G minor and G major, p. 3-7 Fischer Pasis: Staccato exercises Wohlfahrt: 24 Moderato assai and Moderato – Up-bow staccato in se	d 45 emiquavers
Granat: Heifetz Scale Book G minor and G Fischer Practice: Staccato exercises Wohlfahrt: 24 Moderato assai and Moderato – Up-bow staccato in se	emiquavers
Book G minor and G 57-62, p. 90-92 Moderato – Up-bow staccato in se	emiquavers
<i>major</i> , p. 3-7	eparatory
	eparatory
Galamian Vol 1: 1. Ševčík Op. 1 Part 1: No. 12, 19, Part Dancla Op. 68: 13 Moderato – pre	
Scales in One Position 2: No. 9, Part 3: No. 1, 2, 8 study for up-bow staccato	
p. 1-4 and 3. Three- Yanshinov: Exercise 20, p. 8, and Mazas Heft II: 34 Allegro modera	nto –
Octave Scales p. 5-6 Exercise 27a & 27b, p. 11 ricochet, staccato, arpeggios and u	ıp-bow
with bowing B12 (1.) staccato	
Fischer Scales: Three- Dounis The Artist's Technique of Kayser: 33 Allegro moderato – Ul	p or down-
octave scales, Violin Playing Op. 12, Second Part bow staccato	
arpeggios and The Bow: IV Accentuated Legato- Kreutzer: 4 Allegro – Up-bow state	ccato scales
chromatic scales, p. Firm Staccato, V Thrown Bow-Flying Mazas Heft III: 59 Allegro modera	ato – scale
129 Staccato, VI Thrown Staccato- figures in up-bow staccato	
Stringing Staccato (Tremolo), p. 81- Dancla Op. 73: 12 Allegro con fuc	осо, 10
86 Maestoso e risoluto – scale figure:	s in up-
bow staccato	
Fiorillo: 3 Allegro, 16 Allegro non	ı troppo –
up bow staccato	
Dounis The Staccato Op. 21, Second Rode: 7 Moderato – up-bow stace	ato,
Part The Bow: <i>Chapters I-II</i> , p. 246- double-stops	
274	
Ševčík School of Bowing Technique De Bériot: 12 Largo maestoso – U	Jp or down
Op. 2 Part 1: No. 5 with bowing bow staccato, 13 Moderato quasi-	allegro –
exercises 136-190 (Wrist Staccato), p. triple stops and staccato	
9 & 13-14	
Ševčík School of Bowing Technique Wieniawski: 4 Allegro giocoso "L	Le
Op. 2 Part 6: No. 38 with bowing Staccato" – double-stops and scal	le passages
exercises 617-190 (Staccato in up-bow staccato	
picchiettato), p. 2 & 17-18	

The exercises presented in Fischer's method *Basics: 300 exercises and practice routines* for the violin, are beneficial to refine and develop the movements of the bow hand for the

Flying Staccato bow stroke.³⁰⁶ Fischer also provides a practice method for Kreutzer's study *No. 4 Allegro*,³⁰⁷ and recommends to, "play the whole study through, first with one staccato to a note, then two, three and four."³⁰⁸ Fischer then instructs the player to press firmly on the string before moving the bow; ensuring there is pressure on the bow stick. This practice method can also be applied to the other studies listed in **Table 25** (p. 171) so that the Flying Staccato can develop in other musical contexts.

Dounis' chapter on *Staccato* provides valuable information on the process of how to accomplish a bowed-staccato-scale.³⁰⁹ Provided with multiple exercises, Dounis divides the learning process of staccato into sections by employing various rhythms and string crossings.

It is not necessary to play through every recommended study, as all of the studies contain similar bowing patterns. Instead, it is beneficial to choose a selection of easier studies from Wohlfahrt,³¹⁰ Dancla,³¹¹ Kayser,³¹² and Mazas,³¹³ and more challenging studies from Kreutzer,³¹⁴ Fiorillo,³¹⁵ and Rode.³¹⁶

Bow Stroke Terminology

The Primary Technique in Caprice Ten is called Flying Staccato in this project. However, the term is often confused with other words such as "solid staccato," "martelé-staccato," and many others. Having several names to describe a bow stroke creates

³⁰⁶ Fischer, Basics: 300 exercises and practice routines for the violin by Simon Fischer, p. 65-69.

³⁰⁷ Kreutzer, "No. 4 Allegro," in 42 Studies for Violin, p. 6.

³⁰⁸ Fischer, Basics: 300 exercises and practice routines for the violin by Simon Fischer, p. 69.

³⁰⁹ Dounis, "The Staccato: Studies on a Scientific Basis for the Highest Development in Staccato-Playing" in *The Dounis Collection Op. 21*, p. 246-274.

³¹⁰ Wohlfahrt, Sixty Studies for the Violin Op. 45, p. 21, and 41.

³¹¹ Dancla, 15 Etüden, Op. 68, p. 15-16.

³¹² Kayser, *36 Etüden, Op. 20*, p. 42-43.

³¹³ Mazas, Etüden, Op. 36, Heft II, p. 7.

³¹⁴ Kreutzer, 42 Studies for Violin, p. 6.

³¹⁵ Fiorillo, *36 Etüden (Capricen)*, p. 8, and 24.

³¹⁶ Rode, 24 Caprices for Violin, p. 14-15.

³¹⁷ Galamian, *Principles of Violin Playing and Teaching*, p. 78.

³¹⁸ Flesch, *The Art of Violin Playing*, p. 50.

confusion as it is defined differently according to the pedagogue who describes it.

Consequently, instructions on how to perform the bow stroke differ considerably, and a lack of information on this topic creates a gap in the literature. While the topic of bow stroke terminology is not the project's primary aim, this part of the chapter will aim to consolidate the vocabulary used to describe the Flying Staccato. Definitions and instructions by various pedagogues on how to perform the bow stroke will also be categorised to provide clarity on this topic.

The purpose of naming and defining the bow stroke will assist the violinist who tackles Caprice Ten so that the movements, articulations and physics of the bow stroke can be better understood. Providing clarity on this topic will also contribute to knowledge passed on to string pedagogues who can assist the violinist who performs the Flying Staccato bow stroke.

It is first necessary to name, define, and provide instructions on the bow stroke described in Caprice Ten before it is compared with titles, definitions, and instructions by other string pedagogues.

Title, Definition, and Instructions by Author

As previously mentioned, the bow stroke is named Flying Staccato in this project and is defined by performing consecutive staccato notes in an up-bow direction. Although it is not illustrated in Caprice Ten, this movement can also be performed in a down-bow direction. During the bow stroke, the bow does not leave the string when played in the upper half of the bow. However, from the middle to the lower half of the bow, the bow will start to bounce.

Performing the stroke is carried out by quick successions of pressure and release, and short bursts of bow speed. The application of pressure and release is controlled by the right index finger, while the short bursts of bow speed are controlled with the right forearm. No part of the right hand or arm remains stiff for the duration of the bow stroke in Caprice Ten.

As the bow approaches the lower half and begins to bounce, the bow stroke becomes a ricochet stroke. The bow stroke is controlled by the right wrist moving in small circles, while the forearm moves the hand across the string. The application of the ricochet stroke requires both vertical and horizontal movements across the string.

Title, Definition, and Instructions by Francesco Geminiani

Geminiani's treatise *The Art of Playing the Violin* (1751) contains instructions and examples of various left and right-hand exercises. An example of the Flying Staccato stroke is included in example twenty,³¹⁹ but it has no formal name. In the instructions, Geminiani states, "...a staccato, where the Bow is taken off the Strings at every Note."³²⁰

Geminiani's title, definition, and instructions are brief and poorly documented. This treatise, however, appears to be one of the earliest methods that illustrates the Flying Staccato bow stroke.

Title, Definition, and Instructions by Leopold Mozart

Mozart's treatise *Versuch einer Gründlichen Violinschule* (1756) is considered to be one of the most extensive and influential methods of its time.³²¹

Mozart first introduces the bow stroke in his chapter titled *Of the varieties of Bowing in even notes*, which includes several examples of slur and staccato variations. He provides the following instructions:

This style of performance will be somewhat difficult to the beginner. A certain relaxing of the right hand is necessary for it, and a retarding of the bow. This is more easily shown or discovered by oneself by practice than can be explained with words. The weight of the violin bow contributes much, as does also in no less degree its length or shortness. A heavier and longer bow must be used more lightly and retarded somewhat less; whereas a lighter and shorter bow must be pressed down more and retarded more. Above all, the right hand must

³¹⁹ Francesco, Geminiani, *The Art of Playing the Violin* (1751 Reprint, London: Travis & Emery, 2009), p. 27.

³²⁰ Geminiani, The Art of Playing the Violin, p. 9.

³²¹ Stowell, *The Cambridge Companion to the Violin/ Edited by Robin Stowell*, p. 57.

here be made a little stiff, but the contracting and relaxing of the same must be regulated according to the weight and length, or the lightness and shortness of the bow. The notes must be played in an even tempo, with even strength, and not over-hurried or, so to speak, in such fashion that towards the end of the second bar so much strength remains over, that the crotchet note (G) at the end of the passage in the same stroke can be distinguished by a noticeable accent.³²²

Although Mozart provides no formal name for the bow stroke, his definition and instructions for the stroke appear to be the opposite of Geminiani's. While he never states that the bow remains on the string, he confirms that the right-hand repeatedly applies and releases pressure throughout the stroke; which can only be performed on the string.

Title, Definition, and Instructions by Louis Spohr

Louis Spohr's treatise (1852) became the most notable method of the 19th century due to his invention; the chin rest.³²³ This change revolutionised the way of violin playing, and as a result, a surge in violin-specific methods followed.³²⁴ Concerning the Flying Staccato stroke, Spohr offers the following information:

The Staccato is made with the upper half of the up-bow, more than that it must not reach, even if twenty, thirty or more notes are to be played in one bow. You should therefore accustom yourself from the beginning to use as little bow as possible, i.e. only as much as is actually required for the clear intonation of tones. The pushing on of the bow is done with a steady fore and back-arm, and solely with the wrist. Every note obtains as much pressure with the first finger of the right hand, as to lay the whole width of the hair but not so much as to cause the edges of the hair to rise off the string. The beauty of the staccato consists principally in an equal, distinct and clear separation of the notes in the strictest time. At first practise it slowly, and when it is acquired distinctly and strictly in time, a quicker time may gradually be taken. 325

325 Spohr, Spohr's Grand Violin School Newly Revised From the latest German and English Editions, p. 119.

³²² Mozart, Versuch einer Gründlichen Violinschule [A Treatise on the Fundamental Principals of Violin Playing], p. 119.

³²³ Stowell, *The Cambridge Companion to the Violin/ Edited by Robin Stowell*, p. 122-123.

³²⁴ ibid.

The Staccato appears to be the first formal title given to the Flying Staccato stroke since it appeared in Geminiani's 1751 method. Spohr's definition confirms that the bow stroke remains on the string for the duration of the stroke, and an application of pressure and release is controlled with the index finger. These instructions correspond with Mozart's.

Title, Definition, and Instructions by Karl Courvoisier (The Joachim Method)

In 1897, a treatise titled *The Technique of Violin Playing: The Joachim Method* was published by Karl Courvoisier, who was a pupil of Joseph Joachim (1831-1907).³²⁶ According to Courvoisier, there are two types of short strokes which are classified as forearm and wrist strokes. Like Spohr, Courvoisier confirms that the Flying Staccato stroke, which is illustrated in Caprice Ten, is named *The Staccato*. Courvoisier describes the bow stroke:

The action of the hand in exerting the pressure for the attack, may, and indeed should, be perceptible, as also the approach of the stick to the hair which it causes. A repetition of these detached tones in the same stroke is called *staccato*. A few staccato strokes occurring in moderate tempo can be executed in any part of the bow without difficulty.³²⁷

Courvoisier confirms that the staccato stroke is played with the right forearm but is not always suitable for music with softer dynamics. For these passages, he recommends using *The Wrist-Stroke*.

According to Courvoisier, The Wrist-Stroke is a movement which is created by "a lateral swing of the hand, and is hardly possible without a slight tilt of the hand towards the fore-finger."³²⁸ Courvoisier states that in the upper half of the bow, the

³²⁶ Karl Courvoisier, *The Technique of Violin Playing: The Joachim Method* (1897; Reprint, New York: Dover Publications Inc., 2006).

³²⁷ ibid., p. 42.

³²⁸ ibid., p. 43.

hair remains on the string, while in the lower half, the bow is encouraged to "leap from the strings."³²⁹ Courvoisier refers to this movement as the *Thrown Stroke*.

Courvoisier includes the Flying Staccato as another type of bow stroke and provides the following description:

Above the middle of the bow a series of blows can be given in an up-stroke, which are equivalent to a *flying staccato*, that is, a staccato in which the tones are separated by the bow leaping from the strings instead of stopping. Moreover the bow can be permitted, after falling upon the string, to rebound upon it several times, without aid from the hand, which must, of course, be held very loosely.³³⁰

While Courvoisier's classifications of bow strokes are well-defined, the description of the Flying Staccato stroke seems to contradict its title. As confirmed previously by the pedagogues, Courvoisier, Spohr, and Mozart, the staccato stroke is a bow stroke that remains on the string for the duration of the stroke. A better term for Courvoisier's Flying Staccato stroke is a Flying Spiccato stroke.

Title, Definition, and Instructions by Carl Flesch

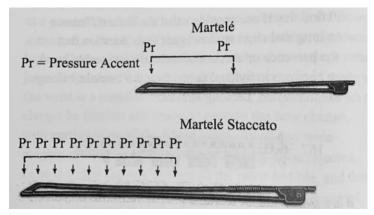
Carl Flesch's *The Art of Violin Playing*, was published in 1924. The extensive treatise covers a significant portion of violin technique and offers several definitions and instructions on the staccato stroke. Flesch describes the staccato stroke used in Caprice Ten as Martelé-Staccato and provides the following description on the bow stroke:

The mechanics of the martelé and the martelé-staccato differ from each other by the fact that in the former the horizontal forearm motion and the pressure accent are in a relationship of one to one. In the case of staccato there are as many pressure accents per one horizontal forearm movement as there are notes to play. The two bowings could be graphically depicted in the following manner (see **Figure 9**, p. 178):

³²⁹ Karl Courvoisier, *The Technique of Violin Playing: The Joachim Method* (1897; Reprint, New York: Dover Publications Inc., 2006), p. 43.

³³⁰ ibid., p. 45.

Figure 9 Carl Flesch Up-Bow Flying Staccato Accent Points



Source: Carl Flesch, *The Art of Violin Playing*, Translated and Edited by Eric Rosenblith, Foreword by Anne-Sophie Mutter (1924; Reprint, New York: Carl Fischer, 2000), p. 50.

Therefore, while in the ordinary martelé, stroke and pressure succeed each other, the difficulty in the staccato resides in the fact that a number of pressure accents have to take place during the horizontal motion and that one must succeed in co-coordinating and amalgamating the two movements. Only when that happens can one rely on a correct staccato...³³¹

Flesch advises that the martelé-staccato stroke can be played with small amounts of pressure using the right index finger or played with a stiff right upper arm. He describes the latter as the "stiff staccato."³³²

Flesch's interpretation of the Flying Staccato stroke is similar to Courvoisier's in that it is classified as an 'off-the-string' bow stroke. However, Flesch's description is far more specific:

Flying staccato is used almost exclusively in the middle (at the point the bow jumps too high, and at the frog it ceases to function.) It can therefore only be considered for relatively short chains of notes, and is, as a rule, hardly suitable for longer staccati. To lesson any tendency the bow might have to jump excessively high, it is often useful to incline the bow by raising the wrist and letting the hand slope down.³³³

³³¹ Flesch, *The Art of Violin Playing*, p. 50-51.

³³² ibid., p. 52.

³³³ ibid., p. 58.

Flesch's description of the Flying Staccato stroke occurring in the middle of the bow contradicts Courvoisier's definition of the stroke. It is, however, the first description that explains the stroke so clearly.

Title, Definition, and Instructions by Ivan Galamian

Ivan Galamian's treatise, written in 1962, provides a comprehensive description of the staccato stroke. Galamian categorises the 'flying strokes' into "the Flying Staccato (same marking as solid staccato) and the Flying Spiccato." A description of the strokes is provided:

These two strokes are similar to one another, but each has its own individual characteristics. The first of the two, as the name implies, derives from the staccato. It is performed with the same motion as the solid staccato, except that the pressure is lightened and the bow is permitted - and encouraged - to leave the string after each note. This lifting should be only very slight, however, and the movement should remain essentially a horizontal one without interruption in its continual forward flow... The flying spiccato is a succession of spiccato notes on one bow. It may be performed either on the up- or down-bow, but in the latter form it is rather infrequent and is practical only for the succession of a relatively small number of notes. The bow lifts higher than in the flying staccato and, true to its spiccato nature, is actively thrown onto the string for every note. For this reason, its speed is far more limited than that of its staccato counterpart.³³⁵

Galamian's description and interpretation of the Flying Staccato and spiccato bow strokes are clearly defined. The differences between the strokes are explained, and instructions on how to operate the stroke are written articulately. What remains to be the problem in the methods is the choice of vocabulary when describing the bow releasing its pressure in the Flying Staccato stroke. The words "lighter and shorter," "bow leaping," and "jumping," provide confusing instructions to the reader.

³³⁴ Galamian, Principles of Violin Playing & Teacher, p. 80.

³³⁵ ibid., p. 80-81.

³³⁶ Mozart, Versuch einer Gründlichen Violinschule [A Treatise on the Fundamental Principals of Violin Playing], p. 119.

³³⁷ Courvoisier, *The Technique of Violin Playing: The Joachim Method*, p. 45.

³³⁸ Flesch, *The Art of Violin Playing*, p. 58.

Unfortunately, during the mid-eighteenth century, the term *staccato* was interpreted differently and used in various contexts.³³⁹ Hansen states that the term staccato is "one of the most confusing terms associated with modern string playing."³⁴⁰ These descriptions presented in the treatises are a consequence of the fact that staccato and spiccato were essentially considered the same stroke during the eighteenth century.³⁴¹

The Technique of Performing Flying Staccato

The information and instructions provided in the treatises found in the previous chapter (**Bow Stroke Terminology**, p. 172), all discuss some form of tension that takes place within the right arm to execute a Flying Staccato stroke. Mozart's direction to "make the right hand a little stiff" is somewhat vague compared to Spohr's instruction to push on the bow "with a steady fore and back-arm." Spohr's instructions which describe the application of pressure using the first finger of the right hand are specific and the most accurate.

Particularly interesting is Joachim's choice of vocabulary where he describes the bow movement as "a *shoving* movement of the hand."³⁴⁴ This term *shoving*, suggests that the movement requires a substantial amount of energy in order to force the direction of the bow. While Joachim has not directly described the amount of force required, the term 'shoving' is correct in the sense that more energy is required to force the up-bow staccato when compared to the down-bow staccato.

³³⁹ Dallin Richard Hansen, "The Bouncing Bow: A Historical Examination of "off-the-string" violin Bowing, 1751-1834,"
Doctor of Musical Arts, Arizona State University, 2009, https://search.proquest.com/docview/304827946/, p.

³⁴⁰ ibid.

³⁴¹ Robin Stowell, *Violin Technique and Performance Practice in the Late Eighteenth and Early Nineteenth Centuries* (New York: Cambridge University Press, 1985), p. 168.

³⁴² Mozart, Versuch einer Gründlichen Violinschule [A Treatise on the Fundamental Principals of Violin Playing], p. 119.

³⁴³ Spohr, Spohr's Grand Violin School Newly Revised From the latest German and English Editions, p. 119.

³⁴⁴ Courvoisier, The Technique of Violin Playing: The Joachim Method, p. 42.

In Galamian's method, he offers several suggestions to execute a Flying Staccato bow stroke.³⁴⁵ These suggestions have been condensed into three methods:

- The Relaxed Method (suitable for slow to moderate speeds)
 - This method requires a relaxed bow grip and upper arm. The index finger is responsible for applying pressure on the bow stick.
- The tension method (suitable for moderate to fast speeds)
 - This method applies force to the bow stick by tensing the upper arm and forearm.
- The Vertical Shaking Method (suitable for fast speeds)
 - The right wrist shakes in a vertical direction causing small consecutive bow strokes to form in one direction.

The Relaxed Method

The Relaxed Method is the preferred method to perform the Flying Staccato bow stroke in Caprice Ten. The method requires a relaxed upper arm and relies on consecutive short strokes which are applied by the index finger. As the bow approaches the lower half, the bow will begin to rebound off the strings as the distribution of bow weight changes.³⁴⁶ Transitioning the stroke into the lower half of the bow is managed easily using The Relaxed Method, as the ricochet bows operate best with a relaxed hand.

The Tension Method

The tension method may be suitable for some players who wish to perform Caprice Ten at a fast tempo (approximately J. = 80+ bpm). The tension method requires the muscles in the upper arm and forearm to tense and twitch the bow across the string with the build-up of energy that is in the right arm. This bow stroke is difficult to manage over lengthy periods as the arm must remain tight for the duration of the bow stroke. The lower

³⁴⁵ Galamian, *Principles of Violin Playing & Teacher*, p. 78-84.

³⁴⁶ Heron-Allen, Violin-Making: A Historical and Practical Guide, p. 96.

half of the bow is best avoided when using this method, as the weight-distribution and tense bow strokes can restrict the sound quality.

The Vertical Shaking Method

The Vertical Shaking Method requires short successive movements in an up and down direction using the right wrist. Applying this movement to a travelling up-bow staccato only works if the downward movement is minimal; allowing the *up-bow-direction* to travel towards the nut. This method must be used with caution as the downbow-movement in the shake can sometimes be heard as an additional note. This method is not advised for Caprice Ten.

The Learning Stages of Up-Bow Flying Staccato

It is first necessary to practice the Flying Staccato in a sequential format before attempting to play it in the context of Caprice Ten. Provided are several exercises that help support the development of the Flying Staccato bow stroke, which is performed using The Relaxed Method.

Step One: Four Accented Notes in One Direction

The ancestry of the Flying Staccato bow stroke comes from the accentuated détaché stroke, which is usually taught at the beginner level.³⁴⁷ **Figure 10** (p. 183) provides the notation for this bow stroke:

182

³⁴⁷ Dounis, "Second Part. The Bow: Genealogical Picture of Bow Strokes," from *The Artist's Technique of Violin Playing, Op.* 12, in *The Dounis Collection*, p. 78.

Figure 10 Accented Note



The first exercise uses this basic notation and comprises of four accented crotchets in a single bow stroke on one string. The same bow speed must be used for each note, so that the sound is rhythmically even. This elementary exercise forms a basic Flying Staccato movement.

Step Two: Variations of the Accented Notes in One Bow Direction

The second exercise aims to develop the bow stroke with several notes in one direction. Initially, attempting two, three, and four accented notes in one direction should be practised on a single string.

For multiple notes in one direction, the bow must make strong contact at the beginning of the stroke for every note. Applying firm bow contact requires the right hand to apply pressure to the bow stick using the index finger. As the bow moves quickly, the right hand must release the pressure of the bow stick to allow the sound to resonate. **Video Clip 30** provides a demonstration of this exercise.

Video Clip 30 Caprice Ten: Open string accented bowing exercise

This exercise can be varied to include more notes on a single string. The violinist should practise six, eight, and nine accented notes in one direction and ensure each note is the same length. **Video Clip 31** provides an example of this exercise.

