

MASTERING THE CHOPIN ÉTUDES

Companion to
GENIUS OF THE PIANO



ALAN KOGOSOWSKI

CHOPIN AND THE PIANO

MASTERING THE ETUDES



Chopin at the piano, by Jakob Götzenberger, 1838

MASTERING THE ETUDES

Frederic Chopin and the Art of the Piano

ALAN KOGOSOWSKI

© Alan Kogosowski 2018

Cover design by Gerald Szubin

“To be sure, very few will be able to master them... But this need not restrain others from studying them: one does well to approach the highest point of virtuosity, though even at some distance... The word ‘Etude’ covers many things here. They must be studied, no matter at what cost.”

- Robert Schumann,

Neue Zeitschrift für Musik, 1836

“The style of Chopin’s playing is exactly like that of his compositions: that is to say, unique.”

- Robert Schumann,

Neue Zeitschrift für Musik, 1835

“Never displace the natural position of the hand”

- Jan Ladislav Dussek

*Instructions on the Art of Playing
the Pianoforte or Harpsichord, 1799*

MASTERING THE ETUDES

FREDERIC CHOPIN AND THE ART OF THE PIANO

Accompanied by GENIUS OF THE PIANO

The subject of how the piano is actually played in practically applied detail has virtually never been addressed in books. This is because it is generally assumed that high-level performers are born with an innate talent for playing. Thus discussion has nearly always focused on the ‘musical’ side of the equation – ‘interpretation’, style, taste, phrasing, poetic meaning. It is certainly true that unless the necessary brain-hand skills are developed at an early age, one can never develop into a first class performer. All virtuosi start out as ‘child prodigies’ – if they are not playing their chosen instrument at a high level by the age of twelve they will never become masters of it.

However, the action of the fingers and hand *are* definable, and even players who are not destined to become top performers can improve their skills by understanding the principles involved. These principles are clear and immutable, and knowable by everyone. Even *non*-performers can glean insights about brain-hand co-ordination from this study. *Mastering the Etudes* exposes the actual physical processes involved in playing the piano, covering every contingency that can be encountered. ‘Interpretation’ is a matter of personal taste, but clear analysis of what is actually going on physically is a matter of anatomically immutable principles.

This two-volume study is based on the self-evident principle that ‘interpretation’ and ‘technique’ are inseparable and must be considered together at all times. As Vladimir Horowitz said, without the first, one is a machine; without the second, one is an amateur. Technique is simply the means by which we produce the sounds we wish to hear. ‘Technique’ is usually taken to mean the ability to negotiate many notes, usually in fast music, successfully. But technique is all-encompassing, embracing everything to do with the physical side of playing the piano – slow passages as much as fast, quality of tone and nuance of phrasing as much as rapid execution.

The physical processes involved in playing the piano may be summarised in three main areas:

1. *Position*. The positioning of our physical resources – body, arms, fingers, and most of all *our hands*. Position of our hands is most important because the effects of this carry through to all other areas. It is of paramount importance in everything we do on the piano, each individual note as well as groups of notes.

2. *The design of our hands*. Human hands are built to *grasp*, being constructed of four jointed fingers and an ‘opposing’ thumb, the latter separate and distinct from the other fingers and needing to be allowed to remain free and loose, and *never* pushed to operate in the same up-and-down manner as the other fingers, but sideways, as it was designed to do.

3. *The movement of our hands*. Not by means of having them struggle to stretch from one place to another, but by smoothly *displacing* them from each position to the next.

Freedom of physical movement is inextricably linked to the flow of ideas from our brains. Even if one doesn't play the piano, the co-ordination of mind and hand that comes with an understanding of the principles involved will improve one's ability to do anything at all; tactile function and brain function go together.

Thus playing the piano revolves around the application of the human body's physiological resources at all times in the most sympathetic ways possible. That is to say, one must never fight against the body's natural inclinations, but instead work with it in the directions that its design and structure request.

Then, you also need heart and soul. This book cannot help the reader much there, but some background knowledge as to the heart and soul which inspired the music is to be found in the companion book to *Mastering the Etudes*, '*Genius of the Piano*'. It can only be helpful to be aware of the circumstances which gave birth to the music.

Alan Kogosowski's understanding of the workings of the hand and of piano technique is due to several exceptional teachers. First, Leo Shalit, old-school cultivated European gentleman from Riga with a distinguished pianistic background and deep understanding of the piano and its literature, who attended classes of Rachmaninoff's colleague Alexander Goldenweiser in Moscow in the inter-war years, inculcated in Kogosowski when he was a boy a feeling for 'dead-weight' looseness and suppleness, a crucial element in the manner of playing developed by Chopin and Liszt. The outstanding Australian teacher, Roy Shepherd, a student of Alfred Cortot, further enhanced this feeling for suppleness – "*souplesse*", as Chopin called it.