Video Clip 31 Caprice Ten: Variations on accented bowing exercises

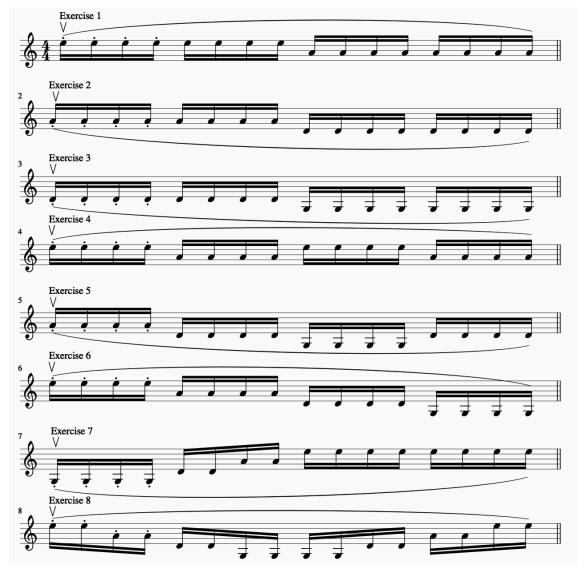
When there are more accented notes in one direction, it is natural for the muscles in the right forearm to stiffen. Although it is still possible to carry out a Flying Staccato bow stroke with a stiff right arm, it is difficult to sustain the bow stroke for an extended period of time. Therefore, the energy that moves the bow should come from the right wrist and not the forearm. Video Clip 32 provides a demonstration of the Flying Staccato bow stroke in slow motion, so the right wrist movements are visible.

Video Clip 32 Caprice Ten: Slow motion travelling staccato

Step Three: Flying Staccato and String Changes

Before the Flying Staccato is sped up, it is beneficial to practise the bow strokes with a variety of string crossings. Staccato exercises that include string crossings benefit the coordination of the left and right hands and prepare the player for passages in Caprice Ten. The right arm must anticipate the direction of the string level so that the string crossings are smooth and seamless. Examples of string crossing exercises are provided in **Music Score 32** (p. 185) and demonstrated in **Video Clip 33** (p. 185).

Music Score 32 Up-Bow Flying Staccato String Crossing Exercise



Video Clip 33 Caprice Ten: Travelling staccato string crossing exercises

Step Four: Applying Bowing Exercises to Caprice Ten

It is beneficial to implement the bowing exercises presented in step two into Caprice Ten (see *Variations of the Accented Notes in One Bow Direction*, p. 183). This exercise uses only the parts of the Caprice that contain a Flying Staccato bow stroke in a descending or ascending scale. These scales exist in

bars 1, 3, 9, 11, 24, 28, 29, 30, 31, 36, 37, 40, 41, 46, 47, 54, 55, 57, 65, 66, and 67. It is useful to practise these bars in two, three, and four-note divisions in a Flying Staccato bow stroke, before attempting the printed bowing. Depending on the violinist's progress and ability to overcome the challenging bow stroke, divisions in six, eight, and nine notes can also be included in this step. A demonstration of bar 1 with two, three, and four-note Flying Staccato bow divisions is provided in **Video Clip 34**.

Video Clip 34 Caprice Ten: b. 1, Applying bowing exercises

Step Five: Speeding up the Flying Staccato Bow Stroke

The final step involves increasing the speed of the bow stroke and incorporating the lower half of the bow when the bow is moving in an upward direction. As the bow approaches the balance point, it will begin to bounce and change into a ricochet stroke. Flicking the bow in a diagonal direction will help sustain the staccati through the bow stroke. **Video Clip 35** provides a demonstration of bars 1-4 at performance tempo.

Video Clip 35 Caprice Ten: bb. 1-4, Performance tempo

Recommended Repertoire Post Caprice Ten

The recommended repertoire listed in **Table 26** (p. 187) is suitable for violinist's who have mastered the Flying Staccato bow stroke in Caprice Ten. The bow stroke is a virtuosic and ostentatious movement that is popular in the works of Wieniawski, Bazzini, Kreisler and Sarasate.

 Table 26
 Recommended Repertoire Post Caprice Ten

Composer	Repertoire			
Bazzini, A.	Scherzo Fantastique, Op. 25			
Falla, M. De.	Danza del Terror (No. 5) from El Amor Brujo			
Hindemith, P.	Sonata, Op. 31, No. 1			
Kreisler, F.	Caprice Viennois, for violin and piano, Op. 2			
Kreisler, F.	Allegretto in the style of Boccherini			
Kreisler, F.	Schön Rosmarin, from three Old Viennese Dances			
Sarasate, P.	Zigeunerweisen, Op. 2, No. 1			
Wieniawski, H.	Violin Concerto in D minor, Op. 22, No. 2			
Wieniawski, H.	Polonaise Brillante, Op. 21			
Wieniawski, H.	Polonaise de Concert, Op. 4			

CHAPTER NINE

Caprice Number Eleven

Caprice Eleven is in the tonic key of C major and comprises of three parts; an *Andante, Presto*, and *Primo Tempo*. The Primary Techniques in this Caprice are double-stops which feature in the andante sections, and a hook stroke bowing pattern which exists in the presto section. Secondary Techniques include triple-stops, string crossings, fast passagework, and détaché bowing.

This chapter discusses the hook stroke bowing pattern, which is typically played at the tip or middle of the bow and several exercises are provided to overcome the challenging bow stroke. Although string crossings are listed as a Secondary Technique in this Caprice, they impact the hook stroke bowing and are therefore incorporated in the exercises.

Included in this chapter is a list of sequential exercises and step-by-step instructions that provide solutions to the technically and musically challenging double-stops that feature in the Caprice.

Note Discrepancies

There are three note discrepancies in Caprice Eleven. **Table 27** (p. 189) illustrates these discrepancies which are located in bars 41, and 97. The discrepancy in bar 97 contains an error and should read as F, C, and A-natural; which corresponds to an identical chord on the second beat of bar 23.

 Table 27
 Caprice Eleven: Note Discrepancies

		Ed	itions of th	e Pagani	ni Capric	es		
Bar	Original	Ricordi,	Breitkopf	Richault	Ricordi,	Peters	IMC	Urtext
Number	Score	1st ed.	& Härtel	c.1825	2 nd ed.	c.1910	1973	1990
	c.1817	c.1820	c.1823		c.1836			
41, 2 nd note	G sharp	G natural	G sharp	G natural	G natural	G sharp	G sharp	G sharp
41, 5 th note	G natural	G natural	G sharp	G natural	G natural	G sharp	G sharp	G sharp
97, second triple- stop (2 nd beat)	E, C, A natural	E, C, A natural	F, C, A natural	E, C, A natural	E, C, A natural	F, C, A natural	F, C, A natural	F, C, A natural

Data from Dr. Wolf-Dieter Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8 and Nicolò Paganini, *24 Capricci Für Violine Solo (Urtext)*, ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

Apart from the note discrepancies, there is a term that is removed from most of the editions; Barbieri explains:

At the beginning of the *Presto* section, Paganini writes *contro*, which is omitted in most editions. *Contro* means that the entire *Presto*, to the recapitulation of the *Andante*, should be played throughout exactly against the bow (i.e. starting with an up-bow), without simplifying slurs, in a constant alternation of staccato and *détaché*, always using the upper half of the bow.³⁴⁸

This marking indicated in Paganini's score exposes the Caprice to newfound technical challenges. While the hook stroke can easily be performed up-down at the tip of the bow, it is the détaché bowing sequence which is difficult to begin on an up-bow. The coordination of the string crossings alongside the 'off-beat' bowing pattern create difficulties for the player. This bowing pattern is rarely performed; however, a video recording of Alexander Markov performing live in concert demonstrates the bowing

³⁴⁸ Renato de Barbieri, "Annotations on Interpretation," from Capriccio No. 11 in C major Op. 1 (Genoa: 1990) in Seiffert, Henle Library, iPad vers 1.6.0.G, Apple App Store, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8.

sequence for several bars.³⁴⁹ From bar 44 onwards, the bowing pattern is sporadic and Markov performs variations of the bowing pattern and slurred hook-strokes. It appears that Markov changes the bowing pattern because the accent of the bar often occurs on the first beat. Playing the strong beat of the bar with a down-bow requires much less effort compared with an up-bow.

Other performers including Milstein,³⁵⁰ Mintz,³⁵¹ Zalai,³⁵² and Ricci,³⁵³ perform slurred hook strokes that commence on a down-bow. This bowing pattern allows the détaché sections to be played on a down-bow which is easier to coordinate when compared with the original bowing.

Only the Richault,³⁵⁴ and IMC editions,³⁵⁵ contain slurs over the dotted semiquavers and demi-semiquavers which convert the separate hook stroke into a slur.

Recommended Exercises, Studies and Scales Before Learning Caprice Eleven

Double-stops and hook stroke bowing patterns are the Primary Techniques of Caprice Eleven. **Table 28** (p. 191) provides a list of recommended repertoires that focuses on developing both techniques through scale systems, exercises and studies. The hook stroke bowing in Caprice Eleven must be rhythmical and precise; therefore, it is beneficial to practise the studies that contain a hook stroke bowing pattern with a metronome.

³⁴⁹ Alexander Markov, "Paganini Caprice no. 11[HQ]", produced by Warner Classics, recorded 1989 and uploaded to Youtube 2009, video 5:14, https://www.youtube.com/watch?v=e98IncrQ0zI.

³⁵⁰ Nathan Milstein, "Paganini Caprice no 11", produced by BBC Studios, London, recorded 1957 and uploaded to Youtube 2006, video, 4:17, https://www.youtube.com/watch?v=u009WRYcRF0.

³⁵¹ Shlomo Mintz, "Paganini: Caprice No. 11 (Shlomo Mintz)", produced by DGG, recorded on VHS 1981 and uploaded to Youtube 2007, video, 4:16, https://www.youtube.com/watch?v=Iv9TA8-YIBs.

³⁵² Antal Zalai, "PAGANINI: Caprice No. 11 – Antal Zalai, violin – classical music", produced by [unknown], Budapest, recorded 2015 and uploaded to Youtube 2016, video 4:44, https://www.youtube.com/watch?v=OB3XF8Tsd-Y.

³⁵³ Ruggiero Ricci, "Complete Paganini 24 Caprices by Ruggiero Ricci," https://www.youtube.com/watch?v=42OtmKJJ7iY.

³⁵⁴ Paganini (Paris: Richault, c.a.1825), 1028.R, p. 30.

³⁵⁵ Paganini (New York: IMC, 1973), 2292, p. 22.

 Table 28
 Caprice Eleven: Recommended Repertoire

Scale Systems	Exercises	Studies
Flesch: C Major, p.	Fischer Practice: Rhythm Practice	Sitt Book III: 54 Tempo di marcia –
1-5	exercise 17, p. 36-37	shifting between positions 1 to 4 using a
		staccato hook stroke
Granat: Heifetz Scale	Dounis The Artist's Technique of	Sitt Book V: 7 Andantino, 15 Andante-
Book C major and C	Violin Playing Op. 12, First Part	double-stops, 20 Tempo di marcia – triple-
<i>minor</i> , p. 28-32	The Left Hand: Shifting, p. 12-17	stops
Galamian Vol 1: 3.	Ševčík School of Bowing	Wohlfahrt: 44 Tempo di marcia – hook
Three-Octave Scales	Technique Op. 2 Part 1: No. 5 with	stroke, 60 Allegro con fuoco – variation of
p. 9 with bowing <i>B2</i>	bowing exercises 118-135 (Dotted	hook stroke in octaves
and rhythm R2 (two-	quavers), p. 9 & 12-13, and No. 6	Mazas Heft II: 53 Moderato assai –
note rhythm patterns)	with bowing exercises 74-98 p. 18	marcato bow stroke
	& 20-21, and <i>No</i> . 7 with bowing	Kayser: 23 Allegretto, 31 Allegro
	exercises 26-41, p. 24-25	moderato – hook stroke bowing
Fischer Scales:	Ševčík School of Bowing	Fiorillo: 4 Moderato – triple-stops
Three-octave scales,	Technique Op. 2 Part 2: No. 17 with	
arpeggios and	bowing exercises 80-100 (Dotted	Gaviniés: 18 Allegro non troppo – hook
chromatic scales, p.	semiquavers), p. 14 & 17-18	stroke, trills, staccato and marcato
134	Yanshinov: Exercise 23, p. 9	

Practising articulated bow strokes can improve rhythmic accuracy. Fischer's chapter on *Rhythm, Accent, Bowing and Dynamic Patterns*,³⁵⁶ and Galamian's *Contemporary Violin Technique* method,³⁵⁷ contain exercises which consist of varied dotted rhythms in separate or slurred bows. The objective of these exercises is to improve the rhythmic timing of the left-hand fingers. These rhythmic exercises can also be applied to the scale systems of Flesch,³⁵⁸ Granat,³⁵⁹ Galamian,³⁶⁰ and Fischer.³⁶¹ Practising these rhythmic

³⁵⁶ Fischer, "Rhythm, accent, bowing and dynamic patterns" in *Scales by Simon Fischer*, p. 122-123.

³⁵⁷ Galamian, Contemporary Violin Technique: Bowing and Rhythm Patters, vol. 1, part 2, p. 3, and 22.

³⁵⁸ Flesch, Scale System: Scale Exercises in All Major and Minor Keys for Daily Study, p. 1-5.

³⁵⁹ Granat, *The Heifetz Scale Book*, p. 28-32.

³⁶⁰ Galamian, Contemporary Violin Technique: Scale and Arpeggio Exercises with Bowing and Rhythm Patters, vol. 1, part 1, p. 9.

³⁶¹ Fischer, Scales by Simon Fischer, p. 134.

exercises will not only improve the rhythmic timing of the left-hand fingers but will also develop the intonation of the tonic key C major.

The studies by Sitt (book III),³⁶² Wohlfahrt,³⁶³ Mazas,³⁶⁴ Kayser,³⁶⁵ and Gaviniés,³⁶⁶ contain bowings that contribute to the development of the hook stroke. The studies in Sitt's book V, and by Fiorillo, develop the skill of playing triple-stops. From the list of recommended studies, there is one which utilises aspects of both techniques in the same context; Wohlfahrt's study No. 60, *Allegro con fuoco*.³⁶⁷ This study is in the tonic key of G major and contains octaves with a small passage in thirds, fourths and sixths. Although the rhythm does not contain a dotted beat, two quavers are followed by a semiquaver note and rest. This rhythm is played continuously throughout the study and requires firm articulation from the bow; which is a skill needed for hook stroke bowing. The octaves in this study require continuous shifts after every note which not only develop towards playing with secure intonation, but also awareness of the distances between the first, second, third, and fourth positions.

The Learning Stages of the Andante Sections

The Andante sections of Caprice Eleven contain a clear melodic line that must be supported by the musically rich and expressive double and triple-stops. Therefore, it is best to divide the learning process into a sequential series of steps.

Step One: The Melodic Line

The first step aims to develop an expressive and dynamic melodic line which has clearly defined phrases. Achieving this step begins by isolating the

³⁶² Sitt, Op. 32 Études For The Violin Book III: Studies in Changing Position, p. 14.

³⁶³ Wohlfahrt, Sixty Studies for the Violin Op. 45, p. 40-41, and 54-55.

³⁶⁴ Mazas, *Etüden Op. 36*, *Heft II*, p. 38-39.

³⁶⁵ Kayser, 36 Etudes/Studies Op. 20, Violine, p. 28-29, and 40-41.

³⁶⁶ Gaviniés, 24 Etudes 'Matinées' for Violin, p. 40-41.

³⁶⁷ Wohlfahrt, Sixty Studies for the Violin Op. 45, p. 54-55.

melodic line from the double and triple-stops. It is essential to practise with the correct fingering as it is pointless to practise two fingerings for the same section.

During this step, the peaks of the phrases should be studied and identified so that they can be translated into the performance. One such interpretation of the music lists the phrases in the following locations:

• Phrase One: bb. 1-4

• Phrase Two: bb. 5-8 (beginning on the upbeat)

• Phrase Three: bb. 9-12

• Phrase Four: bb. 13-14 (beginning on the upbeat)

• Phrase Five: bb. 15-17 (beginning on the upbeat)

• Phrase Six: bb. 18-22

• Phrase Seven: bb. 23-25 (beginning on the upbeat)

• Phrase Eight: bb. 26-28

Step Two: The Lower Voices (Double-stops)

The objective of the second step is to ensure the double-stops are in tune and phrased appropriately according to the melodic line. The double-stops must first be played technically, and without expression, to ensure the intonation is secure. During this process, shifts and left-hand extensions and contractions should be analysed and practised repetitively.

Once the intonation in the double-stops is secure, then the expressive qualities of the melodic line can be applied to the double-stops. This part of the process should incorporate vibrato, portamento shifts, and variations in bow speed, and pressure.

Step Three: Consolidating the Parts

The aim of step three is to consolidate the melodic line and the double-

193

stops. When first attempting the double and triple-stops with the melodic line, it should be practised slowly at first, to ensure the intonation is not affected. The initial practise sessions of this step will require complete technical focus without musical expression, to ensure the melodic line and chords are in tune.

When consolidating the parts, it is typical for the rhythm to become disengaged from the beat. To solve this problem, the chords and grace notes must be played before the beat, so the melodic line is rhythmical and played with a consistent beat.

As the violinist becomes comfortable with the melodic line and chords, the musical qualities of the tune that were introduced in the previous steps can be practised in this final stage.

A video demonstration of the three stages covered in this sub-chapter; *The Learning Stages of the Andante Sections*, is provided on **Video Clip 36**.

Video Clip 36 Caprice Eleven: bb. 1-8, Learning the double-stops

The Learning Stages of the Hook Stroke in the Presto Section

Before practising the *presto* section of Caprice Ten, it is first necessary to decide what type of hook stroke is suitable. The violinist has three options to choose from:

Option One:

To play the hook stroke with Paganini's original *contro* bow stroke. This bow stroke consists of separated hook strokes which are played at the tip of the bow, commencing on an up-bow. The triplets which occur on the third and fourth beats of the bar also commence on an up-bow.

Option Two:

To play the hook stroke with a detached slur stroke. This bowing pattern repeats in a down-down, up-up direction with an articulated bow stroke before each note. The triplets on the third and fourth beats commence on a down-bow.

Option Three:

The hook stroke is played with separate bows which commence on a downbow. The triplets which fall on the third and fourth beats of the bar also commence on a down-bow.

While performing with Paganini's markings is always desired, performing Caprice Eleven with the original bow markings at a presto tempo is exceptionally challenging. The coordination of the string crossings in combination with the up-bows which fall on strong beats makes the bow strokes feel unnatural and upside-down. There is no known recording or live performance of Caprice Eleven that demonstrates the bowing which is instructed by Paganini.

Therefore, to perform this Caprice at a fast tempo, the bow stroke must be played as a separated slur bow stroke (option two), or as a separated bow stroke which commences on a down-bow (option three).

The bow strokes presented in options two and three can be used successfully for Caprice Eleven. However, the separated slur stroke; illustrated in option two, allows the player to manage the string crossings quickly as the bow can pivot during the slur. For this reason, the separated slur bow stroke was selected and used in this project.

Once the presto section of Caprice Eleven is read through, and fingerings and bowings are selected, the presto section should be practised to develop the bowing and difficult string crossings.

By making a small adjustment to the rhythm in the presto section, the articulation and bowing can be practised as a technical exercise in the context of the Caprice. The rhythmic adjustment requires two semiquavers to replace the dotted semiquaver and demissemiquavers each time they occur in the presto section. The objective of the exercise is to ensure the bow makes firm contact with the string; this is especially important for notes

that fall on the strong beats of the bar. This exercise is a preparatory step that assists with the development of the articulation in the hook stroke. **Video Clip 37** provides a demonstration of this exercise.

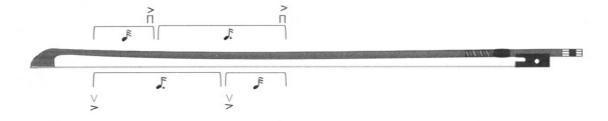
Video Clip 37 Caprice Eleven: bb. 54-65, Eliminating the hook stroke

Articulation in Hook Stroke Bowing

The separated slurred hook stroke bowing pattern has two bow strokes in the same direction. To avoid the bowing pattern becoming a legato slur, the bow must stop between the strokes. Therefore, there are two points of contact where the bow must apply pressure onto the bow stick and release. These articulation points exist at the beginning of the bow movements and are essential characteristics of the hook stroke bowing pattern.

Illustrated in **Figure 11** are the articulation points within the hook stroke bowing pattern. The accents demonstrate the application of bow pressure at the beginning of the dotted semiquaver and the demi-semiquaver. After the accent is applied, the bow must release the pressure so that it can be reapplied for the second note.

Figure 11 Hook Stroke Bowing Articulation Points



In preparation for Caprice Eleven, the hook stroke bowing pattern should be practised on open strings at various tempos. The application of bow pressure and its release should be consistently monitored during practice sessions. **Video Clip 38** provides a demonstration of this exercise.

Video Clip 38 Caprice Eleven: Articulation in hook stroke bowing

When practising in a musical context, it is typical for techniques to lose a percentage of their refinement, due to the player trying to consolidate the musical and technical challenges of the piece. It is, therefore, necessary to practise slowly and methodically, so the challenges of the piece can be consolidated and performed at a high standard.³⁶⁸

Before the Caprice reaches the final stages of consolidation, it is beneficial to practise one final exercise, which will assist with the string crossings, hook stroke, and articulation.

The exercise aims to ensure clarity and refinement between the hook stroke bowing pattern and the triplet transitions. The exercise is played by replacing the notes of the hook stroke with the corresponding open strings. This methodical style of practice will illustrate any uncoordinated string crossings, unprepared shifts, and wrong articulations. **Video Clip 39** provides a demonstration of this exercise.

Video Clip 39 Caprice Eleven: bb. 29-36, Developing secure string crossings

Consolidating Caprice Eleven

When practising the Caprice to consolidate the musical and technical challenges, there is one section of music which may require additional practice. This section of music exists between bars 79 and 84 and features consecutive bars of hook stroke bowing with string crossings that skip over neighbouring strings.

When tackling these string crossings in a separated slur bow stroke, the bow must pivot towards the end of the bow stroke so that the bow is prepared for the next group of upcoming notes on a different string. These string crossings are challenging to play because there is little time to adjust the bow angle. Therefore, it is necessary to use the upper right arm to adjust to the appropriate string height so the forearm and hand can arrive at the correct string in time.

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³⁶⁸ Flesch, *The Art of Violin Playing*, p. 147.

A video demonstration of the challenging string crossings in bars 79 to 85 is provided on **Video Clip 40**. The video presents the string crossings in slow motion, at practise tempo, and performance tempo.

Video Clip 40 Caprice Eleven: bb. 79-85, Managing consecutive string crossings

Recommended Repertoire Post Caprice Eleven

The repertoire listed in **Table 29** illustrates works that feature the hook stroke bowing in either a separate bow or a separated-slur bowing pattern. Although most of the works only feature the hook stroke in small sections of the work, the pieces by Kreisler feature the hook throughout the works. Particularly notable is Kreisler's Liebesleid, ³⁶⁹ which features double and double-dotted notes throughout the piece. The exercises which help support the articulation in Caprice Eleven will assist in the development of the hook stroke bowing pattern in these works.

 Table 29
 Recommended Repertoire Post Caprice Eleven

Composer	Repertoire			
Bartok, B.	Violin Concerto No. 2 Sz. 112			
Brahms, J.	Sonata in A major, No. 2, Op. 100			
Falla, M.	Canción, from 7 Canciones Populares Españolas			
Hindemith, P.	Sonata for Violin Solo, Op. 31 No. 1			
Kreisler, F.	Aucassin and Nicolette, (Medieval Canzonetta)			
Kreisler, F.	Liebesleid, (Love's Sorrow) for violin and piano			
Kreisler, F.	Menuett in the style of Porpora, for violin and piano			
Saint-Saens, C.	Violin Concerto in B minor, Op. 61 No. 3			

198

³⁶⁹ Fritz Kreisler, "Liebesleid" in *Three Old Viennese Dances* (Mainz: Schott, 1910), 29029-30.

CHAPTER TEN

Caprice Number Twelve

Chapter Ten focuses on the technical and musical difficulties of Caprice Twelve. The challenges of this Caprice include string crossings, double-stops, and left-hand extensions and contractions. Exercises to overcome these difficulties are provided in this chapter with step-by-step instructions and video demonstrations. A section on note discrepancies, and recommended repertoire to study before and after the Caprice is also included in this chapter.

Note Discrepancies

Despite there being 1074 notes in Caprice Twelve, only three bars contain discrepancies. **Table 30** (p. 200) illustrates these discrepancies in bars 4, 52, and 57. The discrepancy in bar 52 is often written as a G-flat or G-natural. Unfortunately, this discrepancy is due to Paganini's inconsistent writing in his score. ³⁷⁰ Paganini would often insert an accidental next to a note, but not repeat the accidental if the note reappeared at a different octave in the same bar. ³⁷¹ Unlike Paganini's typical annotations, he repeats the flat sign on the eighth semiquaver in his score. Many editions consider the flat sign a mistake, but the note should remain a G-flat to ensure the key remains in G-flat major.

³⁷⁰ Renato de Barbieri, "Annotations on Interpretation," from Capriccio No. 12 in A flat major Op. 1 (Genoa: 1990) in Seiffert, Henle Library, iPad vers 1.6.0.G, Apple App Store, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8.

³⁷¹ ibid.

Table 30 Caprice Twelve: Note Discrepancies

Editions of the Paganini Caprices								
Bar	Original	Ricordi,	Breitkopf	Richaul	Ricordi,	Peters	IMC	Urtext
Number	Score	1st ed.	& Härtel	t	2 nd ed.	c.1910	1973	1990
	c.1817	c.1820	c.1823	c.1825	c.1836			
4, 2 nd	A flat	С	C natural	С	С	A flat	A flat	A flat
note		natural		natural	natural			
52, 8 th	G flat	G flat	G flat	G flat	G flat	G	G	G flat
note						natural	natural	
57, 4 th	D flat	D flat	D flat	D flat	D	D	D	D
note					natural	natural	natural	natural

Data from Dr. Wolf-Dieter Seiffert, Henle Library, iPad vers 1.6.0.G, Apple App Store, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8 and Nicolò Paganini, 24 Capricci Für Violine Solo (Urtext), ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

Recommended Exercises, Studies and Scales Before Learning Caprice Twelve

The Primary Technique of Caprice Twelve is string crossings. However, unlike string crossings which are usually played with separate bow strokes, Caprice Twelve comprises of neighbouring string crossings which are bowed in four, eight, twelve, sixteen, or twenty-note slurs. Other techniques include extensions reaching the interval of a twelth and fast left-hand passagework. **Table 31** (p. 201) provides a list of repertoires that should be used to support the development of these techniques.

It is not necessary to play all the scale systems that are recommended in **Table 31** (p. 201); however, practising octaves is recommended. Most of the left-hand extensions in the Caprice rely on the frame of the left-hand position to measure the location the note. Therefore, practising octaves will support the intonation for all the intervals that occur within the hand frame.

The list of recommended exercises focuses on the development of double-stops and string crossings. The violinist should practise a mixture of these exercises to develop skills in both of these areas. Even though Caprice Twelve does not contain double-stops, they are used as a tool during the learning stages. Therefore, the violinist must practise them before the Caprice is studied.

 Table 31
 Caprice Twelve: Recommended Repertoire

Exercises	Studies
Fischer Double Stops:	Sitt Book I: 8 Moderato, 18 Moderato – broken
Octaves p. 129-131 and	thirds in a slurred bow stroke
Fingered Octaves p. 132-	
134, Tenths p. 135-136 in	
the key of A flat major	
Fischer Basics: Pivoting and	Herrmann: 7 Allegro moderato (Study for the
String Crossings exercises	Wrist) – combination of détaché and slurs, 13 Con
42-53, p. 27-34	moto (Study in Tenths), 14 Presto (Study in
	Octaves and Unisons) – all contain string
	crossings in slurs
Fischer Practice: String	Mazas Heft I: 30 Allegro non troppo – string
Crossing exercises 79-81, p.	crossings with slurs and left hand pizzicato
101-105	
Ševčík Op. 1 Part 1: No. 10,	Dont Op. 37: 18 Allegro – preparatory study to
11, 18, 20, 29	develop smooth slurs across three strings
	Kreutzer: 13 Moderato – smooth slurs across
	neighbouring strings
Dounis The Artist's	Dont Op. 35: 7 Allegro moderato – slurs in 4 and
Technique of Violin Playing	8 notes with string crossings
Op. 12, Second Part The	G : '' 12 D 1 4
Bow: Legato-Sustained	Gaviniés: 12 Presto – slurs in 4 with string
Tones, p. 87	crossings
Yanshinov: Exercise 19, p.	De Bériot: 4 Andantino quasi allegretto – slurs
7, and <i>exercise 26</i> , p. 10	incorporated with dynamic and expression
	markings, 24 Allegro moderato – string crossings
	with slurs
	Fischer Double Stops: Octaves p. 129-131 and Fingered Octaves p. 132- 134, Tenths p. 135-136 in the key of A flat major Fischer Basics: Pivoting and String Crossings exercises 42-53, p. 27-34 Fischer Practice: String Crossing exercises 79-81, p. 101-105 Ševčík Op. 1 Part 1: No. 10, 11, 18, 20, 29 Dounis The Artist's Technique of Violin Playing Op. 12, Second Part The Bow: Legato-Sustained Tones, p. 87 Yanshinov: Exercise 19, p.

The recommended studies listed in **Table 31** provide the player with a range of repertoire that varies in difficulty. The elementary studies of Sitt,³⁷² and Herrmann,³⁷³ are

³⁷² Sitt, Op. 32 Études For The Violin, Book I: Twenty Étudies in the First Position, p. 8, and 18.

³⁷³ Herrmann, Fourteen Violin-Études for the Systematic Study of Double-Stops, p. 18-19, and 32-35.

both beneficial repertoires to study as they specifically focus on bow strokes that promote the development of string crossings.

Fischer's chapter on *Pivoting* is a valuable resource that provides information and exercises on bowing angles.³⁷⁴ Fischer describes that there are "seven levels of the bow" (in violin playing),³⁷⁵ which means that the bow can be adjusted to touch a single string or two strings at a time. Developing awareness of the height of the right hand and how it affects the string levels is essential to manage the string crossings in Caprice Twelve.

The intermediate studies of Mazas,³⁷⁶ Dont (Op. 37),³⁷⁷ and Kreutzer,³⁷⁸ involve challenging left-hand extensions and multiple string crossings in a slurred bow stroke. One study by Mazas is particularly unusual because it requires the violinist to play left-hand pizzicato while simultaneously playing slurs and fingered notes.³⁷⁹ Although Paganini's Caprice Twelve does not require the violinist to perform three techniques simultaneously, studying Mazas' piece will help develop individual finger dexterity and planning; which are necessary skills to perform Caprice Twelve.

The advanced studies of Dont (Op. 35),³⁸⁰ Gaviniés,³⁸¹ and De Bériot,³⁸² require the player to play musically and with expression. They often include specific dynamic and expression markings that must be included with challenging string crossings and tricky left-hand passagework. These studies are more challenging to play because they often contain slurs in eight or sixteen-note groups.

³⁷⁴ Fischer, "Pivoting and String Crossing Exercises," in *Basics by Simon Fischer*, p. 27.

³⁷⁵ ibid.

³⁷⁶ Mazas, *Etüden Op. 36*, *Heft I*, p. 44.

³⁷⁷ Dont, 24 Preparatory Exercises to Kreutzer & Rode Studies, Op. 37 for Violine Solo, p. 28-29.

³⁷⁸ Kreutzer, 42 Studies for the Violin, p. 20-22.

³⁷⁹ Mazas, "No. 30 Allegro non Troppo" in Etüden Op. 36, Heft I, p. 44.

³⁸⁰ Dont, 24 Etudes and Caprices, Op. 35 for Violin, p. 14-15.

³⁸¹ Gaviniés, 24 Etudes 'Matinées' for Violin, p. 28-29.

³⁸² De Bériot, *The First Thirty Concert Studies for the Violin, Op. 123*, p. 9, and 46-47.

The Importance of Double-Stop Practice in String Crossings

Caprice Twelve comprises of neighbouring string crossings in slurs throughout most of the Caprice. There are only a few bars that contain a series of consecutive notes on the same string, and these occur in bars 3, 4, 7, 8, 30, 36, 43, 46, 63, 67 and 68. Naturally, the fingering selections determine the selection of these bars or fragments of the bars.

Apart from the fragments of bars that contain consecutive notes on the same string, and string crossings that skip a string, almost all of the string crossings can be converted into double-stops. Practising string crossings in double-stops benefit both the left and right hands for the following reasons:

1. The recognition of notes within a position (e.g. the third position) is easily identifiable.

The Caprice contains many thumb and finger extensions, so it is essential to learn the notes and finger patterns which are located in each position on the violin. Learning the notes in each position ensures that the extensions do not interfere with the notes in the hand frame.

2. The left-hand can maintain contact with the notes in the hand frame.

When practising the Caprice in double-stops, the left wrist is required to rotate closer to the neck of the violin. It must remain relaxed but fixed in this position for the duration of the Caprice; even when the Caprice is played with string crossings. This hand position enables the fingers to reach the challenging extensions which occur throughout.

3. The placement of the left-thumb can be easily adjusted to support the hand frame.

Thumb extensions only exist in pieces which contain large intervals or awkward finger patterns. Caprice Twelve contains intervals of a twelfth which qualify the piece for

thumb extensions—practising in double-stops forces the left-hand to hold the large intervals and make adjustments to the thumb's placement where necessary.

4. When playing two strings at a time, the right-hand develops an awareness of the pivoting angles required to play string crossings.

Playing two strings at once forces the right-hand to maintain an imaginary line which draws the bow across two strings at a particular angle. When the learning stages of the Caprice progress to string crossings, the right-hand will oscillate either side of the imaginary line; resulting in string crossings.

5. The height of the right elbow remains in the same position for double-stops as it does for string crossings.

The height of the right elbow affects the wrist's control over the string crossings. As mentioned in point three (p. 203), the right-hand will oscillate, creating a vertical movement using the wrist. However, if the height of the right elbow is too low or high, then the oscillations may miss the string entirely. Smooth string crossings come from the movements of the right wrist oscillating marginally in a vertical direction while the forearm moves horizontally.

Video Clip 41 provides a demonstration of bars 1 to 8 as double-stops. Practising in double-stops is the first step towards being able to play the Caprice with smooth string crossings.

Video Clip 41 Caprice Twelve: bb. 1-8, Double-stop exercise

Thumb-Extensions

A specific type of shift is required to maintain the intervals in Caprice Twelve.

Although it has no formal name, it is called the *Thumb-Extension* in this project. The Thumb-Extension is an independent movement from the rest of the hand that establishes

the thumb in a new position without the fingers following. The purpose of the Thumb-Extension is to provide support to the fingers and hand when stretching for large intervals or awkward fingering passages.

The Thumb-Extension bears no formal title because it was a common way of moving around the violin during the pre-chinrest era.³⁸³ In Ricci's book *Ricci on Glissando*, he refers to two systems of playing - the old and new:

In the pre-chinrest era, the violin was supported primarily by the left hand - not by the chin - and the head was free to move. All the virtuosi from this era - including Paganini, Ernst, Vieuxtemps, Wieniawski, and Sauret - played without a chinrest and held the violin in this manner. In the old system, the left hand was kept against the ribs of the violin...³⁸⁴

This crawling method of violin playing is also described in Flesch's method *The Art of Violin Playing*.³⁸⁵ On the topic of shifting the finger and thumb at the same time to a new position, Flesch states that "it is the simultaneous movement of the thumb and finger motion which frequently leads to failure of a passage."³⁸⁶

Only 38 years later, Galamian published his method *Principles of Violin Playing & Teaching*. The method states that there are two categories of shifts, the *half*, and the *complete shift*. Galamian explains:

There are two main categories of shifts; they will be termed the *complete shift* and the *half shift*. In the complete shift, both the hand and the thumb move into the new position. In the half shift, the thumb does not change its place of contact with the neck of the violin. Instead it remains anchored, and by bending and stretching permits the hand and fingers to move up or down into other positions. This type of motion, the half shift, can be used in many instances where the fingers have to move into another position for a few notes only. Properly applied, it can greatly promote facility and security in passages that would otherwise be very cumbersome.³⁸⁷

³⁸³ Ricci, Ricci on Glissando: The Shortcut to Violin Technique, p. 1.

³⁸⁴ ibid.

³⁸⁵ Flesch, *The Art of Violin Playing*, p. 13.

³⁸⁶ ibid.

³⁸⁷ Galamian, Principles of Violin Playing & Teaching, p. 23-24.

Although Spohr invented the chin rest in c.1820, the left-hand was not freed of its position on the violin until well into the nineteenth century.³⁸⁸ Therefore, only violin methods of the late twentieth century reflect the modern methods of shifting that are currently in use. However, for the violinist who tackles the Paganini Caprices, it is necessary to understand this traditional method of violin playing, as sections of Caprice Twelve require this old system of violin playing.

Before the locations of the thumb-extensions are listed, it is necessary first to define and categorise the movements. There are two directions the left thumb can move in; towards the bridge or the scroll. Moving towards the direction of the bridge is called the *Ascending Thumb-Extension* while moving towards the scroll is called the *Descending Thumb-Extension*. **Table 32** provides the locations of the thumb-extensions.

 Table 32
 Caprice Twelve: Thumb-Extension Locations

Bars Containing Thumb-Extensions				
Ascending Thumb- 1, 6, 10, 12, 14, 16, 20, 21, 22, 23, 27, 34, 35, 44, 45, 56, 58				
Extensions				
Descending Thumb- 3, 7, 10, 12, 15, 19, 20, 21, 22, 23, 29, 35, 36, 45, 46, 56				
Extensions				

Video Clip 42 provides a demonstration of the thumb-extensions from bars 1 to 8. These extensions move independently from the fingers without interfering with the melodic line. The timing of these movements is critical to ensure the left-hand is prepared for the large intervals and position changes.

Video Clip 42 Caprice Twelve: bb. 1-8, Thumb extension

³⁸⁸ Stowell, *The Cambridge Companion to the Violin*, p. 122-123.

The Direction of Right-Hand String Crossings

The string crossings in Caprice Twelve require smooth, controlled string crossings across neighbouring strings. It is beneficial to commence string crossing exercises using open strings before including the challenging notes of the left-hand. Video Clip 43 provides a demonstration of a double-stop across neighbouring strings, followed by string crossings on the open strings.

Video Clip 43 Caprice Twelve: String crossing exercise

There are three components required to operate a slurred string crossing on neighbouring strings. The first component involves establishing an appropriate height of the right elbow, relative to the string height.

The second component involves the right forearm drawing the bow across the two strings in a straight line from the nut to the tip. Although this is a straightforward movement, the bow must not stray from the two strings during the bow stroke.

The final component requires the right-hand and wrist to oscillate in a vertical direction while the forearm moves in a horizontal direction. Figure 12 illustrates the directions of the second and third components as they move across the open strings.

Figure 12 Caprice Twelve: Slurred String Crossing Directions



The slurred string crossings require additional care in the lower and upper sections of the bow due to the angles and bow weight. The lower half of the bow requires the little finger to apply downwards force so the bow pivots in an upwards direction. This motion assists the bow with its oscillations in the lower half. In the upper half of the bow, the pivoting angles are more substantial; so, the right wrist must be flexible so it can move in a vertical direction. The right-hand moves in a *waving* motion across the neighbouring strings and becomes larger towards the upper half of the bow. **Video Clip 44** demonstrates these movements in slow motion.

Video Clip 44 Caprice Twelve: Slow motion right wrist movements

Significant Left-Hand Extensions

There are several bars in Caprice Twelve that contain significant left-hand extensions. These extensions include intervals of a tenth, ³⁸⁹ eleventh, ³⁹⁰ and twelfth. ³⁹¹

An extension can open the left-hand in two directions. A stretch towards the bridge is called a *Forward Extension*, and a stretch towards the scroll is a *Backward Extension*.³⁹²

The Forward Extension requires a simultaneous movement from the thumb and finger. The thumb should relocate its position to approximately the middle of the extension, between the stretching fingers, so that it can support the third and fourth fingers. As the extension occurs, the index finger holds firm on the fingerboard and rotates providing length to the third and fourth fingers. Depending on the extension, the index finger can rotate so severely it rests on the side of the finger instead of the finger pad.

Video Clip 45 (p. 209) provides a demonstration of the Forward Extension in bars 20 to 21. During the video clip, the extension is demonstrated in slow motion, so that the simultaneous movements can be viewed.

208

³⁸⁹ The intervals of a tenth, these occur in bars 2, 6, 10, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 28, 34, 35, 44, 45, 56, 57, 58, 59, 60, 61, 63, and 64.

³⁹⁰ The intervals of an eleventh occur in bars 20, and 63.

³⁹¹ The intervals of a twelfth occur in bars 12, 15, 16, 34, 35, 45, 56, 58, and 59.

³⁹² Flesch, *The Art of Violin Playing*, p. 97.

Video Clip 45 Caprice Twelve: bb. 20-21, Preparing the hand for tenths

The Backward Extension usually occurs when notes from the half position or lower positions are needed. This extension requires the index finger to uncurl and stretch away from the rest of the hand. Depending on the distance of the extension, the index finger can stretch until it is fully extended and straight.

Simultaneous Forwards and Backwards extensions occur rarely but do exist in Caprice Twelve. An example can be found in bar 16 on the fourth beat of the bar between the F and B-natural. As the first, second, and third beats of the bar are played in the third position, the first finger must extend by a semitone into the second position to reach the B-natural. At the same time, the thumb and fourth finger must extend forwards to reach the F; this creates an interval of a twelfth.³⁹³

Recommended Repertoire Post Caprice Twelve

The repertoire in **Table 33** illustrates works that contain neighbouring string crossings in legato slurs. Unfortunately, very few composers born after Paganini have employed continuous legato slurs, so the works listed by Bloch,³⁹⁴ Ravel,³⁹⁵ and Wieniawski,³⁹⁶ only contain string crossings across neighbouring strings in a two-note slur.

 Table 33
 Recommended Repertoire Post Caprice Twelve

Composer	Repertoire	
Brahms, J.	Sonata no. 3 in D minor, Op. 108	
Bloch, E.	Suite I for Violin Solo	
Ravel, M.	Allegretto, from Violin Sonata in G major from Sonata No. 1	
Wieniawski, H.	Carnaval Russe, Theme and Variations Op. 11	
Ysaye, E.	(Obsession) Sonate for Violin Solo No. 2, Op. 27	
Vaughan Williams, R.	The Lark Ascending, Romance for Violin & Orchestra	

³⁹³ Further information concerning left-hand stretches are addressed in Chapter Eleven (see Left-Hand Extensions and Contractions in Caprice Sixteen, p. 224).

³⁹⁴ Ernest Bloch, Suite No. 1 for Solo Violin, B. 99 (New York: Broude Brothers, 1959), 2037.

³⁹⁵ Maurice Ravel, *Violin Sonata No. 1*, edited by Arbie Orenstein (Paris: Salabert, 1975), EAS17226.

³⁹⁶ Henryk Wieniawski, Le Carnaval Russe, Op. 11 (Leipzig: Kistner, c.a.1854), 2004.

CHAPTER ELEVEN

Caprice Number Sixteen

The Primary Technique of the Sixteenth Caprice, *Presto*, is a bowing called détaché bow stroke. This bow stroke is the most basic of all bow strokes, making it a necessary part of the foundation of violin playing. Apart from studying this primary bowing technique, this chapter also discusses the *forte* markings, the tempo, specific problem areas, string crossings, and left-hand extensions and contractions.

Note Discrepancies

There are no note discrepancies in any of the publications of Caprice Sixteen. However, there are several articulations and dynamics which are misplaced or non-existent in many of the editions. These errors are due to the original score being crammed on a mere seven lines. Authors Cantù and Herttrich describe the condition of Paganini's autograph.

In the autograph, this piece is written down in a cramped hand on a mere seven lines. Although Paganini set the f signs very carefully, the engraver of R1 read them incorrectly in numerous passages. In R1/R2/R3/B/Ri they are often placed ambiguously or incorrectly; the two f in M 32 and the first one M 33 are omitted there altogether.³⁹⁷

It is beneficial to use the IMC and Urtext editions when learning Caprice Sixteen as they are the most reliable publications that exist of the Paganini Caprices.³⁹⁸ Unfortunately, most of the earlier editions such as the Breitkopf and Härtel,³⁹⁹ and Richault edition,⁴⁰⁰ copied

³⁹⁷ Alberto Cantù and Ernst Herttrich, (Genoa and Munich: 1990) from Dr. Wolf-Dieter Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8. – R1 refers to the first Ricordi edition (1820), R2 the second Ricordi edition (1836), R3 the third edition (1872), B refers to the Breitkopf & Härtel edition (1823), and Ri the Richault edition (ca.1825).

³⁹⁸ Paganini (New York: IMC, 1973), 2292; Paganini (München: G. Henle Verlag, 1990), 450,

³⁹⁹ Paganini (Leipzig: Breitkopf & Härtel, c.a.1823), 3936.

⁴⁰⁰ Paganini (Paris: Richault, c.a.1825), 1028.R.

mistakes from the first and second Ricordi editions,⁴⁰¹ which led to a whole series of publications containing incorrect notation.⁴⁰²

Recommended Exercises, Studies and Scales Before Learning Caprice Sixteen

Emil Kross (1852-1917) a German violinist known for his scholarly composition titled *ViolinSchule* (first published in 1899),⁴⁰³ produced a fascinating edition of the Paganini Caprices in 1922. Kross arranged the Caprices in order of difficulty and included short descriptions on each of the Caprices. Kross presents Caprice Sixteen first out of the collection of twenty-four Caprices and provides the following commentary.

With exception of the notes specially marked (f) this Caprice is to be played *mezza voce* throughout. Only so much of the middle of the bow to be used as is necessary to set the strings into vibration. It is very difficult to produce the accented notes with the necessary precision and nicety, owing to the rapid tempo of this Caprice. This accentuation must never interfere in the slightest degree with the tempo at which the study is taken. Not only must the various bowings be executed with the greatest rapidity but with absolute distinctness as well...⁴⁰⁴

The bowing technique described by Kross is a détaché bow stroke, which is also the Primary Technique in Caprice Sixteen. **Table 34** (p. 212) provides a list of works to supplement the learning of the détaché bowing; however, secondary techniques such as string crossings, and left-hand extensions and contractions are also included where possible.

⁴⁰¹ Paganini (Milan: Ricordi, c.a.1820), 403; Paganini (Milan: Ricordi, c.a.1836), 9036.

⁴⁰² Stowell, "Paganini: 24 Capricci per il Violino solo, dedicato agli Aritsti, Op. 1 – Robin Stowell," http://mhm hud.ac.uk/chase/.

⁴⁰³ Kross, ViolinSchule, 26880.

⁴⁰⁴ Paganini (New York: Carl Fischer, 1922), 15522, p. 2.