Next, most importantly, Michel Block – superlative, refined French pianist steeped in the pianism of Chopin and Rachmaninoff and a protégé of Alexis Weissenberg, a master of it, took this grounding in suppleness and demonstrated how it must be understood and monitored on a definable and ongoing basis, with the over-riding importance of correct positioning of the hands in everything we do.

The distinction between 'musical' and 'technical' has been a commonplace since the time of Mozart and Clementi, and while some pianists may be more tasteful, refined, emotional or passionate than others, the distinction is misleading, and useless. Music is serviced by technique, and technique is determined by the music. 'Technique' is by definition simply the means by which we produce the sounds we wish to hear. Michel Block told Kogosowski, "fifty per cent of technique is in the ear," by which he meant that half of any technical question consists of accurately and precisely defining *exactly* what sound we wish to produce at every given moment.

The same applies to the ethos of the music: if we don't know where it came from, what circumstances and ideas gave it birth, and what it was intended to express, a major element is lost on us – though great music does have intrinsic worth for itself, as well as universality. It is the need for listeners and performers to understand *both* elements in inseparable context that inspired the accompanying background story to each chapter of *Mastering the Etudes* in *Genius of the Piano*.



Mastering the Chopin Etudes

1	<i>A Whole Orchestra with Two hands</i>	<i>Etude No.1 in C major</i>	15
	<i>Hand positions; thumb; posture</i>		
2	<i>Smaller Hand Positions, Same Hand</i>	<i>Etude No.2 in A minor</i>	32
	<i>Hand positions; use of the thumb; fingering; mirror-image hands</i>		
3	<i>Songs Beyond Words</i>	<i>Etude No.3 in E major</i>	52
	<i>Singing tone; extensors and flexors</i>		
4	<i>Mephistopheles Exchanges the Violin for a Piano</i>	<i>4 & 5</i>	68
	<i>Hand positions; bravura; flat fingers</i>		
5	<i>Sounds Carried on the Wind</i>	<i>Etudes 6, 7 & 8</i>	84
	<i>Legato; pedalling; disconnection and lateral movement of thumb</i>		
6	<i>Poet of the Piano</i>	<i>Etudes 9, 10, 11 & 12 ('Revolutionary')</i>	96
	<i>Left hand; little finger; non legato; lateral movement of left hand</i>		
7	<i>Music leik Water</i>	<i>Etudes 13 ('Aeolian Harp') & 14</i>	120
	<i>Mirror image hand movements</i>		
8	<i>Two Sides of the Coin</i>	<i>Etudes 15 & 16</i>	131
	<i>Easy displacement of left hand positions</i>		
9	<i>Orchestrating with ten fingers</i>	<i>Etudes 17, 18, 19</i>	140
	<i>Orchestrating on the piano; speaking through our fingers</i>		
10	<i>Suave & dramatic</i>	<i>20, 21 ('Butterfly'), 22</i>	158
	<i>Our Siamese twins; release the thumb; octaves: two voices</i>		
11	<i>As no Instrument Ever Sounded</i>	<i>Etudes 23 ('Winter Wind') & 24</i>	176
	<i>Small flexors and hand positions always</i>		
12	<i>Delicatissimo with Strength (only Chopin)</i>	<i>Etudes 25, 26 & 27</i>	188
	<i>Principles never vary</i>		

<i>Epilogue: What you Really want is to play the Grieg Concerto</i>	200
<i>In Summary</i>	213
<i>Frederic Chopin Biographical Outline</i>	222
<i>Childhood and youth in Poland, 1810 - 31;</i>	
<i>Life and career in Paris, 1831 - 49</i>	
<i>Chronological list of Chopin's works</i>	235
<i>Dates of composition and publication, dedications</i>	
<i>Selected Bibliography</i>	242

Foreword

The objective of *Mastering the Etudes* is to provide a guide for the pianist which emphasizes the necessity of keeping strain out of the equation at all times. If something is being played correctly, there is no strain; that is an unarguable given. If we feel strain of any kind then we are doing something incorrectly in some way. It is our task to find the culprit – and a culprit is always there, somewhere or other. Writing off strain in a performance as not feeling the best on that day is simply wrong. The task for us is to clear-headedly acknowledge in the preparation stage when something is not quite right, identify the problem, and correct it.