 Table 34
 Caprice Sixteen: Recommended Repertoire

Scale Systems	Exercises	Studies
Flesch: G Minor, p.	Fischer Basics: Détaché	Sitt Book I: 17 Allegro
26-30	exercises 83-87, p. 59-61	
Granat: Heifetz Scale	Fischer Practice: Détaché	Sitt Book III: 60 Allegro Moderato
Book G minor and G	exercises 49-51 p. 86-87	
<i>major</i> , p. 3-7		
Galamian Vol 1: 3.	Ševčík Op. 1 Part 1: No. 1-7,	Wohlfahrt: 1 Allegro moderato, 2 Allegretto
Three-Octave Scales	Part 2: No. 1, 4, 12, 21, 30,	Moderato, 3 Moderato, 4 Allegretto, 5 Moderato,
p. 5-6 with bowing	35, 39, Part 3: No. 1, 3, 9, 11	7 Allegro moderato, 11 Moderato, 14 Allegro non
B1 and rhythm R1		tanto, 15 Allegro, 17 Moderato assai, 19
		Moderato, 23 Moderato, 27 Allegro, 31
		Moderato, 34 Allegro, 36 Moderato, 37
		Moderato, 38 Moderato, 49 Allegro
Fischer Scales:	Dounis The Violin Players'	Mazas Heft I: 4 Allegro moderato, 5 Allegro non
Three-octave scales,	Daily Dozen Op. 20: Sixth	troppo, 6 Allegro non troppo, 29 Allegro non
arpeggios and	Exercise (for shifting),	troppo (The Chatterbox)
chromatic scales, p.	exercise B, p. 240	
129	Dounis The Artist's	Kayser: 1 Allegro moderato, 9 Allegro assai,
	Technique of Violin Playing	allegro energico, 26 Allegro assai
	Op. 12, Second Part The	Kreutzer: 2 Allegro moderato, 5 Allegro
	Bow: Typical exercises for	moderato, 8 Allegro non troppo, 12 Allegro
	all bowings, p. 79-80	moderato, 26 Moderato, 30 Moderato
		Dancla Op. 73: 4 Allegro vivo molto, 15 Allegro
		vivo e con brio
		Dont Op. 35: 2 Presto, 20 Vivace assai
		Fiorillo: 11 Moderato, 34 Moderato
		De Bériot: 10 Allegro moderato, 20 Allegro
		Rode: 2 Allegretto, 6 Moderato, 8 Moderato
		assai, 10 Allegretto

The recommended scale systems in **Table 34** are useful to work on developing consistent and accurate intonation in the key of G minor. Care is required when playing the leading note of the scale as it needs to be sharper than a regular concert F-sharp so that it fits within the context of the key. Similarly, maintaining consistent intonation is a

challenge in the *Sixth Exercise* from Dounis' *The Violin Player's Daily Dozen*, as the left-hand moves through a series of shifts while trying to maintain an accurate pitch.⁴⁰⁵

The right-hand is also challenged in the many exercises offered in Dounis' chapter on *The Bow*, ⁴⁰⁶ which provides the player with several string crossing exercises, and variations on repeated strings.

The recommended studies listed in **Table 34** (p. 212) provide the violinist with a varied range of repertoire at various levels of difficulty. Particularly useful are the elementary studies by Sitt and Wohlfahrt, which contain simple rhythms and notes in a single position. These elementary studies review the simplest movements of violin playing and assist the student in building a solid foundation. They should be played periodically to ensure basic movements in the left and right hands are operating correctly.

The intermediate studies of Mazas, ⁴⁰⁸ Kayser, ⁴⁰⁹ Kreutzer, ⁴¹⁰ and Dancla, ⁴¹¹ provide a range of challenges for the violinist to navigate including, accents, position changes, dynamics, and string crossings. However, one study that is particularly important to explore is Kreutzer's study *No. 30 Moderato*. ⁴¹² This study is similar to Paganini's Caprice Sixteen in style, bow stroke, string crossings, and key that it is an ideal preliminary study to prepare before commencing Caprice Sixteen.

The more advanced studies by Dont,⁴¹³ Fiorillo,⁴¹⁴ De Bériot,⁴¹⁵ and Rode,⁴¹⁶ share similar challenges to the intermediate studies but are far more virtuosic. They provide

⁴⁰⁵ Dounis, "Sixth Exercise (for shifting)" from *The Violin Player's Daily Dozen, Op. 20*, in *The Dounis Collection*, p. 240.

⁴⁰⁶ Dounis, "I. Typical Exercises for all bowings," from The Artist's Technique of Violin Playing, Op. 12, in The Dounis Collection, p. 79-80.

⁴⁰⁷ Sitt, Études for the Violin Op. 32, Book 1: Twenty Ètudes in the First Position, p. 16; Wohlfahrt, Sixty Studies for the Violin, Op. 45, p. 5-7, 8, 10, 12-16, 20, 22-23, 28, 31, 33-34, and 44-45.

⁴⁰⁸ Mazas, *Etüden, Op. 36, Heft I*, p. 8-11, and 42-43.

⁴⁰⁹ Kayser, *36 Etüden, Op. 20*, p. 3, 10-11, and 32-33.

⁴¹⁰ Kreutzer, 42 Studies for Violin, p. 5, 7, 12-13, 19, 48-49, and 57-59.

⁴¹¹ Dancla, 20 Etudes Brillantes, Op. 73, p. 8-9, and 30-31.

⁴¹² Kreutzer, "No. 30 Moderato," in 42 Studies for Violin, p. 57.

⁴¹³ Dont, 24 Etudes and Caprices, Op. 35, p. 4-5, and 34-35.

⁴¹⁴ Fiorillo, *36 Etüden*, p. 16-17, and 46-47.

⁴¹⁵ De Bériot, *The First Thirty Concert Studies for the Violin, Op. 123*, p. 18-19, and 38-39.

⁴¹⁶ Rode, *24 Caprices*, p. 4-5, 12-13, 16-17, and 20-21.

challenging opportunities for the violinist to navigate higher positions and complex hand extensions and contractions, all while playing a détaché bow stroke. A selection of the elementary and intermediate studies are beneficial to practise before commencing this advanced collection of studies.

Forte Markings and Tempo

Caprice Sixteen contains *forte* signs which are placed under specific notes. The interpretation of these markings creates some confusion, as the purpose and intention of them seem unclear. To better understand Paganini's notation in the score, it is first necessary to explain the function of the forte dynamic music during the eighteenth century, Brown explains:

Although f was most commonly used to indicate an absolute dynamic level, applying not just to single notes but to a whole passage, it was often used during the second half of the eighteenth century to identify notes that required a particular accent. The implications of this marking must, at first, have been wider than they later became, when other instructions for the accent had come into use. Where, as where often the case in the mid-eighteenth century, f was the only accent instruction employed by the composer, it would have had to be deduced from the music context whether it implied a sharp, heavy, moderate, light, rapidly decaying, or more sustained accent. 417

Brown's explanation confirms that the forte signs can be played as accents; although the strength of the accent is now a topic of interpretation. To weigh in on the question of interpretation, Renato de Barbieri (1920-1991) who was an editor of the Urtext edition, stated that "the notes marked **f** must not be accented too sharply or stand out as sforzati; in every case only a simple **f** is intended."

⁴¹⁷ Clive Brown, "The Notation of Accents and Dynamics," in *Classical and Romantic Performing Practice 1750-1900*, (Oxford: Oxford University Press: 1999 and published online in 2008), p. 5, https://doi:10.1093/acprof:oso/9780198161653.003.0004.

⁴¹⁸ Paganini (München: G. Henle Verlag, 1990), 450.

⁴¹⁹ Renato de Barbieri, (Genoa: 1990) from Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8.

The interpretation of the forte markings in Caprice Sixteen directly affect the character, style, timbre, and expression of the Caprice. For example, a strong *forte* sign played with fast bow speed and flat hair may represent an aggressive character within the Caprice, whereas a forte *sign* played with slower bow speed in the lower half of the bow may represent a more refined and elegant version of the Caprice; which changes the mood and expression of the piece.

Unfortunately, the strength of the forte markings cannot be measured until the tempo choice is made. As the Caprice is marked *Presto*, this indicates a tempo between J=168 to 177 bpm. The tempo choice and forte signs create problems for the player because the faster the tempo is, the more challenging it is to articulate the accents.

An audio recording of Caprice Sixteen by Ruggiero Ricci in 1947,⁴²⁰ reveals an interesting decision by Ricci where he plays the Caprice at approximately J= 178 bpm and consequently only manages to play select forte markings. In contrast, Julia Fischer's audio recording of Caprice Sixteen is played at approximately J= 126 bpm but contains pronounced accents at every forte marking.⁴²¹ Neither recording justifies Paganini's score entirely, but instead, illustrates the importance for a musician to understand the notation and make interpretive decisions that they feel will present the best possible version of the Caprice.

From a practical perspective, it is necessary when learning the Caprice to practice it at a slow tempo ensuring the forte markings are accented. When working at slower speeds, it is essential to use the same parts of the bow as when playing at a performance tempo, so the player becomes accustomed to using the correct part of the bow. This Caprice will utilise the middle and upper parts of the bow in particular sections. **Video Clip**46 demonstrates bars 1 to 8 at a practice tempo with accents.

Video Clip 46 Caprice Sixteen: bb. 1-8, Detaché with accented notes

⁴²⁰ Niccolo Paganini, First Complete Recording of the 24 Caprices Op. 1, with Ruggiero Ricci (Violin) recorded 1947, CEDAR, IDIS309, 1998, CD.

⁴²¹ Niccolo Paganini, *Julia Fischer Paganini: 24 Caprices*, with Julia Fischer (Violin) recorded 2010, Decca, 4782274, 2010,

Problem Areas

Bars 39 to 44 in Caprice Sixteen contain an unusual bowing pattern known as *The Paganini Bowing*. ⁴²² It consists of a single down-bow followed by a two-note slur over continuous semiquavers. **Music Score 33** illustrates these bars.

Music Score 33 Caprice Sixteen, bb. 39-44

Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a1910), 9703, p. 31, bb. 39-44.

A doctoral dissertation by Vahe Djingheuzian claims that "there is one type of bowing invented by Paganini which bears his name. A good example of the Paganini bowing is found in Caprice XVI." Ivan Galamian also supports this theory in his method *Principles of Violin Playing & Teaching*, 424 where he provides an example of Paganini's bowing alongside Viotti's bowing (see **Figure 13**, p. 217). In contrast, several academics provide contradicting statements by using the term "*so-called*" each time they refer to the bowing pattern; questioning the authenticity of Paganini's invention. Further research in this area is required to solve this question of authorship.

⁴²² Ivan Galamian, *Principles of Violin Playing & Teaching*, p. 98.

⁴²³ Vahe Djingheuzian, "Technical Devices Used by Paganini in his Compositions" (Doctor of Musical Arts, School of Fine and Applied Arts Boston University, 1963), p. 118, https://open.bu.edu/bitstream/handle/2144/29098/Djingheuzian_Vahe_1963_web.pdf?sequence=1.

⁴²⁴ Ivan Galamian, *Principles of Violin Playing & Teaching*, p. 98.

⁴²⁵ Robin Stowell, *Beethoven Violin Concerto* (UK: Cambridge University Press, 1998), p. 46, https://doi.org/10.1017/CBO9780511605703, and Carl Flesch, *The Art of Violin Playing*, p. 60.

Figure 13 Galamian's Examples of the Viotti & Paganini Bowings



Source: Ivan Galamian, *Principles of Violin Playing & Teaching* (1962 reprint, New York: Dover Publications, 2013), p. 98.

The Austrian violinist and pedagogue Eugene Gruenberg (1854-1928) answered the question of how to play the *Paganini Bowing* in his 1919 method, *Violin Teaching and Violin Study*:

To solve this difficult problem correctly, we must, before all, be able to perform a perfect wrist stroke at the frog, playing notes of short duration with less than one inch of the bow hair. Suppose now, we have to play in succession two long notes with the whole bow, the first one up, the last one down stroke. If we take, say the last sixteenth of the first note and the sixteenth of the second notes back and forth at the frog, it is evident that we shall have to employ the so-called wrist stroke, using extremely little bow. Now, all we have to do is to connect the wrist stroke with the full arm stroke, and should try to connect the two actions so well that they will appear to be amalgamated into one.⁴²⁶

Gruenberg's recommendation on using the wrist stroke is necessary to perform the Paganini Bowing for every down-bow. However, the movement is so small that it is barely visible when demonstrated. The reason for this is that the up-bow slur uses a minimal amount of bow during the two-note slur. Both the down and up-bows must use the same amount of bow for each movement to avoid any unnecessary travel to different parts of the bow. Restricting the bow also enables the player to perform the bowing pattern faster, which is necessary for performing Caprice Sixteen. Video Clip 47 provides a demonstration of the Paganini Bowing from bars 40 to 44 of Caprice Sixteen. The demonstration is performed twice; once slowly, and the second must faster.

Video Clip 47 Caprice Sixteen: bb. 40-44, Articulation

⁴²⁶ Eugene Gruenberg, Violin Teaching and Violin Study (New York: Carl Fischer, 1919), p. 78.

Another problem area is located from bar 25 to 26. Within these bars, intervals consist of thirteenths which are followed by chromatic notes. **Music Score 34** illustrates these bars.

Music Score 34 Caprice Sixteen, bb. 24-26



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a1910), 9703, p. 30, bb. 24-26.

There are two methods of playing these bars. The first requires considerable stretches from the left-hand, requiring the hand to open as far as possible. During this method, the first finger anchors to the F-natural in bar 24 and shifts accordingly to the first note of each beat in bars 25 and 26. These instructions can be identified by the line which is printed next to the one in bar 24. The Peters and IMC editions annotated by Flesch and Galamian suggest this method of playing in their editions.⁴²⁷

There are several problems with this method of playing:

- 1. Depending on the size of the player's hand, reaching these intervals may not be possible.
- 2. The stretches are painful and cause significant tension in the left-hand.
- 3. Tension in the left-hand causes intonation problems.
- 4. It is near impossible to ensure the first finger does not move or change angle when the third finger is placed on the fingerboard.

For the reasons listed above, it is advisable to disregard the suggested markings by Flesch and Galamian, as they hinder the movements of the left-hand required to execute the passage. However, it is worth mentioning that males have significantly greater finger

⁴²⁷ Paganini (Leipzig: C.F. Peters, c.a.1910), 9703, p. 30-31; Paganini (New York: International Music Company, 1973), 2292, p. 30-31.

length and hand mass than women.⁴²⁸ Therefore, violinists with large hands will likely find the suggested markings achievable.

The second method involves consecutive shifts after each beat in bars 25 and 26. From bar 25, the ascending shifts will consist of a semitone shift from G to E-flat (first two notes of the first beat), a tone shift from F to D (first two notes of the second beat), and another tone shift from E-natural to C-sharp (first two notes of beat three). Then continuing from bar 26, there is a tone shift from F to D (first two notes of the first beat), and another tone shift from E-flat to C (first two notes of beat two). The third beat of the bar does not require shifts, as it remains in the second position.

Locating the hand positions of the notes G-F-E-F-E flat-D on the beats of bars 25 to 26 is essential to be able to play the passage in tune. Played consecutively with the first finger, the left-hand must move through the following positions: third, second, first, second, half, and second. Practising only the notes which are responsible for position changes will help secure the shifts before the notes on the E-string are introduced. **Video Clip 48** provides a demonstration of this method.

Video Clip 48 Caprice Sixteen: bb. 25-26, Managing difficult shifts

Another challenging passage exists between bars 27 to 29. During these bars, the left-hand plays repeated notes with alternating fingers while the right-hand plays legato slurs. **Music Score 35** illustrates this passage.

Music Score 35 Caprice Sixteen, bb.27-29



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 30, bb. 27-29

⁴²⁸ Hiroshi Endo, and Kawahara Koichi, "Gender Differences in Hand Stability of Normal Young People Assessed at Low Force Levels," *Ergonomics* 54, no. 3 (2011): p. 278, https://doi:10.1080/00140139.2010.547607.

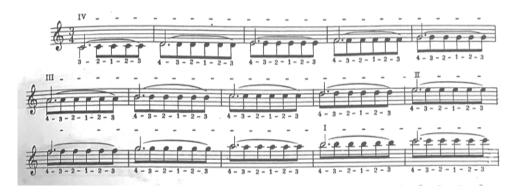
The main difficulty of this section is to play with secure intonation. The alternating fingering means that different fingers are playing the same notes consecutively. An exercise to help develop light and accurate shifts is Dounis' Sixth Exercise from his violin method, *The Violin Players' Daily Dozen Op. 20* (see **Music Score 36**). In this exercise, the left-hand plays the same note, but with a different finger each time.

Music Score 36 Dounis' Shifting Exercise: Sixth Exercise for Shifting

SIXTH EXERCISE A FOR SHIFTING

DIRECTIONS FOR PRACTISING: The thumb should always follow the hand in an upward shift; while in a downward shift it acts as a forerunner to the other fingers. Shifting should never have any effect on the evenness of the bow stroke; the bowing should give the same impression as if the notes were played in the same position, without shifting.

Practise slowly and with full tone; aim at producing the effect of a sustained note. Practise in a new key every day.



Source: Demetrius Dounis, "The Violin Players' Daily Dozen: Twelve Fundamental Exercises for the Left Hand and the Bow, Op. 20," in *The Dounis Collection* (1925 reprint, USA: Fischer, 2005), BF19 p. 239, bb. 1-15.

A variation of Dounis' shifting exercise can be applied directly to bars 27 to 29 of Caprice Sixteen. **Music Score 37** (p. 221) illustrates the exercise, which aims to help the violinist measure the distances of the shifts. Practising the shifts in this context leads to better accuracy and secure intonation.

⁴²⁹ Dounis, "Sixth Exercise For Shifting," from *The Violin Players' Daily Dozen: Twelve Fundamental Exercises for the Left Hand and the Bow, Op. 20,* in *The Dounis Collection,* p. 239.

Caprice Sixteen Shifting Exercise (bb. 27-29) N. Paganini ed. by M. Melrose

Video Clip 49 demonstrates the exercise in Music Score 37. The exercise must be practised slowly and with slight glissando between the shifts. The glissandi allows the violinist to measure the distance between the notes, which build towards establishing secure intonation.

Video Clip 49 Caprice Sixteen: bb. 27-29, Shifting exercise

Video Clip 50 demonstrates the following step in the sequence. In this video, bars 27 to 29 are played without additional notes, and the slurred bowing is included. The last demonstration in the video clip illustrates the final step in the sequence, which is the passage played at performance tempo.

Video Clip 50 Caprice Sixteen: bb. 27-29, Increasing tempo while maintaining secure shifts

String Crossings

String crossings can be categorised into two groups. The first type of string crossing consists of a string change between neighbouring strings. The second type of string crossing skips over a neighbouring string and lands two or more strings away from the starting string. As there is no formal definition for these string crossings, we shall refer to

the first type of string crossing as a *Neighbouring String Crossing*, and the second as a *Skipping String Crossing* in this project.

Caprice Sixteen consists of both of these string crossings with a vast number of the bars containing Skipping String Crossings. These string crossings are more challenging to play when compared with Neighbouring String Crossings as they require accurate pivoting movement from the right-hand and arm and are challenging to perform at fast speeds. The bars containing Skipping String Crossings are presented in **Table 35** (p. 223).

 Table 35
 Caprice Sixteen: Locations of Skipping String Crossings

	Bar	Beat of Bar
	2	2
	5	2
	6	2 & 3
	7	1, 2, & 3
	8	1 (String crossing can be avoided with alternate fingering option)
	10	2 & 3
	12	2 & 3
_ u	13	1, 2, & 3
tee	14	1
Six	18	1
Skipping String Crossings in Caprice Sixteen	22	1
apr	22 to 23	Beat 3 of bar 22 & beat 1 of bar 23
n C	24	1 & 3
gs i	25	1, 2, & 3
sin	26	1, 2, & 3
Cros	27 to 28	Beat 3 of bar 27 & beat 1 of bar 28
) gi	28 to 29	Beat 3 of bar 28 & beat 1 of bar 29
trin	33	1
ි වි	35	1, 2 & 3
pin	37	1, 2, & 3
skip	45	1, 2, & 3
	46	1
	47	1
	47 to 48	Beat 3 of bar 47 & beat 1 of bar 48
	48	3
	48 to 49	Beat 3 of bar 48 & beat 1 of bar 49
	49	1 (String crossing can be avoided with alternate fingering option)
	49 to 50	Beat 3 of bar 49 & beat 1 of bar 50
	50	1, 2, & 3
	51	1, 2, & 3

The skipping string crossings should be played just below the middle of the bow with flat bow hair. This location on the bow is ideal for string crossings to ensure the pivoting angle of the bow is minimal, and the right-arm is avoiding any excessive movement.

During a Skipping String Crossing, the little finger on the bow needs to activate and apply force in a downwards direction if the bow is crossing from a low to high-string (i.e. G-string to A-string). This movement encourages the bow to move quickly across the strings. In the opposite situation, where the bow is crossing from a high to low-string (i.e. A to G-string), force is applied to the right index finger as it assists the bow to make contact with the appropriate string quickly.

While the right fingers ensure contact between bow hair and string, the right elbow must move vertically to adjust the bow to the correct string height. Simultaneously, the forearm must draw the bow horizontally across the string. The three functions of the right hand, elbow and forearm, are vital to ensure that the pivot-movement between strings is large enough so there is clearance between the strings.

When practising Skipping String Crossings, it is beneficial to play first on the open strings of the violin to allow the player to develop their coordination skills. Once the right-hand is managing the string crossings, the left-hand can be introduced. **Video Clip**51 provides an example of this exercise.

Video Clip 51 Caprice Sixteen: b. 37, String crossing angles

Left-Hand Extensions and Contractions

Caprice Sixteen is challenging for the left-hand, as it requires frequent stretches in different directions. These stretches are called *Extensions* and are exaggerated left-hand finger movements that stretch out of the hand position to reach specific notes.

These Extensions are not usually problematic for the first or second fingers as they are rather long and can easily reach towards to the scroll of the violin. However, the short third and fourth fingers are often responsible for intonation errors as they often struggle to stretch adequately.

Therefore, it is necessary to use the thumb to support the third and fourth fingers. By placing the thumb slightly higher in the hand position in the direction of the bridge, it can change the finger angle and lengthen it, allowing the stretch to become a shorter distance.

This thumb support is necessary whenever using a third or fourth finger as they are the shortest fingers of the hand.

In contrast, a left-hand *Contraction* refers to the fingers contorting, which result in the hand frame becoming smaller. This often occurs when fingers must twist against one other or during chromatic passages. During a Contraction, the thumb remains in the same position until it is necessary to shift to a new position. An example of a left-hand Contraction exists in bar 15 (see **Music Score 38**). In this bar, the third note (D-flat) which is played with a third finger, reduces the hand frame by a semitone. Although the Contractions are not frequent, they require careful tone and semitone measurements.

Music Score 38 Caprice Sixteen, bar 15



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 30, b. 15.

Recommended Repertoire Post Caprice Sixteen

The repertoire listed in **Table 36** provides a small selection of pieces that could be attempted by the violinist after the completion of Caprice Sixteen. The pieces have been considered for their degree of difficulty but will still require a teacher's expertise to determine if they are suitable for the student. This further consideration to repertoire choice is due to the détaché bow stroke being an elementary technique.

 Table 36
 Recommended Repertoire Post Caprice Sixteen

Composer	Repertoire
Bartok B.	Violin Concerto No. 2 Sz. 112
Bartok B.	Romanian Folk Dances
Khachaturian, A.	Violin Concerto in D Minor, Op. 46
Kreisler, F.	Praeludium and Allegro, for Violin and Piano
Prokofiev, S.	Sonata for Solo Violin in D Major, Op. 115
Rachmaninoff, S.	Hungarian Dance No. 2 from Morceaux de Salon Op. 6
Saint-Saëns, C.	Introduction and Rondo Capriccioso
Vieuxtemps, H.	Violin Concerto No. 5, Op. 37

CHAPTER TWELVE

Caprice Number Nineteen

The technical difficulties of Caprice Nineteen are string crossings, double-stops, and spiccato bowing. This chapter forensically examines these techniques and discusses the movements to perform them. The spiccato bowing is particularly interesting in this Caprice because it reflects the character and mimesis of the work. A sub-chapter titled *Imitating Birdsong* (p. 229) discusses how the spiccato stroke can be manipulated to replicate the song of a chirping bird.

Note Discrepancies

There is one note discrepancy in Caprice Nineteen, and it is located on the 3rd beat of bar 13 (see **Table 37** p. 227). Depending on the edition, the appoggiatura is published as three or four-notes. Despite the selections available among the editions, the three-note appoggiatura consisting of the notes A, B-flat and C, is often performed by many artists including Perlman, ⁴³⁰ Fischer, ⁴³¹ Rabin, ⁴³² Mintz⁴³³ and Ricci. ⁴³⁴

⁴³⁰ Niccolo Paganini, *Paganini 24 Caprice*, with Itzhak Perlman (Violin) recorded 1972, EMI Records, 724356723726, 2000,

⁴³¹ Niccolo Paganini, *Julia Fischer Paganini: 24 Caprices*, with Julia Fischer (Violin) recorded 2010, Decca, 4782274, 2010, CD

⁴³² Niccolo Paganini, Paganini: Caprices Op. 1 for Unaccompanied Violin, with Michael Rabin (Violin) recorded 1959, EMI Classics, D138454, 2001, CD.

⁴³³ Niccolo Paganini, *Paganini: 24 Capricci*, with Shlomo Mintz (Violin) recorded 1982, Deutsche Grammophon, 415043-2, 1982, CD.

⁴³⁴ Niccolo Paganini, First Complete Recording of the 24 Caprices Op. 1, with Ruggiero Ricci (Violin) recorded 1947, CEDAR, IDIS309, 1998, CD.

Table 37 Caprice Nineteen: Note Discrepancies

	Editions of the Paganini Caprices							
Bar	Original	Ricordi,	Breitkopf	Richault	Ricordi,	Peters	IMC	Urtext
Number	Score	1st ed.	& Härtel	c.1825	2 nd ed.	c.1910	1973	1990
	c.1817	c.1820	c.1823		c.1836			
13, 3 rd	A, B flat, C	G, A flat,	A, B flat, C	G, A flat,	G, A flat,	A, B flat,	A, B flat,	A, B flat
beat (appoggiat ura)	natural	B flat, C natural	natural	B flat, C natural	B flat, C natural	C natural	C natural	C natural

Data from Dr. Wolf-Dieter Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8 and Nicolò Paganini, *24 Capricci Für Violine Solo (Urtext)*, ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

Recommended Exercises, Studies and Scales Before Learning Caprice Nineteen

The Primary Techniques of Caprice Nineteen include double-stops, spiccato bowing and string crossings. A variety of scale systems, exercises and studies are available to adequately prepare the left and right hands for these Primary Techniques. The recommended studies in **Table 38** (p. 228) are arranged in order of difficulty with the De Bériot and Wieniawski studies being the most challenging.⁴³⁵

⁴³⁵ De Bériot, *The First Thirty Concert Studies for the Violin, Op. 123*, p. 26-27 and 34-35; Wieniawski, *Ecole Moderne Etudes-Caprices, Op. 10 for Violin Solo*, p. 3.

 Table 38
 Caprice Nineteen: Recommended Repertoire

Scale Systems	Exercises	Studies
Flesch: Eb Major,	Fischer Double Stops: Sixths	Sitt Book IV: 76 Allegretto, 77 Allegro moderato, 78
p. 31-35	in E flat major, p. 98-100	Allegro moderato – studies from 1st to 7th positions
		with slurs and spiccato strokes across all four strings
Granat: Heifetz	Fischer Basics: Spiccato	Mazas Heft I: 25 Allegro Moderato – double-stops,
Scale Book E flat	exercises p. 70-72	string crossings with the bow raised after every note,
major and E flat		29 Allegro "The Chatterbox" - fast sautillé in the
minor, p. 43-47		middle of the bow
Galamian Vol 1:	Fischer Practice: Spiccato	Dont Op. 37: 20 Allegretto vivo – Up-bow spiccato
3. Three-Octave	exercises p. 93-97 and <i>Point</i>	with some slurs throughout
Scales p. 11 with	of Contact exercises p. 57-	
bowing <i>B6 (1.)</i> ,	60	
B4 (3. and 5.)	Yanshinov: Exercise 18, p. 7	Kayser: 25 Allegro – Spiccato, string crossings and
		slurs
Fischer Scales:	Ševčík Op. 2 Part 1: No. 5	Mazas Heft III: 59 Andante – melody on the G string
Three-octave	Detached and 'springing'	Dont (Op. 35): 2 Presto – preparatory study for fast
scales, arpeggios	bowing styles, p. 9-17 and	passagework (especially on the G string), contains
and chromatic	spiccato strokes from No. 29	extensions
scales, p. 137	Exercises on two strings, p.	
	2 and 12-13	
	Dounis Preparatory Studies	De Bériot: 14 Allegretto moderato – combination of
	Op. 16: Chapters II-III, p.	mezzo staccato and spiccato, 18 Allegretto moderato
	182-185	- double-stops, mezzo staccato and spiccato in the
		lower third of the bow
		Wieniawski: 1 Presto – semiquaver passagework
		with similar bowing patterns to Caprice Nineteen

Caprice Nineteen contains many double-stop-sixths throughout the *Allegro* assai sections. The recommended exercises in Fischer's *Double Stops* book contain valuable methods that incorporate shifting into the double-stop patterns. ⁴³⁶ The detailed

⁴³⁶ Fischer, Double Stops: scales and scale exercises for the violin, in Basics: 300 exercises and practice routines for the violin by Simon Fischer, p. 98-100.

instructions on shifting between the double-stops are beneficial for preparing the sixths which frequently occur throughout the Caprice.

The Ševčík *School of Bowing* violin exercises are excellent training tools for the development of spiccato stroke.⁴³⁷ The series offers several bowing variations of the spiccato stroke which include consecutive up-bow spiccato strokes that are identical to Caprice Nineteen.

The Sitt studies found in **Table 38** (p. 228) offer complex bowings, including string crossings, slurs, and spiccato bow strokes.⁴³⁸ Although sometimes overlooked, these preliminary studies require agility from both the left and right-hands and are useful to review basic techniques.

The *Andante* section of study *No. 59* by Mazas,⁴³⁹ is included in **Table 38** (p. 228) for its melodic line, which is played on the G-string. Ensuring good tone on the G-string is essential for the fast passagework which occurs on the G-string from bar 27 in Caprice Nineteen. Adjusting the point-of-contact so that it is closer to the bridge is necessary as the left-hand moves further up the neck of the instrument. Experimenting with the point-of-contact in this study will contribute to the sounding point in the fast passagework of Caprice Nineteen.

Other beneficial studies include the De Bériot,⁴⁴⁰ and Wieniawski studies,⁴⁴¹ both of which include difficult shifting and springing bow strokes. Studying these works will contribute towards a greater understanding of the bouncing bow stroke and the operation of the right hand.

Imitating Birdsong

Paganini's ability to use different techniques such as glissandi, harmonics, ricochet, and pizzicato to imitate sounds of animals, humans, and other musical instruments, has

⁴³⁷ Ševčik, "No. 5, Detached and Springing Bow Styles," in School of Bowing, Op. 2, Part 1, p. 9-17.

⁴³⁸ Sitt, 100 Studies, Op. 32, Book IV: Twenty Etudes in 6th and 7th Positions, p. 18-20.

⁴³⁹ Mazas, "No. 59 Andante," in Mazas Etüden, Op. 36, Heft III, p. 4.

⁴⁴⁰ De Bériot, *The First Thirty Concert Studies for Violin, Op. 123*, p. 26-27, and 34-35.

⁴⁴¹ Wieniawski, "No. 1 Presto," in Ecole Moderne Etudes-Caprices, Op. 10 for Violin Solo, p. 2.

been consistently documented.⁴⁴² Julius Max Schottky was Paganini's first biographer and provided a detailed description of one of Paganini's concerts in Prague:

...From his instrument, one hears, besides the tones peculiar to the violin, veritable nature-sounds, like the simple songs of birds, or the warbling of the nightingale, or the silvery chime of bells, now flute-like and dying away, and again a stormy flood of torrential double-stops that seem to dominate the entire orchestra.⁴⁴³

Paganini's use of mimesis existed not only on the concert stage but also within his Caprices. The *Allegro assai* section of Caprice Nineteen consists of repetitive spiccato notes with interjecting acciaccature on the third beat of every bar. This particular section of the Caprice which commences from bar five is often compared to the imitation of birdsong.⁴⁴⁴

In order to depict a bird-like character within the *Allegro assai* section, the spiccato notes need to be played very short. A very short sounding spiccato bow stroke comes from the bow hitting the strings with minimal horizontal movement. Applying a small retake between the six consecutive up-bows will also ensure the bow stroke remains short while avoiding any unnecessary travel to another part of the bow.

The phrasing and dynamic markings of the spiccato notes are also essential factors to consider when trying to represent a particular character within the music. Just as important as the sound itself is the direction it leads in. Therefore, the phrase of the spiccato notes should lead towards the two double-stops. Maintaining a *piano* dynamic throughout the phrase will help create a more realistic bird-like character.

The acciaccature which feature in the *Allegro assai* section will sound more realistic if they are played just before the third beat of the bar. Timing and coordinating the acciaccature can be challenging, so it is beneficial to practise only the spiccato sections repetitively, ensuring the acciaccature is as short as possible. Once the timing of the

⁴⁴² De Courcy, Paganini the Genoese I, p. 113; Lilian Day, Paganini of Genoa (London: Victor Gollancz, 1966), p. 106.

⁴⁴³ Julius Max Schottky, Paganinis Leben und Treiben als Künstler und Mensch, mit unparteiischer Berücksichtigung de Meinungen seiner Anhänger und Gegner, (Prague: Calve, 1830) in Edgar Istel & Theodore Baker, "The Secret of Paganini's Technique", The Musical Quarterly 16, no. 1 (1930): p. 106.

⁴⁴⁴ Albi Rosenthal. 'An intriguing copy of Paganini's "Capricci" and Its Implications', in Raffaello Monterosso, ed. Nicolò Paganini e il suo tempo (Genoa: Commune di Genova, 1984), p. 243.

acciaccature becomes comfortable to play, it is best to practice consolidating the bow stroke with the dynamics, and phrasing. **Video Clip 52** provides a short demonstration of the spiccato notes during a practice session.

Video Clip 52 Caprice Nineteen: Spiccato exercise

The introduction of the double-stops within the *Allegro assai* section create difficulties for the violinist. The sudden left-hand shifts in combination with significant string crossings increase the difficulty of this section. Instead of navigating these challenges simultaneously, it is best to work on one at a time, starting with the string crossings.

Managing the String Crossings

Challenging string crossings occur when the bow skips over a neighbouring string or in some circumstances two strings. In the *Allegro assai* section of Caprice Nineteen, the bow often alternates between the E-string and the lower strings (D and G-strings), before returning the E-string. Played slowly, these string crossings are manageable, but when played faster or at performance tempo (approximately BPM: J=130), the string crossings become more challenging.

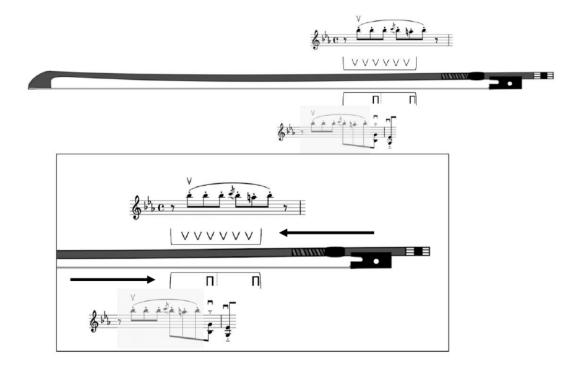
In the initial stages of learning, it is beneficial to play the *Allegro assai* section without the left-hand. Concentrating on only the bowing without the interference of the left-hand is a helpful exercise to practise when both the left and right-hands are doing complicated movements. **Video clip 53** provides a demonstration of this exercise.

Video Clip 53 Caprice Nineteen: Open string spiccato & double-stop exercise

As mentioned previously, it is essential to the success of the bow stroke, that the bow remains in the lower region of the bow. However, when the open-string double-stops are

introduced, changes to the bow distribution must be made. Figure 14 illustrates the bow distribution for the *Allegro assai* section.





The six consecutive spiccato up-bows use approximately 1/6th of the bow when combined. This up-bow stroke is played off the string and should begin at the balance point of the bow. The two down-bow double-stops also use approximately 1/6th of the bow when combined but move in the opposite direction. The down-bows are played entirely on the string. Therefore, each of the up-bows and down-bows should use the same amount of bow, as illustrated in the brackets of **Figure 14**. The bowing pattern repeats throughout Caprice Nineteen without rests, so the bow distribution must be organised so that the bow pattern can continue. **Video Clip 54** provides a demonstration of bars 5 to 8 with the bowing pattern described in **Figure 14**.

Video Clip 54 Caprice Nineteen: bb. 5-8, Consolidating the bow strokes

Securing the Double-Stops

Once the bowing pattern in the right-hand becomes manageable as an open string exercise, it is time to focus on the left-hand and the challenging double-stops which exist in the *Allegro assai* section.

While the double-stops themselves are not particularly challenging to play, it is the shifts either side of the double-stops, which is what makes them difficult. Additionally, the shifts occur during a string crossing, and this can cause the player to lose their sense of position on the violin; often with the sensation that their left-hand is jumping into position.

Before practising the shifts, it is first necessary to establish the positions of the double-stops. Video clip 55 demonstrates an exercise that aims to build confidence in the player's ability to locate double-stops in specific positions. The exercise promotes these skills by removing the left-hand from the neck of the violin after each pair of double-stops. The lack of contact with the instrument replicates the sensation of playing the passage in context.

Video Clip 55 Caprice Nineteen: bb. 5-13, Double-stop exercise

The next stage involves inserting the shifts and playing the double-stops in context. Very few editions have provided fingering suggestions; however, both the Peters and IMC editions recommend beginning the *Allegro assai* section (b. 5) on a second finger in the third position. ⁴⁴⁵ In the following bar, the IMC edition provides an alternative fingering option, by inserting a three in brackets; suggesting the second bar begins in the second position.

The study of the second position is often neglected as it is uncomfortable to play in due to the stretches required by the tone and semitone spacing. Leopold Mozart's 1756 treatise was the first to advise caution whenever using the second position, instructing that "the third finger must be specially watched, for there is always a danger of playing out of

⁴⁴⁵ Paganini (Leipzig: C.F. Peters, c.a.1910), 9703, p. 36-37; Paganini, (New York: IMC, 1973), 2292, p. 36-37.

tune with it."⁴⁴⁶ Flesch also commented on the difficulty of the second position in his 1924 treatise:

I noticed that the shift from the 2nd to 5th position seemed insecure; at first this seemed incomprehensible, yet it led to the fact that the B frequently sounded flat. Examining this more closely, the explanation became apparent; the absolutely necessary preparatory position of the thumb for this up-shift became very uncertain when starting from the "hovering-in-air" 2nd position. 447

Although sometimes awkward to play, the second position is a convenient choice of fingering depending on the musical context. In Caprice Nineteen, the choice to alternate between the first and second positions within bars 5 to 9 work well because of their semitone distances. In this context, utilising the second position over the third position should be taken into consideration.

During the shifts in the *Allegro assai* section, the player must play the note before the shift very short, so there is enough time to shift and arrive at the desired note in time. Fischer refers to this as "stealing time from the note before the shift," which is written in his chapter titled *Understanding timing*. ⁴⁴⁸ In addition to the timing of the shift being correct, the shift must also occur during the string crossing. This means that the player will lose contact with the instrument during the shift, and this can have a profound effect on the intonation. Knowledge of the violin positions is essential to execute the rapid shifts throughout the section. Building knowledge in this area can be done by measuring the tone and semitone distances, this will help secure the intonation in the section.

Fast Passagework

From bars 27 to 42, fast semiquaver passagework commences with frequent and challenging shifts occurring on the G-string. Within this section, students may find bars 28 and 35 particularly challenging, as they are difficult to execute with correct and consistent

⁴⁴⁶ Mozart, A Treatise on the Fundamental Principles of Violin Playing, p. 141.

⁴⁴⁷ Flesch, *The Art of Violin Playing*, p. 100.

⁴⁴⁸ Fischer, "Understanding Timing," in *The Violin Lesson by Simon Fischer*, p. 243.

intonation. The shifts are the cause of the problem in these bars, as they require fast and accurate movements. **Music Score 39** illustrates these bars.

Music Score 39 Caprice Nineteen, Exercise, Fast Passagework



There are both ascending and descending shifts within bars 28 and 35. However, it is the ascending shifts which are usually more challenging for the student as the distance of the shift increases each time. A solution to secure these shifts is to guide the first finger up the neck of the violin, ensuring it leads the hand into the correct position. The grace notes illustrated in **Music Score 39** indicate the note the first finger lands on so that the following note is in tune.

Practising **Music Score 39** will help the player measure the distances of the shifts. Over time, the shift up to the grace note can become more transparent so that the grace note is barely audible. Fischer refers to these shifts as 'ghosting', and provides three basic instructions on how to execute them:

- "1 Lighten the finger as though playing a harmonic.
 - 2 Use the least bow pressure.
 - 3 Use the least length of bow."449

⁴⁴⁹ Fischer, Basics: 300 exercises and practice routines for the violin by Simon Fischer, p. 145.

When applied to **Music Score 39** (p. 235), Fischer's advice can promote fast-shifting and accuracy, which are both necessary to execute this passage. **Video Clip 56** demonstrates **Music Score 39** (p. 235) with exaggerated grace notes. Exaggerating these notes is beneficial in the initial stages of learning to secure the shifts.

Video Clip 56 Caprice Nineteen: bb. 27-28 & 35-36, Securing the shifts

Recommended Repertoire Post Caprice Nineteen

The Primary Techniques found in Caprice Nineteen exist in several works. **Table 39** provides a repertoire list that includes small concert pieces and selected movements from violin concertos that share the same techniques as Caprice Nineteen.

The works by Bloch, Kreisler, and Sarasate contain difficult shifts which frequently require the violinist to perform consecutive shifts between each note. Particularly challenging is Bloch's *Suite No. 1*,⁴⁵⁰ which features intervals as large as a thirteenth and string crossings which skip over neighbouring strings.

 Table 39 Recommended Repertoire Post Caprice Nineteen

Composer	Repertoire
Bloch, E.	Suite No. 1 for Violin Solo
Kreisler, F.	Variations on a Theme of Corelli for Violin and Piano
Mendelssohn, F. Violin Concerto in E minor, Op. 64	
Sarasate, P.	Moderato, from Carmen Fantasy, Op. 25
Sarasate, P.	Zapateado, from Spanish Dances, Op. 23
Vieuxtemps, H.	Violin Concerto No. 3, Op. 25
Vieuxtemps, H.	Violin Concerto No. 3, Op. 37

236

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⁴⁵⁰ Ernest Bloch, Suite No. 1 for Solo Violin, B. 99 (New York: Broude Brothers, 1959), 2037.

CHAPTER THIRTEEN

Caprice Number Twenty

This chapter focuses on the technical difficulties of Caprice Twenty, which is Flying Spiccato bowing, trills, double-stops and triple-stops. These techniques are first studied independently, forensically examining the required movements, before consolidating them and discussing how best to manage them in the score of Caprice Twenty.

Note Discrepancies

Bar 17 in Caprice Twenty is the only bar which contains note discrepancies. **Table 40** provides an illustration of the notes which are different in the IMC and Urtext editions.⁴⁵¹ Unfortunately, the second note in the second chord of Paganini's original score is illegible.

Table 40 Caprice Twenty: Note Discrepancies

	Editions of the Paganini Caprices							
Bar	Original	Ricordi,	Breitkopf	Richault	Ricordi,	Peters	IMC	Urtext
Number	Score	1st ed.	& Härtel	c.1825	2 nd ed.	c.1910	1973	1990
	c.1817	c.1820	c.1823		c.1836			
17	D-A-F#,	D-A-F#,	D-A-F#,	D-A-F#,	D-A-F#,	D-A-F#,	D-A-F#,	D-A-F#,
	D-unclear-G,	D-F#-D,	D-F#-D,	D-F#-D,	D-F#-D,	D-F#-D,	D-B-G,	D-B-G,
	D-A-F#,	D-G-E,	D-G-E,	D-G-E,	D-G-E,	D-G-E,	D-A-F#,	D-A-F#,
	D-G#-E#	D-G#-E#	D-G#-E#	D-G#-E#	D-G#-E#	D-G#-E#	D-G#-E#	D-G#-E#

Data from Dr. Wolf-Dieter Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8 and Nicolò Paganini, *24 Capricci Für Violine Solo (Urtext)*, ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

Apart from the note discrepancies in bar 17, the bowing or phrase markings in the opening *Allegretto* section differ between the editions. **Music Score 40** (p. 238) illustrates the slur markings from Ricordi's first edition of Caprice Twenty which was copied directly from Paganini's original score.

⁴⁵¹ Paganini (New York: IMC, 1973), 2292; Paganini (München: G. Henle Verlag, 1990), 405.

Music Score 40 Ricordi's First Edition of Paganini Caprice Twenty, bb. 1-17



Source: Paganini, Niccolo. 24 Capricci Per Violino solo Composti e Dedicati Agli Artisti da Nicolo Paganini. 1st ed. Milan: G. Ricordi, c.1820, 403, http://conquest.imslp.info/files/imglnks/usimg/f/f8/IMSLP330985-PMLP03645-24capriccipervio00paga.pdf, p. 38, bb. 1-17.

Both the 1973 IMC edition,⁴⁵² and the 1910 Peters editions,⁴⁵³ contain two-bar slurs that replace Paganini's single slur marking in his original score.⁴⁵⁴ Doctor Friedemann Eichhorn (born 1971), a German violinist and professor at the Liszt School of Music in Weimar, Germany, provided written comments about the fingering and bowings in Caprice Twenty that were composed by Galamian (1903-1981) in the 1973 IMC publication:

...Galamian's goal is to let the violin sound at its best, also often by means of dividing up slurs. He interprets many of Paganini's original markings as phrase marks, not as actual bowings. He offers a systematic ordering of slurred and detached bowings, with the detached notes also played in one bow (Caprices 18 and 20)...⁴⁵⁵

As Eichhorn mentions, some of Paganini's original markings are phrase markings and not bowings. Differentiating these can be challenging, but if the markings appear as long slurs that seem near impossible to execute as a bowing, then they are likely phrasing

⁴⁵² Paganini (New York: IMC, 1973), 2292, p. 38.

⁴⁵³ Paganini (Leipzig: C.F. Peters, c.a.1910), 9703, p. 38.

⁴⁵⁴ Paganini (Original Score: c.a.1817).

⁴⁵⁵ Eichhorn, Friedemann. Fingerings and Bowings: Ivan Galamian, Weimar: 2015/2016, in Seiffert, Dr. Wolf-Dieter. Henle Library. iPad vers. 1.6.0.G. Apple App Store. (Henle Publishers, 2017). https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8.

markings. The c.1910 Peters edition which was annotated by Carl Flesch is the earliest publication which features a practical bowing suggestion.⁴⁵⁶

Recommended Exercises, Studies and Scales Before Learning Caprice Twenty

The resources provided in **Table 41** (p. 240) support the learning and development of the Flying Spiccato bowing, trills, and double and triple-stops. However, where possible, studies that include secondary techniques like string crossings and fast passagework have also been selected and provided in the table below.

⁴⁵⁶ Paganini (Leipzig: C.F. Peters, c.a.1910), 9703, p. 38.