When dealing with the purely physical – which by definition is exactly what ‘technique’ is, no more, no less. There is no such thing as a problem which cannot be solved. Thus, it is more correct to think not in terms of ‘problems’ but of puzzles. There is *always* an answer – not just an answer to making something easier or better, but actually making it perfect. If a passage does not flow perfectly, then we are missing a piece of the puzzle. We just have to find it. But before we can find it, we must analyze and precisely identify it.

The twenty-four *Etudes* of Opus 10 and Opus 25 constitute Chopin’s exposition of every imaginable issue that can be encountered when playing the piano. The twelve *Etudes* of Op. 25 are different in character from those of Opus 10. The first set is predominantly ‘fingery’ – brilliant, sharply etched, crystalline. The second set, completed three years later, is more feminine in character (with the exception of the overpowering last three) – more concerned with questions of tone colour and poetic atmosphere. But these require just as much identification of the necessary physical means of producing these sounds as do the more overtly brilliant *Etudes* of Opus 10.

The main thrust of *Mastering the Etudes*, in every situation, be it the fulminating brilliance of the first *Etude* of Opus 10 or the svelte poetry of the first *Etude* of Opus 25 – is that the cornerstone of what we call ‘technique’ is that the piano *must* be played with the hands always in their ‘*natural*’ position – namely, the position in which they find themselves when hanging loose: never stretching out, either forward or sideways, but instead moving freely and easily around the keyboard from one position to the next.

This is the correct way to play, demonstrable by universal anatomical principles. The right thing is not to strain the hands in the first place, rather than allow strain to creep in and then apply relaxation techniques of some kind or other after the damage has already been done. These efforts at relaxation are mere band-aids, temporary fixes, which may provide a soothing hiatus – simply because one has stopped doing for a brief while that which was causing the strain, only to reactivate it as soon as one returns to the piano – but they never address the real issue: the strain being incurred and acerbated. This can only be solved by playing correctly all along, or by fixing something if it is not quite right, and not straining the hands, wrists or arms *ever*.

Using our hands in the way they are designed is simply applying incontrovertible laws of anatomy; thus postulating some idiosyncratic ‘technique’, ‘method’ or ‘theory’ is wrong-headed. What we are aiming at is more about *disengaging* than engaging. When working on any piece, we should always be stripping away, refining down, removing problems and difficulties, both physical and musical.

The physical problems can be easily recognized: they are *always* characterised by strain or tightness in the hand and arms. The musical problems take a little more careful listening with ‘our mind’s ear’, as our teacher Michel Block described it. Our objective must always be to *minimize* to the greatest extent possible all physical activity outside the fingers – and that means using the end-joints of the fingers, pulling in toward the palm of the hand as much as possible. Complete evaporation of all other movements apart from those of the finger-tips is the ideal to which we must consciously aspire.

This is of course an *ideal*, and nowhere near fully possible in the real world, but it is an ideal we must have constantly in our sights, and work towards all the time. This is the substance of what we term ‘practice’. Our time at the piano should be almost entirely devoted to solving each puzzle that comes up in the course of a piece, until each and every one is clearly identified and we have worked out a plan for what we are going to do with every note, chord and phrase. Once this is done, we know the piece; the idea of ‘practising’ it becomes redundant. The French don’t even have a word for ‘practise’: they say *travailler* – to work.

Practice does *not* make perfect. Analysis, definition and plan of action does. Playing the piano is nothing like athletics, an activity that requires constant physical training. Playing the piano is a matter of mind-hand co-ordination. We’ve got to get it right in our mind – in every detail as we imagine it *should* sound: note by note, nuance by nuance, phrase by phrase. When we have worked out *exactly* how every note should sound and fit into the whole, then it’s a relatively straightforward matter to determine how we are going to project it. Even if we are no longer at that early age when the synapses in our brain for mind/hand co-ordination are developed, we can still understand what’s at play, and apply these principles elsewhere, in everything we do.

Once we have fully worked out each note’s position – and that means everything about that note: its fingering, weight, tone, touch, etc. – we never have to ‘practise’ that particular bit again. It slots happily into our brain program for that piece of music. If we have *not* fully worked out all the details of how we are to play a particular note or phrase, no amount of ‘practice’ will make it right. If our adrenalin is up, we may get it more or less right on a good day, if our brain’s subconscious is working overtime – but only occasionally, and never under stress conditions, namely a public performance.

The basic principle is position, position, position: *position in which the fingers lie* – slightly curved, so that they can *pull* inwards at all times, with the ends of the fingers, never *striking* the key; *position in which the thumb lies* – flexed, i.e. slightly curved, so that it doesn’t become fixed in a straight position and thus rigid; and *position of the hand* in relation to what comes before and what goes after every note.