 Table 41
 Caprice Twenty: Recommended Repertoire

Scale Systems	Exercises	Studies
Flesch: D major, p.	Fischer Basics: Trills	Sitt Book V: 2 Andante, 3, Moderato, 4
101-105	exercises 191-196, p. 134-	Moderato, 5 Moderato, 13 Molto moderato – all
	138	preliminary studies for the introduction of
		Paganini Caprice 20
Granat: Heifetz Scale	Fischer Practice: Chords	Dont Op. 37: 2 Allegro, 4 [No Name], 6 [No
Book D major and D	exercises 40-48, p. 77-84	Name], 7 Vivace – all contain string crossings,
minor, p. 38-42		variations on slurs and spiccato (no trills)
Galamian Vol 1: 1.	Dounis Fundamental Trill	Kayser: 13 Allegretto – combination of slur and
Scales in One	Studies Op. 18: Chapters I-	spiccato
Position p. 1-4 with	<i>IV</i> , p. 218-229	
bowing <i>B12 (4.)</i>		
Fischer Scales:		Dancla Op. 73: 1 Allegro appassionato e
Three-octave scales,		moderato – some long slurs with consecutive up-
arpeggios and		bow spiccato
chromatic scales, p.		Gaviniés: 4 Allegretto and 13 Allegro Assai –
136		combination of spiccato and slurs
		Fiorillo: 6 Andante sciolto, - combination of
		staccato, spiccato and trills, 9 Allegro and 15
		Allegro, - combination of spiccato and slur
		strokes, 29 Grave – includes double stops, but
		more advanced than Paganini Caprice 20
		Rode: 1 Moderato – trills, spiccato and string
		crossing manoeuvres

Dounis's studies on the Fundamental trill are particularly useful to condition the fingers to move metronomically.⁴⁵⁷ Although the word *Studies* is part of the title, they have been listed as an exercise in **Table 41** as they are not written in a musical context. The exercises proceed through a series of rhythmic patterns that help establish independent finger movement, strength, dexterity and accuracy. Dounis provides written instructions on how best to approach his exercises which are illustrated in **Figure 15** (p. 241).

⁴⁵⁷ Dounis, "Fundamental Trill Studies: On a Scientific Basis, Op. 18," in *The Dounis Collection*, p. 218-229.

Figure 15 Dounis's Directions For Practising: Fundamental Trill Studies

DIRECTIONS FOR PRACTISING

AIM AT ABSOLUTE PRECISION IN FINGER-ACTION.

DO NOT LET THE FINGERS FALL UPON THE STRINGS WITH TOO MUCH FORCE; HAVE IN MIND, ALWAYS, THAT ELASTICITY AND SUPPLENESS ARE, BY FAR, MORE DESIRABLE AND NECESSARY THAN MERE FORCE.

THE BOW PLAYS AN IMPORTANT PART IN PERFORMING THE TRILL. DIVIDE THE BOW INTO EQUAL PARTS TO INSURE EVENNESS. DEVELOP THE LOWER PART OF THE BOW.

DEVOTE A FEW MINUTES EVERY DAY IN PRACTISING TRILL EXERCISES WITH THE LOWER HALF OF THE BOW ALONE.

The Exercises are written in such a manner as to exercise the hand in the two fundamental settings of the fingers.* Complete training of the hand is thus assured.

* Full explanations about the two fundamental settings of the fingers are to be found in my book: "THE VIOLINIST'S DAILY DOZEN."

Source: Demetrius Constantine Dounis, "Directions For Practising" from Fundamental Trill Studies On a Scientific Basis, Op. 18 inside The Dounis Collection: Eleven Books of Studies for the Violin, Op. 12, 15 (two books), 16 (two books), 18, 20, 21, 27, 29, 30 by Demetrius Constantine Dounis. New York: Fischer, 2005, BF16, p. 219.

Although elementary, the Sitt studies recommended in **Table 41** (p. 240) are beneficial for developing intonation.⁴⁵⁸ Each book in the series contains studies that aim to develop a particular technique and book five aims to improve the playing of doublestops. The recommended Sitt studies focus on preparing the student to tune double-stops which contain open strings. They are useful preliminary studies to practise in preparation for Caprice Twenty and are beneficial studies to revise for the advanced violinist.

A more challenging study is Dancla's study No. 1, *Allegro Appassionata e moderato*, ⁴⁵⁹ which is similar to Paganini's Caprice Twenty in its bowing pattern. It consists of a down-bow two-note slur followed by two up-bow spiccato slurs. Although it lacks the third up-bow spiccato note, it requires the same Flying Spiccato bowing as Caprice Twenty and minimal bow.

⁴⁵⁸ Sitt, "20 Studies in Double stops," from Book V, in 100 Studies, Op. 32, p. 4-7, and 15.

⁴⁵⁹ Dancla, "No. 1 Allegro Appassionata e moderato," in 20 Etudes Brillantes, Op. 73, p. 2-3.

The recommended Gaviniés, 460 Fiorillo, 461 and Rode studies, 462 are excellent studies to practice for the coordination of the left and right hands in preparation for Caprice Twenty. Still, some students may find them more challenging to play when compared to Caprice Twenty because they contain additional techniques.

The additional techniques in the Gaviniés studies include significant string crossings and fast passagework and this can be difficult to manage at a fast tempo. 463 Study No. 29 *Grave*, by Fiorillo is one of the most challenging studies to play out of the recommended Fiorillo studies due to the frequent shifts during the double-stop passages. 464 The Rode study No. 1 *Moderato* is also challenging to play because of the occasional semiquaver runs which occur throughout the piece. 465

Despite these difficulties, the studies are valuable resources which aim to improve the spiccato and slurred strokes which are Primary Techniques of Caprice Twenty. Even if they are not executed to a performance standard, they are beneficial for the learning process and should therefore, be attempted by the violinist.

The Flying Spiccato Bow Stroke

From bar 25 onwards in Caprice Twenty, a repetitive bowing pattern occurs. This pattern consists of a three-note slur, followed by three spiccato strokes which are marked by a slur. This particular spiccato marking is called Flying Spiccato and is from the family of springing bow strokes. It is often wrongly classified and confused with the term Flying Staccato which is played entirely on the string.⁴⁶⁶

⁴⁶⁰ Gaviniés, *24 Etudes 'Matinées'*, p. 12-13, and 30-31.

⁴⁶¹ Fiorillo, 36 Etüden (Capricen) for Violine Solo, Op. 3, p. 11, 14, 22-23, and 40-41.

⁴⁶² Rode, 24 Caprices for Violin, p. 2-3.

⁴⁶³ Gaviniés, *24 Etudes 'Matinées'*, p. 12-13, and 30-31.

⁴⁶⁴ Fiorillo, "No. 29 Grave," in 36 Etüden, p. 40-41.

⁴⁶⁵ Rode, "No. 1 Moderato," in 24 Caprices for Violin, p. 2-3.

⁴⁶⁶ Flesch & Dounis use the term Flying Staccato in place of Flying Spiccato – "Flying spiccato represents, from a practical point of view, a connection between the martelé staccato and the thrown or bouncing bow. A number of notes are produced on a single bow, and the bow leaves the string after each note." Flesch, *The Art of Violin Playing*, p. 58.

The Flying Spiccato consists of several notes played in either a down or up-bow direction. The down-bow Flying Spiccato is challenging to manage due to the weight distribution when used at the nut and is therefore rarely used over long passages. When utilising an up-bow Flying Spiccato, the bow stroke requires an active right hand that moves in a vertical direction. Each note of the stroke is a spiccato bounce, so consequently, the speed of the bow stroke is limited.

While most bow strokes usually work better in specific regions of the bow, the Flying Spiccato can function using a small portion of the bow and extend to perform over an entire bow (from nut to tip). Galamian describes the capacity of the Flying Spiccato as a recovered or retrogressed stroke:

The flying spiccato, too, can be effectively "recovered," staying in one place in the bow. The recovery serves a double purpose: it permits the uninterrupted use of this bowing even for the longest passages and it helps maintain the same sound-character on the stroke that would otherwise change as the bow varies its point of attack relative to its length...

In the flying spiccato, the strokes can even be made to retrogress, so that in a succession of up-bow spiccatos the bow actually approaches the point. This retrogression is a good practice device, and it occasionally finds its place in actual performance when the need arises to work up toward a high place in the bow.⁴⁶⁷

The 'recovered' bow stroke as Galamian describes, is not necessary for the bowing pattern which occurs from bar 25 onwards in Caprice Twenty. However, using most of the bow will also hinder the spiccato in the Flying Spiccato stroke as the bow speed must be increased to restart the bowing pattern each time. Therefore, only a quarter of bow should be used for the bowing pattern. **Video Clip 57** provides a demonstration of small and large amounts of the bow being used for the Flying Spiccato bow stroke.

Video Clip 57 Caprice Twenty: b. 25, Bowing exercise

⁴⁶⁷ Galamian, Principles of Violin Playing & Teaching, p. 81.

[&]quot;The thrown bow is nothing but a spiccato with all the notes playing with consecutive down or up bow strokes... the flying staccato is similar to the thrown bow, with the difference that the bow, instead of remaining on the same place, is moving from the point to the middle." Dounis, *The Artist's Technique of Violin Playing, Op. 12*, p. 83.

By viewing the video, it becomes apparent that there is a lack of refinement in the bow stroke when more bow is used for the Flying Spiccato stroke. When using half the bow for the Flying Spiccato stroke, the spiccati must bounce as the bow moves quickly across the string, and this makes the bow stroke cumbersome and challenging to manage. Ideally, the player should use the same amount of bow for the slur and the Flying Spiccato, as this enables the stroke to sound identical when it is repeated.

The choice of tempo from bar 25 onwards in Caprice Twenty dictates the necessity for a retrogressed or recovered bow stroke. While a retrogressed Flying Spiccato bow stroke may be suitable for a moderate tempo, a continuous recovering Flying Spiccato bow stroke will be necessary for a fast tempo. The player's ability to spiccato with as little horizontal movement as possible will enable the player to perform this work at a faster tempo.

Coordination of the Spiccato & Trills of Caprice Twenty

From bar 25 onwards, the violinist has to consider the length of the trills. The trills can vary from one turn to several oscillations and have a profound effect on the Caprice both technically and musically. They must, however, maintain perfect rhythm and be kept strictly in time.

Musically, the trills affect the Caprice by emphasising the strong beats of the bar. The more oscillations the trill contains, the faster the trills have to be played, and the stronger the emphasis becomes. When compared with the turn, the emphasis is much lighter and more lyrical because the speed of the turn is slower.

From a technical perspective, a trill which contains several oscillations requires fast repetitive movements. If the violinist cannot perform the trills fast enough by lifting the individual finger from the base of the knuckle, then the trill needs to be performed as a vibrato-trill, which is typically much faster than a regular trill.

Coordinating the trills and the Flying Spiccato bow stroke is challenging as one technique must be immediately followed by the other. In order to conquer this difficulty, a small rest can be applied between the two techniques during practice. The rest provides the player with enough time to ensure both hands are ready for the upcoming Flying Spiccato bow stroke. **Video Clip 58** (p. 245) illustrates this exercise.

Video Clip 58 Caprice Twenty: bb. 25-27, Coordination exercise

Once both the trills and the Flying Spiccato can be performed, it is then necessary to consolidate the techniques, remove the rest, and work on increasing the tempo. Using a metronome to increase the tempo can assist with achieving the desired performance speed. **Video Clip 59** provides a demonstration of bars 25 to 27 at performance tempo.

Video Clip 59 Caprice Twenty: bb. 25-27, Increasing the tempo

The Double & Triple-Stops of Caprice Twenty

The first 24 bars form the opening section of Caprice Twenty and feature a series of double-stops that are followed by triple-stops. The double-stops commence over the first sixteen bars and feature a homophonic melodic line that is accompanied by a drone which is played by the D-string. This particular style of writing requires excellent control of the bow and continuous evaluation of the bow pressure, point-of-contact, and bow speed. Please see **Video Clip 60** for a demonstration of bars 1-16.

Video Clip 60 Caprice Twenty: bb. 1-16, Phrasing & bow weight distribution

As demonstrated in the video clip, the bow pressure should be more substantial on the A-string, as it carries the melodic line. Adjusting the point-of-contact so that more of the bow hair is on the A-string, will help balance the sound of the two voices.

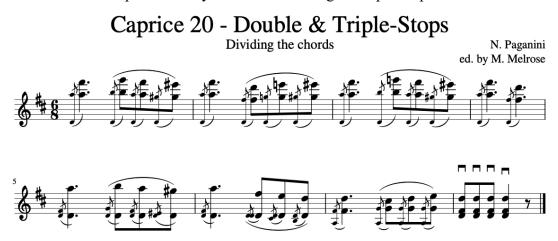
The point-of-contact should be monitored throughout the section so that the angle of the bow remains across two strings. Periodically adjusting the point-of-contact so that it is closer to the fingerboard, will provide a softer, more delicate sound which will suit the *dolce* marking.

The bow speed should vary according to the phrase marking. Where possible, an upbow should be used for the crescendo, and a down-bow should be used for the decrescendo. The weight of the bow and the direction it moves in affects the volume because the bow is heavier at the nut. Therefore, it is beneficial to change the bowing to one slur per bar, or every two bars as this will help shape the phrases.

From bar 17, the double-stops change to triple-stops with frequent slurs. Due to the slur, it is impossible to sustain three-strings at once, so each chord must be carefully divided, ensuring the melodic line remains undisrupted.

Music Score 41 presents an illustration of bars 17 to 24 from Caprice Twenty. The music score identifies the split in the triple-stop and breaks the chord into double-stops, leaving the notes of the melodic line held longer.

Music Score 41 Caprice Twenty Exercise: Dividing the triple-stops



Playing the first part of the triple-stop as a grace note ensures no disruption to the melodic line, however, it is essential that the grace-note-double-stop comes before the beat, so there is no delay to the melodic line. Video Clip 61 provides a demonstration of Music Score 41, which is presented slower than the performance tempo.

Video Clip 61 Caprice Twenty: bb. 17-24, Splitting the triple-stops

To work towards achieving a performance tempo, it is worth practising only the melodic line without the grace notes from bar 17 to 24. Practising this way provides an

opportunity to experiment with the tempo before applying the grace notes back into context. **Video Clip 62** provides a demonstration of bars 17 to 24 at performance tempo.

Video Clip 62 Caprice Twenty: bb. 17-24, Performance tempo

Recommended Repertoire Post Caprice Twenty

Provided in **Table 42** are some examples of violin repertoire that can be studied after the completion of Caprice Twenty. Although not all the repertoire contains all three studied techniques (trills, spiccato and slurs), there is one piece which does. Fritz Kreisler's *Allegretto (In the style of Niccolo Porpora)*, 468 contains the same trills and slurred-spiccato bow stroke as Paganini's Caprice Twenty. **Music Scores 42** and **43** (p. 248) offer a comparison between the two works.

 Table 42
 Recommended Repertoire Post Caprice Twenty

Composer	Repertoire
Bartok, B.	Violin concerto in B major, Sz.112, No. 2
Khachaturian, A.	Violin Concerto in D minor, Op. 46
Kreisler, F.	Allegretto in the Style of Niccolo Porpora
Kreisler, F.	Chanson Louis XIII & Pavane
Kreisler, F.	La Précieuse in the Style of Couperin
Prokofiev, S.	Sonata for Solo Violin, Op. 115
Sarasate, P.	Carden Concert Fantasy, Op. 25 for Violin and Piano

247

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⁴⁶⁸ Fritz Kreisler, Allegretto (In the Style of Niccolo Paganini), (New York: Fischer, 1913), B576, p. 2.

Music Score 42 Fritz Kreisler, Allegretto in the Style of Niccolo Porpora, bb. 1-10

Sheet Music Edition B 576

ALLEGRETTO (In the Style of Niccolo Porpora)



Source: Fritz Kreisler, Allegretto (In the Style of Niccolo Paganini), (New York: Fischer, 1913), B576, p. 2, bb. 1-10.

Music Score 43 Paganini Caprice Twenty: bb. 25-32



Source: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 38, bb. 25-32.

There are many similarities between the two works, such as the bowing pattern, rhythm, and articulation. However, it is the additional grace note in Kreisler's *Allegretto*, which separate the works from their many similar features.

CHAPTER FOURTEEN

Caprice Number Twenty-Four

The theme and variations which form Caprice Twenty-Four, are considered to be the most famous out of the set and have been reconstructed, arranged and inspired by different composers including; Liszt (Grandes études de Paganini),⁴⁶⁹ Muczynski (Desperate Measures for piano),⁴⁷⁰ Rachmaninov (Rhapsody on a Theme by Paganini),⁴⁷¹ Brahms (Variations on a theme by Paganini),⁴⁷² and Busoni (Paganini-Liszt Six Etudes).⁴⁷³

The Caprice's popularity exists because of its technical and flamboyant adroitness and its musical yet straightforward structure. Of all the Caprices, Caprice Twenty-Four contains the highest number of techniques and is, therefore, one of the most challenging to conquer.

As detailed in the scope of this project (p. 21), Caprice Twenty-Four contains ten techniques, including arpeggios, double-stops, triple-stops, string crossings, fast passagework, spiccato, staccato, détaché and pizzicato. Seven of these techniques are discussed in previous chapters so this chapter will focus on the remaining techniques. They include double-stop-tenths, triple-stops and left-hand pizzicato.

Note Discrepancies

Table 43 (p. 250) provides a list of note discrepancies which can be found in Caprice Twenty-Four. There are three bars with note discrepancies that can be found in the listed editions.

⁴⁶⁹ Franz Liszt, Grandes Etudes de Paganini, S.141 (Leipzig: Breitkopf & Härtel, 1851), 83689.

⁴⁷⁰ Robert Muczynski, *Desperate Measures (Paganini Variations) for Piano, Op. 48* (USA: Theodore Presser Co., 1996), 410-41307

⁴⁷¹ Sergei Rachmaninoff, *Rapsodie: Sur un Thème de Paganini pour Piano et Orchestre Op. 43* (London: Boosey & Hawkes, 1934), R1.

⁴⁷² Johannes Brahms, *Variazioni Sopra un Tema di Paganini Op. 35 for the piano* [Variations on a theme by Paganini, Op. 35] (Milan: Ricordi, 1930), [plate unknown].

⁴⁷³ Ferruciio Busoni & Franz Liszt, 6 Etudes D'execution Transcendante D'apre Paganini (Leipzig: Breitkopf und Härtel, 1914-21), [plate unknown].

Table 43 Caprice Twenty-Four: Note Discrepancies

	Editions of the Paganini Caprices							
Bar	Original	Ricordi,	Breitkopf	Richault	Ricordi,	Peters	IMC	Urtext
Number	Score	1st ed.	& Härtel	c.1825	2 nd ed.	c.1910	1973	1990
	c.1817	c.1820	c.1823		c.1836			
37, 1 st beat	C/C natural octave	C/A natural double- stop	C/A natural double-stop	C/A natural double- stop	C/A natural double- stop	C/C natural octave	C/C natural octave	C/C natural octave
38, 1st beat, lower note of double- stop	B Sharp	B Sharp	G Sharp	B sharp	B Sharp	G Sharp	G Sharp	G sharp
100, 4 th quaver	E/E natural octave	E, B, E natural	E, B, E natural	E, B, E natural	E, B, E natural	E, B, E natural	E, B, E natural	E/E natural octave

Source: Data from Dr. Wolf-Dieter Seiffert, *Henle Library*, iPad vers 1.6.0.G, *Apple App Store*, (Henle Publishers, 2017), https://itunes.apple.com/au/app/henle-library/id1021283948?mt=8 and Nicolò Paganini, *24 Capricci Für Violine Solo (Urtext)*, ed. by Renato De Barbieri, Alberto Cantu and Ernst Herttrich (München: G. Henle Verlag, 1990), 450.

The notation of the lower note in bar 38 has been altered several times in the editions listed in **Table 43**. Unfortunately, the notation in bar 38 of Paganini's score is difficult to read, and under closer inspection appears as a B sharp. **Music Score 44** (p. 251) illustrates bar 38 (indicated by a black box) in Paganini's original score.

Besides the first beat of bar 38, variation three is written entirely in octaves. Therefore, a G-sharp should replace the B-sharp in bar 38 so that the variation is consolidated into octaves. Examples of the note change can be found in the Breitkopf & Härtel, Peters and IMC editions.⁴⁷⁴

⁴⁷⁴ Paganini (Leipzig: Breitkopf & Härtel, c.a.1823), 3936, p. 36; Paganini (Leipzig: C.F. Peters, c.a.1910), 9703, p. 43; Paganini (New York: IMC, 1973), 2292, p. 43.

Music Score 44 Caprice Twenty-Four, Original Manuscript, bb. 1-53,



Source: Niccolo Paganini, "Opus 1 24 Capricci per Violino Solo," Original Manuscript, c.a.1817, https://imslp.org/wiki/Special:ImagefromIndex/12926/nhfn, p. 44, bb.1-53.

Recommended Exercises, Studies and Scales Before Learning Caprice Twenty-Four

Caprice Twenty-Four features ten challenging string techniques. Therefore, it is recommended that the previous repertoire listed in **Tables 15** (Caprice Five, p. 119), **22** (Caprice Nine, p. 150), **25** (Caprice Ten, p. 171), **31** (Caprice Twelve, p. 201), **34** (Caprice Sixteen, p. 212), and **38** (Caprice Nineteen, p. 228), are studied before commencing the recommended repertoire found in **Table 44** (p. 252-53).

 Table 44
 Caprice Twenty-Four: Recommended Repertoire

Scale Systems						
Flesch: A minor p. 6-10	Granat: Heifetz Scale Book A major and A minor p.					
	13-17					
Galamian Vol 1: 3. Three-Octave Scales p. 7 with	Galamian Vol 2: IV Tenths p. 18-19 and X Triple					
bowing B1, B2, B3, B4, B6, B12 and rhythms R1,	<i>Stops</i> p. 25-26					
R2, R3, R4, R6, R12						
Fischer Scales: Three-octave scales, arpeggios and	-					
chromatic scales p. 131						
Double-St	ops: Tenths					
Exercises	Studies					
Fischer Double Stops: Fingered Octaves p. 34-36	Herrmann: 13 Con moto, Study in Tenths – slurred					
and Tenths p. 37-38 in the key of A minor	broken double stopped 10ths					
Fischer Practice: Double Stops (Tenths) exercise	Fiorillo: 30 Allegro and 27 Allegretto – broken and					
<i>182</i> p. 228	double stopped 10ths					
Dounis The Artist's Technique of Violin Playing						
Op. 12: IV The technique of double stop playing						
(octaves and tenths), Part B p. 43-46						
Triplo	e-Stops					
Exercises	Studies					
Galamian Contemporary Violin Technique Vol 2:	Hermann: 10 Molto moderato and 11 Allegro					
X Triple Stops, (A.) Diatonic Triple Stops in	moderato – features consecutive bowing patterns: r					
Consecutive Motion and (B.) In Disjunct Motion (p.	ПП or ПVП					
25-26) – features triple stops with a variety of						
bowings and fingerings						
Fischer Double Stops: <i>Thirds</i> p. 25-27, <i>Octaves</i> p.	Dont Op. 37: 24 Allegretto vivo – combination of Γ					
31-33 in the key of A minor	ПП or ПVП bowing					
Fischer Basics: Chords exercises 123-126 p. 86-88	Dont Op. 35: 1 Prêlude, 9 Allegro and 11 Allegrette					
	- continuous triple stops, 4 Allegretto and 23 Molto					
	appassionato – slurs and triple stops					
Dounis The Artist's Technique of Violin Playing	Bériot: 2 Allegretto moderato – rhythmic fugue					
Op. 12: Second Part The Bow: Chords of three	containing tripe stops					
notes, p. 67-69						
Yanshinov: Exercise 16, p. 7	Wieniawski Ecole Moderne: 8 Allegro marziale –					
	triple stops					

Left Hand Pizzicato		
Exercises	Studies	
Heifetz Scale Book: No. 14 from A major, A minor	Mazas Heft II-III: 30 Allegro non troppo, – slurs,	
Scales and Arpeggios	string crossings and left hand pizzicato, 57	
	Allegretto – left hand pizzicato and harmonics	
	(pizzicato notes contain specific fingerings)	
Fischer Basics: Fast Fingers exercise 168 p. 120	Kayser: 20 Allegretto – features left hand pizz,	
	double and triple stops	
Fischer Practice: Left-hand Pizzicato exercise 119-	Dont Op. 35: 6 Allegretto scherzoso – study is	
120 p. 140	originally written to improve finger dexterity and	
Ševčík Op. 1 Part 4: No. 19, 20	trills, however it can also be used to develop the	
Dounis The Absolute Independence of the Fingers	technique of left hand pizzicato ⁴⁷⁵	
Op. 15 Book 1, The Absolute Independence of		
Three Fingers, p. 93-108, and Op. 15 Book 2, The		
Absolute Independence of Four Fingers, p. 110-		
174		
Dounis The Artist's Technique of Violin Playing		
Op. 12: <i>Pizzicato</i> , exercises <i>1-6</i> , p. 74-75		
Dounis The Violin Players' Daily Dozen Op. 20:		
Tweleth Exercise – for left hand pizzicato, p. 244		

Double-Stops: Tenths

The double-stopped exercises which are presented in chapter four of Dounis' *The Artist's Technique of Violin Playing Op. 12*, ⁴⁷⁶ are beneficial to practice as they are similar to the tenths which are presented in variation six of Paganini's Caprice Twenty-Four. The exercises are presented in scale fragments on neighbouring strings commencing first on the G and D strings, before moving to the D and A, and finally the A and E strings.

Study No. 13, Con moto, 477 was composed by the American violinist Eduard

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⁴⁷⁵ Dont, "Allegretto scherzoso No. 6" in *24 Etudes and Caprices Opus 35 for Violin Solo*, p. 12-13. – (edition contains left hand pizzicato exercise in the footnote).

⁴⁷⁶ Dounis, "IV: The Technique of double stop playing (octaves and tenths), Part B" in *The Artist's Technique of Violin Playing Op. 12* (New York: Fischer, 2005), BF16, p. 43-46.

⁴⁷⁷ Hermann, "No. 13 Con moto, Study in Tenths" in *Fourteen Violin-Études for the Systematic Study of Double-Stops, Book II*, p. 32-33.

Herrmann (1850-1937),⁴⁷⁸ and is an ideal work for practising tenths in a musical context. Although the study is written in broken tenths, it can be adapted so that it can be played as double-stops.

Triple-Stops

Galamian's triple-stop exercises are presented in a scale format.⁴⁷⁹ Galamian offers several bowing patterns that can be practised with the triple-stops; however, it is beneficial to practise them as struck chords in a continuous down-bow pattern as this bowing pattern can be used in variation eight of Caprice Twenty-Four. The triple-stops should also be played in a two-chord slur, with each triple-stop played in an ascending direction as this can also be used as an alternative bowing for variation eight.

Left Hand Pizzicato

Fischer's chapter on *Co-ordination* contains helpful information on the timing and action of the left and right hands. Fischer encourages the player to first play exercises with right-hand pizzicato before attempting to use the bow:

A simple way to demonstrate perfect co-ordination is to play pizzicato: the difference in timing between putting the finger down and plucking it is obvious. In the following example first play pizzicato, and then bow with the same timing as when plucking.⁴⁸¹

While these exercises do not focus on left-hand pizzicato, it is still beneficial to improve co-ordination between the hands. Fischer's other exercises (119 and 120 from *Practice*, 2006) titled *Left-Hand Pizzicato*, ⁴⁸² are beneficial for players preparing for variation nine. Exercise 120 provides instructions on how to ensure a clear sound

⁴⁷⁸ Anya Laurence, *Herrmann, Eduard*, Grove Music Online: published 2011, published in print 2001, https://doi.org/10.1093/gmo/9781561592630.article.A2087384.

⁴⁷⁹ Galamian, "X. Triple Stops," in *Contemporary Violin Technique: Double and Multiple Stops in Scale and Arpeggio Exercises*, vol. 2, p. 25-26.

⁴⁸⁰ Fischer, "Co-ordination" in Basics: 300 exercises and practice routines for the violin by Simon Fischer, p. 129.

⁴⁸¹ ibid.

⁴⁸² Fischer, "Left-hand Pizzicato," in *Practice by Simon Fischer: 250 step-by-step practice methods for the violin*, p. 140.

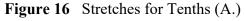
throughout the variation by providing a systematic fingering sequence.⁴⁸³

A previously mentioned resource that was used in **Table 19** (p. 134) to prepare Caprice Six is worth investigating. Dounis' chapter on *The Absolute Independence of Four Fingers*, ⁴⁸⁴ contains exercises that require the player to pluck the string using left hand pizzicato while the right hand simultaneously draws the bow across the string. These exercises require complete independence and control of the left and right hands and will prove valuable as a primary resource towards the preparation of left hand pizzicato.

Double-Stops: Tenths

Double-stop-tenths are challenging to play due to the unavoidable tension placed on the hand, which occurs when stretching. Even for large hands, extending the fingers is a necessary movement which is most problematic in the first to third positions where the distance between the two notes is the largest. Unfortunately, strain and tension in the left-hand are inevitable when playing tenths. However, with adequate exercise and training of the muscles in the left-hand, the tenths can be managed.

Figures 16 and **17** (p. 255-56), illustrate some stretches that can improve flexibility. These stretches improve the ability to reach a greater distance with the left-hand and are beneficial to practise during warm-up. They should always be done slowly and gently, to avoid any injury to the hand or fingers.





⁴⁸³ Fischer, "Left-hand Pizzicato," in Practice by Simon Fischer: 250 step-by-step practice methods for the violin, p. 140.

⁴⁸⁴ Dounis, "Book II: The Absolute Independence of Four Fingers" in *The Dounis Collection Op. 15*, p. 110-185.

Figure 17 Stretches for Tenths (B.)



Before attempting the tenths in Caprice Twenty-Four, it is first necessary to confirm the position of the thumb between the first and fourth fingers when stretching an interval of a tenth. Provided, are instructions by Galamian which discuss the playing of fingered octaves and tenths:

In the playing of fingered octaves it is important to place the hand higher so that the first and second fingers reach back a little as the third and fourth fingers stretch forward.

This same idea applied to tenths: it is best to place the hand in an intermediate position between the first and fourth fingers so that the hand can utilize its stretch in both directions, fourth finger upward and first finger downward with no undue strain place on either...⁴⁸⁵

The position of the thumb is crucial to the success of the tenths. Its location can relieve some tension in the left-hand and allow a more significant stretch between the fingers. As Galamian recommends, it is beneficial to place the thumb under the neck between the first and fourth fingers.

Performing tenths successfully requires a great deal of skill and understanding of the movements. A deliberate and well thought out practice regime that progresses gradually is necessary to support the development of the tenths. Provided, is that series of steps that correspond to the tenths found in variation six of Caprice Twenty-Four.

⁴⁸⁵ Galamian, Principles of Violin Playing & Teaching, p. 28.

Step One:

It is first necessary to analyse the semitone, and tone distances between the consecutive tenths in variation six. **Music Score 45** illustrates these distances.

Music Score 45 Caprice Twenty-Four, Tone & Semitone Distances, bb. 73-84



Source: Adapted from Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703, p. 44, bb. 73-84.

The tenths are most challenging when both notes of the double-stop do not shift the same distance. These shifts are often the cause of intonation problems, and they are difficult to correct immediately. Therefore, the memorisation of the tone and semitone distances is essential.

Step Two:

The objective of the second step is to develop familiarity of the pitch and fingering patterns. A beneficial exercise to practice involves playing only the lower or upper notes of the consecutive tenths with the selected double-stop fingering. Playing this exercise with a chain-bowing pattern helps measure the distance of the shifts which will occur after every note. **Video Clip 63** (p. 258) provides a demonstration of this exercise.

Video Clip 63 Caprice Twenty-Four: bb. 5-6 (var. 6), Scales with double-stop fingering

Step Three:

Step three involves preliminary exercises that work towards consolidating the tenths. In this exercise, the tenths are practised broken in a slur bowing. However, unlike traditional broken-double-stops, the second note introduces the double-stop. The purpose of this variation is to encourage the fingers to shift simultaneously according to their tone or semitone pattern. A demonstration of this exercise is provided in **Video Clip 64**.

Video Clip 64 Caprice Twenty-Four: bb. 5-6 (var. 6), Double-stop-broken-tenths exercise

Another exercise that works to strengthen the tenths is demonstrated in **Video Clip 65**. In this exercise, the left fingers press down on both notes of the double-stop and shift, while the bow only plays the upper or lower notes of the tenths. Practising this way allows the player to focus on the intonation of the notes and adjust the tone and semitone spacing accordingly.

Video Clip 65 Caprice Twenty-Four: bb. 5-6 (var. 6), Upper/lower note focus in double-stop playing

Step Four:

The objective of the final step is to increase the tempo of the tenths and perform them musically. Using a metronome at this stage is useful to speed up the tenths incrementally to achieve the desired performance tempo. Speeding up by only two to four BPM is advised as it is crucial to maintain excellent intonation throughout the double-stops.

As the tenths become playable closer to the performance tempo, it can be beneficial for the player to pulse the bow slightly for each double-stop. This decreases any sliding sounds which might occur during the shifts and provides

direction in the sound, as the length of the bow can be manipulated to suit the phrase. **Video Clip 66** provides a demonstration of the tenths at performance tempo.

Video Clip 66 Caprice Twenty-Four: bb. 5-6 (var. 6) Consolidating the learning stages

Triple-Stops

Intonation is often a problem when managing the triple-stops in variation eight of Caprice Twenty-Four. In some triple-stops, the intonation is not always measured ascending from the bottom note of the chord. Instead, it is measured according to the position of the open string.

An example of this scenario exists on the first triple-stop of variation eight, which contains the notes A, C, E in ascending order using fingers 4, 2, and the E-string. Instead of tuning the chord from the root note of the chord, it must be tuned in a descending direction by tuning the C and E-string together first. The fourth-finger A-natural can then be tuned against the C-natural.

Double-stops or triple-stops which contain an open-string, must be tuned according to the placement of that open-string due to the string being at a fixed pitch. All other notes in the double or triple-stop must, therefore, be tuned against the open-string.

Music Score 46 (p. 260) provides an exercise that supports the development of intonation in the triple-stops found in variation eight of Caprice Twenty-Four. The triple-stops that contain open-strings are tuned first before the rest of the chord and are presented in two double-stop slurs. The slurs support the intonation by encouraging the left-hand to hold down all fingers for the duration of the slur. A demonstration of **Music Score 46** (p. 260) is presented in **Video Clip 67.**

Video Clip 67 Caprice Twenty-Four: var. 8, Tuning the triple-stops

Music Score 46 Caprice Twenty-Four, Exercise, Triple Stops

Caprice 24 - Triple Stops

Intonation Exercise (Variation 8)

N. Paganini ed. by M. Melrose



When playing triple-stops, it is essential to focus on the middle string of the triple-stop and adjust the point-of-contact of the bow so that it is slightly towards the fingerboard. The adjustment of the sounding point enables the bow to move across the three strings with greater accuracy without forcing the strings to bend under the pressure of the bow. **Video Clip 68** provides a demonstration of several triple-stops with long and short bow strokes.

Video Clip 68 Caprice Twenty-Four: var. 8, Bow management in triple-stops

The bowing indication in Paganini's original score of variation eight, contains two slur markings. The first slur is drawn clearly over the bar-line and connects the first two bars of variation eight into a single slur. **Music Score 47** (p. 261) illustrates the marking in Paganini's original manuscript of variation eight.

Music Score 47 Caprice Twenty-Four (var. 8): bb. 90-115, Original Score



Source: Niccolo Paganini, *Opus I 24 Capricci per Violino Solo*, holograph score, c.a.1817, https://imslp.org/wiki/Special:ImagefromIndex/12926/nhfn, p. 44.

Unfortunately, this bowing marked by Paganini is impossible to execute successfully due to the restrictive amount of bow allowed over the eight triple-stops. This bowing suggestion has been replicated in both of the first and second Ricordi editions,⁴⁸⁶ and the Richault edition,⁴⁸⁷ but has led to subsequent editions suggesting alternative bowings.⁴⁸⁸

Various violinists who have recorded the Caprices have also used alternative bowing patterns for variation eight.⁴⁸⁹ The two most common bowing patterns are consecutive downbows at the nut and slurs connecting two triple-stops in a single bow.

Playing variation eight with consecutive down-bows requires a relaxed bow hold with a bent thumb and little finger. The thumb acts as a form of suspension as the bow makes contact with the strings, while the little finger counteracts the weight of the bow, ensuring it connects with the strings at the correct angle. The consecutive down-bow stroke begins in the air and moves across the strings in a diagonal direction, lifting off the strings at the end of the note and returning to the starting position to repeat the same movements. An example of this bowing pattern is demonstrated in **Video Clip 69**.

Video Clip 69 Caprice Twenty-Four: var. 8, Bowing with consecutive down-bows

⁴⁸⁶ Paganini (Milan: Ricordi, c.a.1820), 403, p. 45; Paganini (Milan: Ricordi, c.a.1836), 9036, p. 45.

⁴⁸⁷ Paganini, (Paris: Richault, c.a.1825), 1028, 45.

⁴⁸⁸ Please see **Appendix 3** (p. 305) for a list of suggested bowing patterns that can be found in the various editions of the Caprices.

⁴⁸⁹ Please see **Appendix 4** (p. 306) for a list of bowing patterns that have been used by various violinists in live video recordings of Caprice Twenty-Four.

Examples of different variations of the bowing patterns in variation eight can include

short consecutive down-up-bows, long consecutive down-up-bows, and triple-stops in slurs

of two. One of the main differences between the bow strokes is that any of the long-

separate strokes or slurred strokes will resolve onto the middle note of the triple-stop to

lengthen the sound. A demonstration of these bowing patterns is provided in Video Clip

70.

Video Clip 70 Caprice Twenty-Four: var. 8, Bowing variations

Left Hand Pizzicato

Performing a successful left-hand pizzicato requires heavy finger pressure and

awareness of the finger angles. Excellent coordination is also required, especially for passages

that contain bowed notes.

Left-hand pizzicato is one of the rare occasions when heavy finger pressure is necessary

to benefit the sound of the pizzicato. When a finger presses hard on the string, it shortens the

length of the string mimicking the nut of the fingerboard on the violin.

Adjusting the left-hand to a low finger action can also benefit the sound of the pizzicato.

Achieving this position can be done by moving the left elbow more to the left so that the flesh

of the finger is used to pull the string in a horizontal or downwards direction.

In the context of variation nine of Caprice Twenty-Four, the left-hand pizzicato can be

challenging to manage due to there being a combination of bowed and pizzicato notes, and

limited space between the stopped-note and the finger which is plucking the string.

In order to solve the first problem of difficult bowed and pizzicato notes, it is necessary

to practise only the *arco-notes* of the variation. It is essential to play them with precise rhythm

and with short spiccato bow strokes so that the arco and pizzicato notes are the same

lengths. Video Clip 71 provides a demonstration of this exercise.

Video Clip 71 Caprice Twenty-Four: var. 9, Arco notes

262

In order to solve the second problem of limited space between the stopped-note and the plucking finger, fingering instructions have been provided in an adapted copy of Fischer's Left-Hand Pizzicato Exercise in **Music Score 48**.

Music Score 48 Caprice Twenty-Four, Exercise, Left Hand Pizzicato



Source Adapted From: Simon Fischer, "Left-hand Pizzicato," in *Practice by Simon Fischer: 250 step-by-step practice methods for the violin, 2nd ed.* (London: Peters, 2006), 7578, p. 140.

Presented in **Music Score 48** are a series of numbers which indicate fingering instructions. The numbers which are written over double and triple-stops instruct the player to press those fingers over their corresponding notes. The numbers in circles indicate the finger which will pluck the stopped note. Due to the limited space between the notes, the fingers must press hard onto the fingerboard, and the plucking finger must pull the string forcefully. An example of this exercise is presented in **Video Clip 72**.

The tempo of this variation is dictated by the violinist's ability to organise their fingers quickly and accurately. Gradually increasing the tempo should only commence once coordination of the bow and fingers are established. **Video Clip 73** provides a complete performance of variation nine, which is followed by a faster segment.

Video Clip 73 Caprice Twenty-Four: var. 9, Increasing the tempo

Recommended Repertoire Post Caprice Twenty-Four

There are three string techniques which are listed as headings in **Table 45** (p. 265). Although there are many techniques in Caprice Twenty-four, this chapter only focuses on double-stopped-tenths, triple-stops, and left-hand pizzicato. Provided under each heading is a list of works that feature the corresponding technique. Studying these pieces after the completion of Caprice Twenty-Four adequately prepares the violinist to conquer the three selected techniques that are presented in this chapter.

 Table 45
 Recommended Repertoire Post Caprice Twenty-four

	Double-stops: Tenths		
Composer	Repertoire		
Brahms, J.	Violin Concerto in D major, Op. 77		
Bruch, M.	Violin Concerto in G minor, Op. 26, No. 1		
Paganini, N.	Violin Concerto in D major, Op. 6, No. 1		
Sibelius, J.	Violin Concerto in D minor, Opus 47		
Tchaikovsky, P.	Violin concerto in D major, Op. 35		
Ysaÿe, E.	(Obsession) Sonata No. 2 for Violin Solo		
Triple-stops			
Composer	Repertoire		
Bartok, B.	Violin concerto in B major, Sz.112, No. 2		
Bartók, B.	Romanian Folk Dances for Violin and Piano		
Bruch, M.	Scottish Fantasy, Op. 46		
Bruch, M.	Violin Concerto in G minor, Op. 26, No. 1		
Chausson, E.	Poême, Op. 25		
Kreisler, F.	Praeludium and Allegro in the style of Pugnani		
Saint-Saëns, C.	Introduction and Rondo Capriccioso, Op. 28		
Sarasate, P.	Caprice Basque, for violin and piano, Op. 24		
Sibelius, J.	Violin Concerto in D minor, Op. 47		
Sinding, C.	Suite in A minor, Op. 10		
Tchaikovsky, P	Violin Concerto in D major, Op. 35		
Left Hand Pizzicato			
Composer	Repertoire		
Bazzini, A.	Scherzo Fantastique, Op. 25		
Berg, A.	Violin Concerto		
De Falla, M.	Danza del Terror (No. 5) from El Amor Brujo		
De Falla, M.	El Paño Moruno, from 7 Canciones Populares Españolas for Violin and		
	Piano		
Paganini, N.	Variations on God Save The King, Op. 9		
Poliakin, F.	Le Canari for violin and piano		
Sarasate, P.	Caprice Basque for violin and piano, Op. 24		
Sarasate, P.	Zigeunerweisen, Op. 20		
Sculthorpe, P.	Irkanda I, for Solo Violin		
Wieniawski, H.	Obertass No. 1, from Deux Mazurkas, Op. 19		

CONCLUSION

The Paganini Caprices remain amongst the most challenging works in the entire violin repertoire. The sophisticated writing of the various techniques which often occur simultaneously requires the purposeful organisation of the left and right hands with precise timing. Not only do the Caprices require technical proficiency of the highest level, but they also offer musically rich melodic lines and intricate harmonies which can be difficult to decipher due to the layered complexities of the works.

Due to this high degree of difficulty, the Caprices are rarely performed in public.

They are usually only ever attempted by celebrated soloists who perform selected Caprices as encores for their concerts or used by teachers who provide their students with selected Caprices to improve particular aspects of their playing.

This project bridges the gap for the student, violin teacher, and professional violinist who aspires to comprehend and perform the Caprices to a high standard. While the Caprices have been out of reach for many violinists, this project serves the broader community of string pedagogues by addressing techniques and other complexities from the Caprices and dismantling them into their most basic elements. By simplifying the manoeuvres, this provides the violinist with an opportunity to access the Caprices which may have been previously inaccessible.

As illustrated in the scope of this project, there are seventeen techniques which feature in the 24 Paganini Caprices. Due to several Caprices consisting of the same techniques, it was necessary to limit the scope of the project to twelve Caprices so that there was no unnecessary repetitive discussion. Therefore, there is no need for the remaining Caprices to be studied as these techniques have already been discussed in this project.

Due to the project's empirical nature, I felt it was necessary to integrate a performance component into this project's submission. The purpose of providing step-by-step demonstrations on the DVD is to provide the reader with a better understanding of the manoeuvres which are required to play the Caprices. The advantage of using this medium is that exercises and instructions can be better understood through visual analysis, and it is hoped that this medium provides that support to the written text in this thesis. Of course,

the disadvantage of using this DVD is that it may not suit the level of the violinist who uses it. However, it is hoped that the demonstrations can be adapted to the player.

The audio CD features performances of the selected Caprices and provides the outcome of the project's methodology. It provides the reader with practical evidence that the exercises and step-by-step solutions assist with the learning of the Caprices. Due to the project's empirical nature, it is hoped that it will be used by teachers and students who wish to explore the step-by-step procedures so that they may be tried and tested in the daily teachings of string pedagogues.

Not only can this project be carried out in a practical setting in a private studio or Conservatorium, but it is also entirely transferrable to other works in the violin repertoire. While this project provides lists of other works that can be attempted after the Caprices, the template of the project could also be adapted to solve the mysteries of other technical works like the De Bériot, Fiorillo, Rode, and Gaviniés studies and Caprices.

The project is not restricted to works with only a technical objective and could be adapted to serve works that were not conceived as studies or technical exercises. These pieces could include the celebrated concertos and sonatas in the violin repertoire, along with works for solo violin, and smaller violin and piano pieces.

From a broader perspective, the project is also completely transferable, not just to other violin works, but to works in other instrument groups. Solving the highly technical and musical challenges found in complex works is not only a violin-specific problem but a problem that exists across the board in all instrument categories, which requires solving.

This project aims to be a significant work in the area of violin pedagogy and performance. The ever-evolving methods on how to play the violin and conquer the problematic techniques is an area that needs to be consistently researched so that systematic and practical solutions can be provided to teachers who then pass this knowledge on to future generations of violinists.

The journey of this project, from its conception to its submission, has redefined the way I teach and play the violin. Throughout the journey, the Caprices have required a highly forensic way of thinking. Playing and learning the Caprices for the first time has required me to analyse the micro-movements of my hands. It has provided me with the opportunity to focus on the physics of the bow's behaviour both on and off the string and

taught me why these bowing behaviours occur the way they do. By learning and understanding the mechanical components of how the bow strokes operate, it has taught me how to control it. Learning this knowledge has had a profound impact on my teaching and how I analyse other violinists. Becoming overwhelmed with the layered complexities of techniques has been reduced, and I am now able to simplify intricate movements into their most basic form; which is a result of my personal growth through this project.

Teaching the violin also inspired my approach to tackling the demonstrations on the DVD. Even though there is a limited amount of discussion on the DVD, I have tried to replicate my demonstrations as if they were being taught in a lesson. Providing illustrations in a sequential format has been an important part of this project, and I feel it is the best method to articulate my findings so that they can be adapted to students of all levels.

Studying the Caprices from a highly forensic perception has been a challenge at times because the Caprices are extremely difficult. Nonetheless, the development and understanding of technique has taught me to connect the similarities and differences of the most basic elementary manoeuvres, to the most challenging techniques. I hope this research prepares other violinists to embrace and conquer the techniques found not only in the Paganini Caprices but also in other repertoires.

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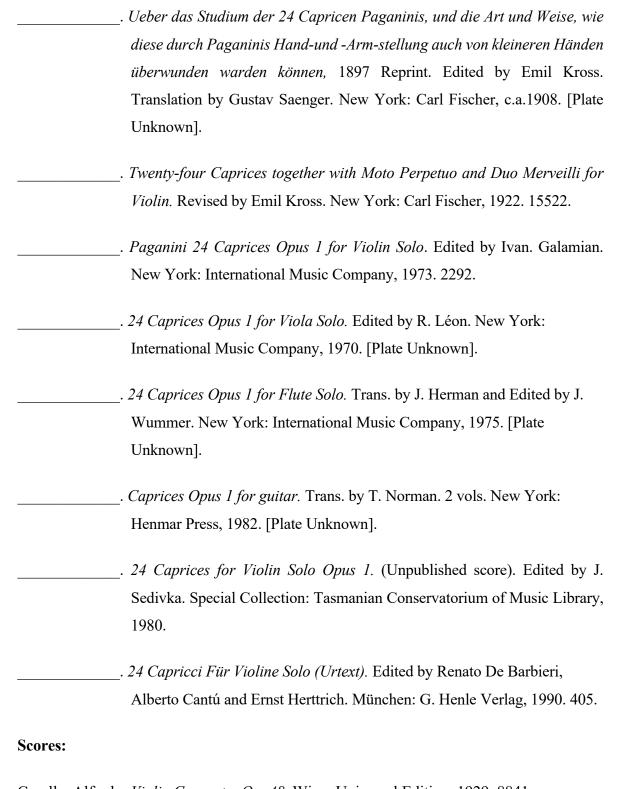
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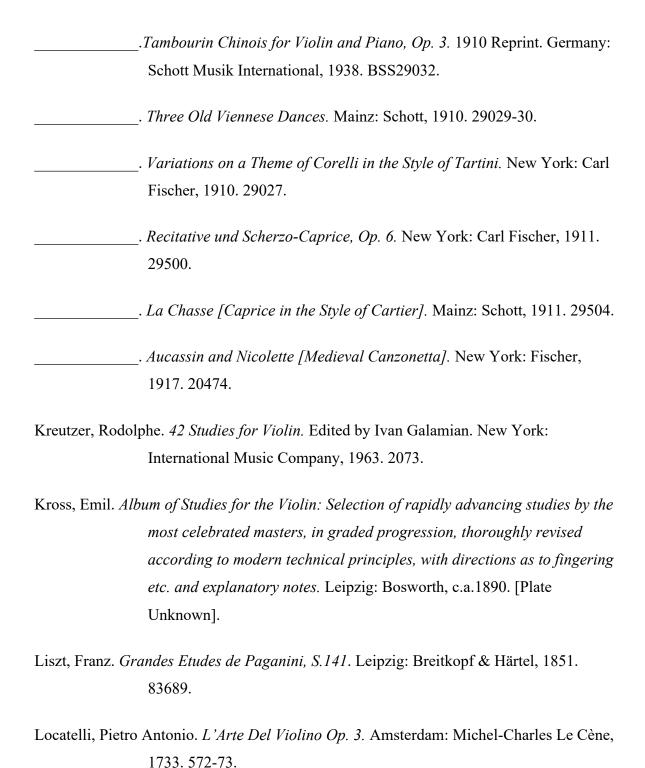
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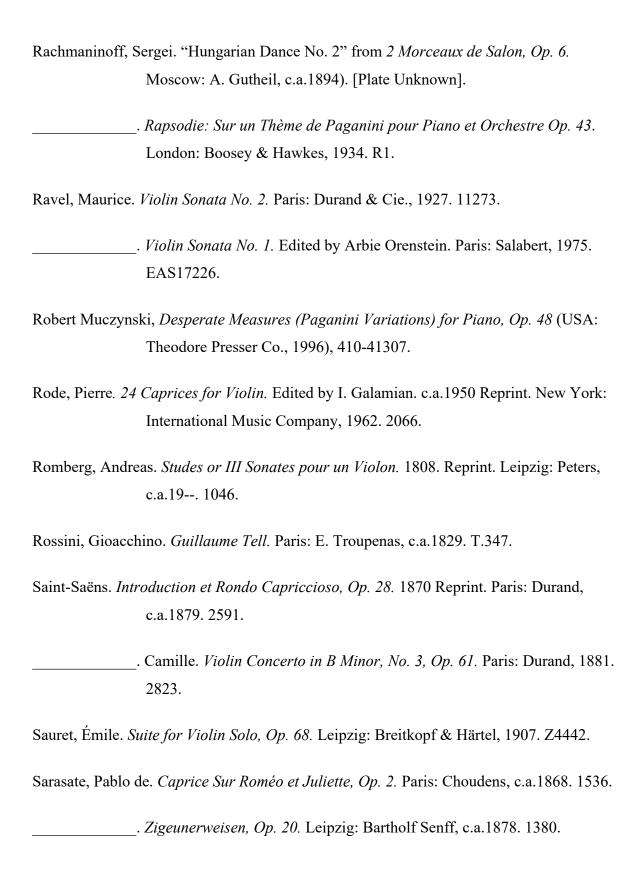
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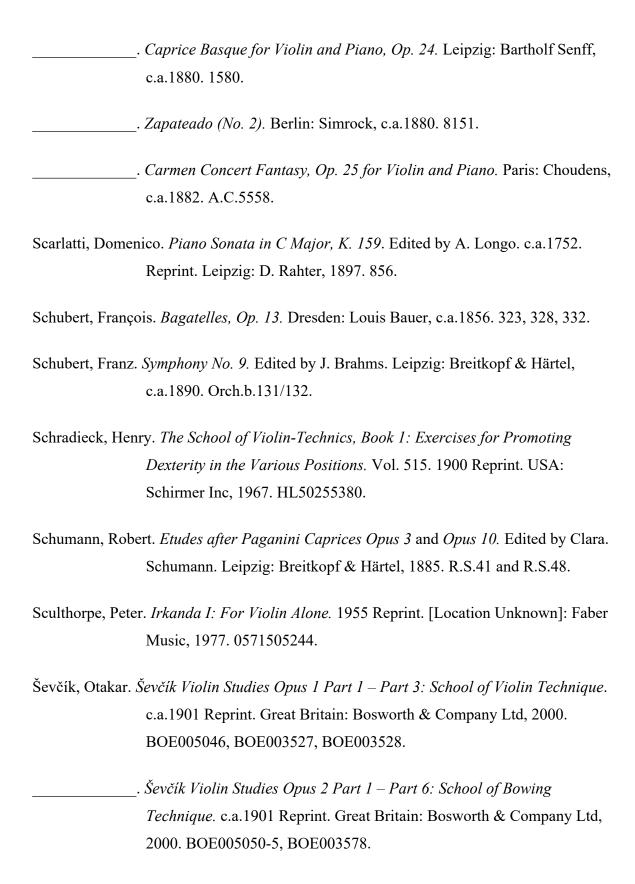
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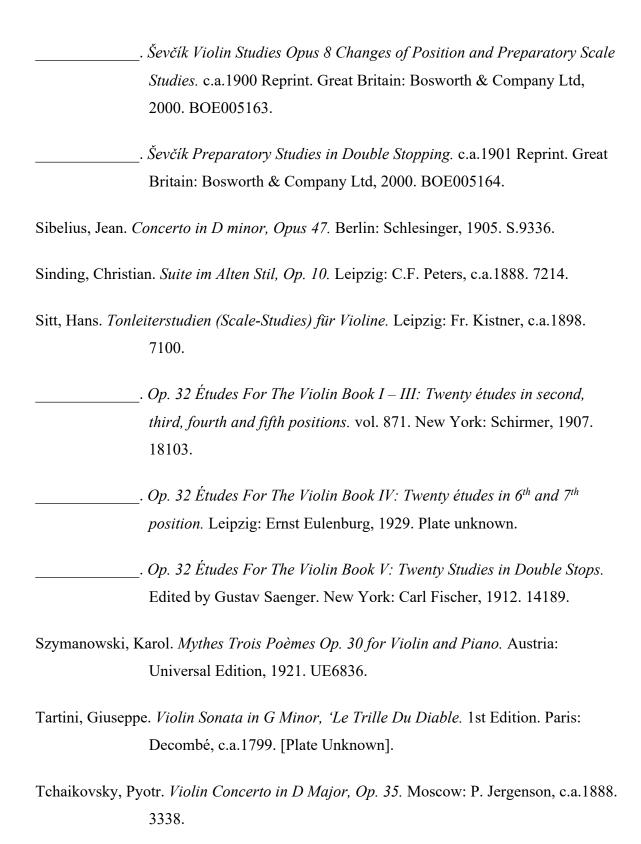


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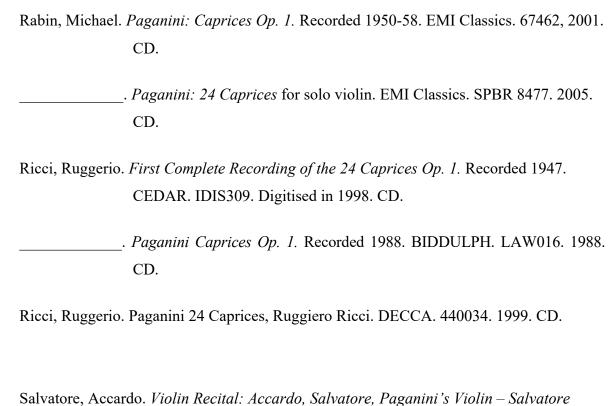
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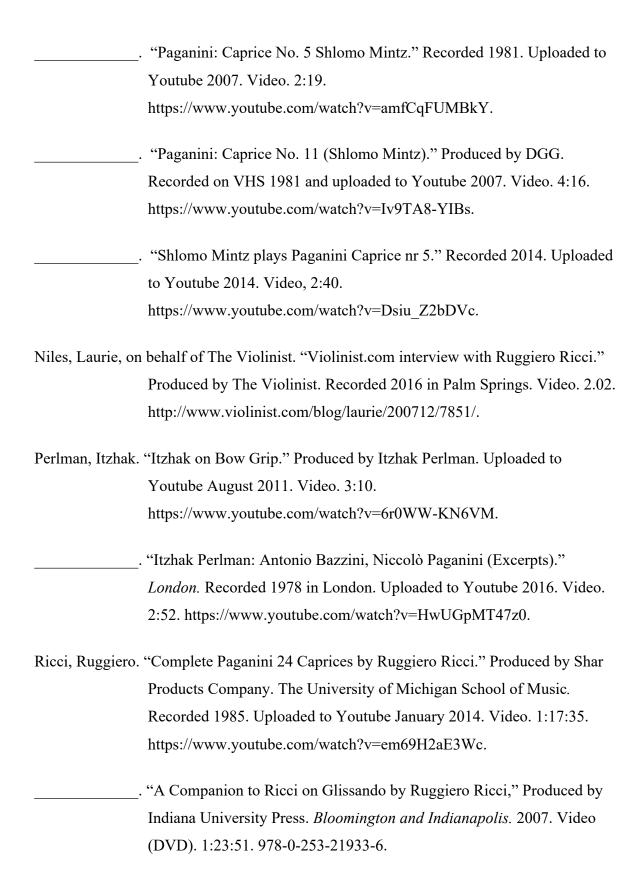
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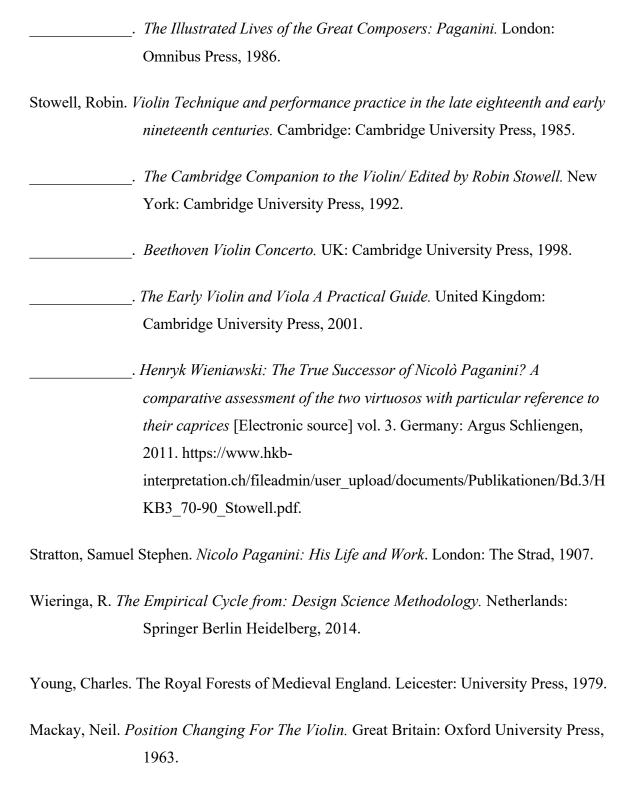
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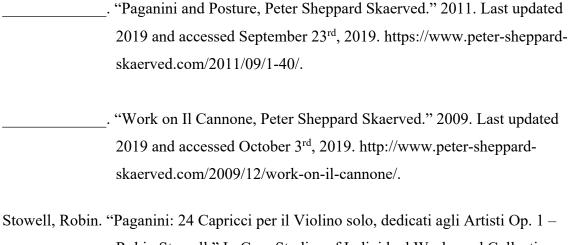
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Appendix One: Portrait of Niccolò Paganini by Daniel Maclise, 1831



Source: Downloaded from Debut in London of Niccolo Paganini (1784-1840), Italian Violinist, sketched by Daniel Maclise, July 1831, Victoria and Albert Museum, London, last updated 22nd September 2019, https://collections.vam.ac.uk/item/O167002/debut-in-london-of-nicolo-drawing-maclise-daniel-

Appendix Two: Caprice Five Bowing Changes

The following table recommends that bars 16, 17, 22, 24, 26, 27, 29, 32, 33, 34, 30, 41, 48, 49, 53, 54 and 55 from the saltato section in Caprice Five change bowing direction. These bars contain string crossings that are difficult to maintain in the $\sqcap\sqcap\sqcap\lor$, $\sqcap\sqcap\sqcap\lor$ (down, down, down, up) bowing pattern. Therefore, alternative bowing recommendations have been provided.

Bars	Bars that require bowing changes	Bars with recommended bowing patterns
16		TY TYTYTY TYTY TYTY
17	2 2 2 2 3 2 1 1 0 2 3 2 2 1	2
22		T V n V
24		
26	2	T P P P P P P P P P P P P P P P P P P P
27	43,21,32,1,10,43,22	V 1 V 1 V 1 V 1 V 1 V 1 V 1 V 1 V 1 V 1
29	b 3 2 1 1 0 4 8 2 2 1 1 0 4 8 2 2 1 1 1 0 4 8 2 2 1 1 1 0 1 4 8 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	V
32	1 bob so by the second	



Source Adapted from: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a..1910), 9703, p. 10-11, bb. 73-84.

Appendix Three: Bowings for Variation Eight from Caprice Twenty-Four, from Various Editions of the Paganini Caprices

Edition	Bowing Description
Paganini's Original Score(c.a.1817)	First two bars of variation
Niccolò Paganini, Opus 1 24 Capricci per Violino Solo (c.a.1817),	eight are slurred into a single
https://imslp.org/wiki/Special:ImagefromIndex/12926/nhfn.	bow. A total of eight triple-
Ricordi's First Edition (c.a.1820)	stops are included in the slur.
Nicolò Paganini, 24 Capricci Per Violino solo Composti e Dedicati	stops are meraded in the star.
Agli Artisti da Nicolo Paganini, 1st ed. (Milan: G. Ricordi, 1820),	
403,	
http://conquest.imslp.info/files/imglnks/usimg/f/f8/IMSLP330985-	
PMLP03645-24capriccipervio00paga.pdf.	
Breitkopf & Härtel (c.a.1823)	
N. Paganini, 24 Caprices pour Le Violon composes par N. Paganini	
(Leipzig: Breitkopf & Härtel, 1823), 3936,	
http://conquest.imslp.info/files/imglnks/usimg/7/7d/IMSLP363858-	
PMLP03645-paganini 24 caprices op1 breitkopf.pdf.	
Richault (c.a.1825)	
N. Paganini, Vingt-Quatre Caprices on Studes Pour Le Violon, ed. by	
Henry Bonaventure (Paris: Richault, c.1825), 1028.R, http://ks4.imslp.net/files/imglnks/usimg/d/dc/IMSLP390349-	
PMLP03645-paganini caprices ed henry.pdf.	
Ricordi's Second Edition (c.a.1836)	
Nicolò Paganini, 24 Capricci Per Violino solo Composti e Dedicati	
Agli Artisti da Nicolo Paganini, 2 nd ed. (Milan: G. Ricordi, 1836),	
9036,	
http://conquest.imslp.info/files/imglnks/usimg/0/00/IMSLP29587-	
PMLP03645-Paganini Capricci 2a Edizione.pdf.	
Flesch (c.a.1930)	Bowing indicated with down
N. Paganini, <i>Paganini Capricen Opus 1 Violine</i> , ed. by Carl Flesh	and up bows over each triple-
(Frankfurt: C.F. Peters, [1930?]), 9703,	1
http://conquest.imslp.info/files/imglnks/usimg/4/44/IMSLP382305-	stop.
PMLP03645-PAGANINI-Flesch_24_Caprices.pdf.	
IMC (1973)	Slur over each bar connecting
Niccolo Paganini, Paganini 24 Caprices Opus 1 for Violin Solo, ed.	four triple-stops into one bow.
by Ivan Galamian (New York: International Music Company, 1973),	An up-bow on the third triple-
2292.	stop of each bar is also
URTEXT (1990)	l ÷
Nicolò Paganini, 24 Capricci Für Violine Solo (Urtext), ed. by	provided as an optional
Renato De Barbieri, Alberto Cantú and Ernst Herttrich (München: G.	bowing suggesting a slur for
Henle Verlag, 1990), plate unknown.	every two triple-stops.

Appendix Four: Bowing Patterns Collected from Video Performances of Variation Eight from Caprice Twenty-Four

Violinist	Source	Bowing Pattern
Hilary Hahn (unknown)	Hilary Hahn, "Hilary Hahn – Paganini – Caprice 24," produced by MINTZ, [location and date of recording?], uploaded to Youtube 2013, video, 12:41, https://www.youtube.com/watch?v=gpnIrE7_1YA.	Triple-stops slurred in pairs.
Maxim Vengerov (2014)	Maxim Vengerov, "Maxin Vengerov – Caprice No 24 – Paganini," produced & recorded by Lunar Classics, 2014 and uploaded to Youtube 2014, video, 5:07, https://www.youtube.com/watch?v=hsJdLv38fy8.	
Kevin Zhu (2018)	Kevin Zhu, "Kevin Zhu – Capriccio n.24 (N.Paganini) – Genova, 24 ottobre 2018," produced by <i>unknown</i> , Genova, recorded 2018 and uploaded to Youtube 2018, video, 5:46, https://www.youtube.com/watch?v=MfQj9QrWg.	
Jascha Heifetz (Unknown)	Jascha Heifetz, "Jascha Heifetz plays Paganini Caprice No. 24," [production, recording date and location?] uploaded to Youtube 2006, video 5:41, https://www.youtube.com/watch?v=vPcnGrie_M.	All down bows at the nut.
Nikolay Madoyan (2003)	Nikolay Madoyan, "Paganini 24 caprices played live in one concert (without interval)!," produced by ONERPM, [location?], recorded 2003 and uploaded to Youtube October 2012, video, 1:12:36, https://www.youtube.com/watch?v=wSyvG5-mv44.	
Ayako Ishikawa (2014)	Ayako Ishikawa, "Paganini Caprice No. 24 -Ayako Ishikawa-," [production and location?] recorded 2014 and uploaded to Youtube 2014, video, 6:41, https://www.youtube.com/watch?v=7axMQQJyHco.	
Ruggiero Ricci (1985)	Ruggiero Ricci, "Complete Paganini 24 Caprices by Ruggiero Ricci," produced by Shar Products Company, The University of Michigan School of Music, recorded 1985 and uploaded to Youtube January 2014, video, 1:17:35, https://www.youtube.com/watch?v=em69H2aE3Wc.	Consecutive down bows with some consecutive up bows.
Alexander Markov (2003)	Nikolay Madoyan, "Paganini 24 caprices played live in one concert (without interval)!," produced by ONERPM, [location?], recorded 2003 and uploaded to Youtube October 2012, video, 1:12:36, https://www.youtube.com/watch?v=wSyvG5-mv44.	A combination of consecutive down bows and down-up bows.
Julia Fischer (2010)	Julia Fischer, "Julia Fischer – Paganini: 24 caprices (Music Clip)," produced by Universal Music France, [location?], recorded 2010 and uploaded to Youtube 2010, video, 5:00, https://www.youtube.com/watch?v=-095jDDgrQo.	Triple-stops in slurs of two, but with stopped bowing.
Rachel Barton Pine (2013)	Rachel Barton Pine, "Rachel Barton Pine – Paganini Caprice 24," produced by Auditorio Fabio Lozano, <i>[location?]</i> , recorded 2013 and uploaded to Youtube March 9 th 2013, video, 5:20, https://www.youtube.com/watch?v=i7Ep812fMm4.	A combination of triple- stop slurs in twos and consecutive down bows.

Appendix Five: Caprice One (author's marking adapted from Peters Edition)



Source Adapted from: Niccolo Paganini, *Paganini Capricen Opus 1 Violine*, ed. Carl Flesh (Leipzig: C.F. Peters, c.a.1910), 9703.









*) Die 2 übereinanderstehenden Nullen bedeuten, daß das «K gar nicht gegriffen zu werden braucht, da in dem schneilen Tempo die leere Saite eine Oktave höher klingt.

*) Au lieu de la note marquée de deux zéros (B) prenes la corde à vide, puisque cette dennière sonne toujours une oclave plus haut dans les traits de grande viteose.

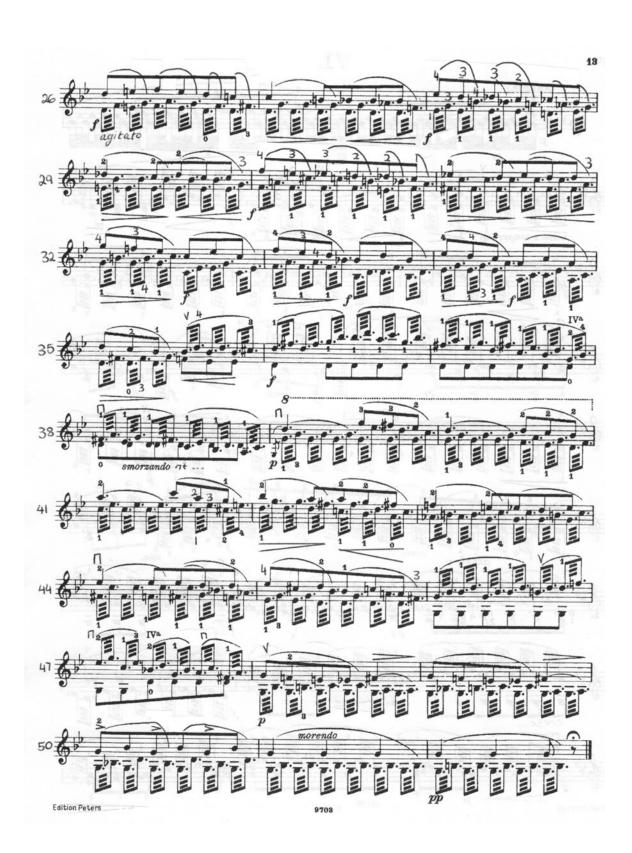
*) The two noughts written one above the other indicate that the note E need not be taken at all, as in the quick time the open string sounds an octave higher.

Edition Peters

9703











20 X.















Edition Peters