The ideas expressed in this book are not the author’s personal ideas or opinions – they are incontrovertible laws of nature. When we walk, we put one foot in front of the other, flexed at its hinge, the knee. This is the law of nature as it pertains to walking – not a philosophy or theory or method of walking, not something that is open to opinion or debate. The ‘ideas’ herein are the laws of nature by which we play the piano, and they apply *in every case* to our playing – whether subconsciously or consciously.

Getting things right is not at all a dry, unglamorous subject next to the sway and emotion of the music itself – which one also has to get right, and not entrust to the feeling of the moment. It is a rewarding and uplifting activity which becomes a source of great satisfaction, whether we perform in public or play just for ourselves.

“Never displace the natural position of the hand” - Jan Ladislav Dussek

Mastering the Etudes

Chapter One

A WHOLE ORCHESTRA WITH TWO HANDS

Etude No. 1 in C major: Hand Positions; Thumb; Posture

Opening up the spectrum of piano playing from that designed for a chamber-sized fortepiano to that organically conceived for a modern grand, with an orchestral spectrum of sound, expanding the scope from a centralized area of the keyboard to a range of six octaves

Chopin's first *Etude* can be seen as a *homage* to Johann Sebastian Bach. But it was primarily something else – a unique piece representing a pivotal moment in the history of the development of piano technique. In that two-and-a-quarter minutes of music, composed at age nineteen, Chopin unlocked a whole new world of technical and artistic possibilities for the new and still developing keyboard, by opening up the limits of what could be expected of the hand.

The hand was now, for the first time, required by Chopin to range in wide-spread arpeggios over five octaves in quick expansions and contractions. No composer – with the exception of Beethoven in a few rare examples – had ever dared write music for the piano where the individual hand positions were not contained within the span of an octave. It was the natural way of things harmonically, all the elements of any particular key being contained within a single octave span, and even more so physically, as the natural span of most hands when stretched out is around an octave.

'Hands' were used as measurements for centuries – for instance in describing the height of a horse – the original 'hand' measurement supposedly dating from the tall king of England Edward 1st in the 13th century, whose hand was used as the template for this unit of measurement (his foot was used to establish the unit of measurement for 'feet').

Occasionally there are hands which are considerably larger than the norm – those of Rachmaninoff, Lhévinne, and Arthur Rubinstein being salient examples, all three encompassing stretches of an octave and a half! – but these are extremely unusual, and in the case of pianists do not fundamentally determine the quality or nature of their playing; a small handful of pieces, such as Schumann's *Toccata*, are more easily within their grasp; that's the only advantage these pianists with oversized hands have over normal mortals.

Chopin had small hands, being only about five foot four inches tall, and Liszt, for all his wide-ranging pyrotechnics, was also slight of build and had no more than average-sized hands. It is probably fair to say that ninety per cent of people have hands which span eight notes when stretched out – basically the compass of an octave. So the idea of writing music for the piano where hand positions extend beyond this span never really came up during the first decades of the pianoforte's existence and the half century that the 'grand piano' was in existence before Chopin wrote his first *Etude*. And because of the nature of diatonic harmony – universal in the 18th century 'Classical' period – hand positions were almost always close and contained.

By 'hand position' – a critical concept in the understanding of piano technique and the causes of chronic hand strain problems – we simply mean the position in which the hand finds itself while the fingers play whatever they are required to play, before it moves along to the next position.

Here, for the first time, the *apparent* hand positions are expanded not just beyond the eight-note range of an *octave*, but to ten and *eleven* notes – over and over again, four times in each bar. And four times in each bar they *contract*, in order to regroup and spread out again. There were hardly ever passages in piano music before Chopin which required hand positions of this size, or rather, 'extension'. Certainly no-one had ever written a composition which required this kind of extended hand position, or *seemingly* extended hand position, consistently throughout a piece.

The basic, natural 'hand position', fundamental to all piano music of the classical period, including all of Mozart, Haydn and nearly all of Beethoven, was a *sixth* – the span of six notes, embodied in the classic accompanimental figure known as the 'Alberti bass', which consisted of a *fifth* or a *sixth* with a *third* incorporated within this position. Which is to say, the hand was never required to stretch more than the distance of six notes – a *sixth* – before moving on to another playing position.

The first subject of Beethoven's *Les Adieux* Sonata, Op. 81a, has a left-hand accompaniment figure built on a sequence of *tenths*. There is also an instance in the first movement of the next sonata, Sonata in E minor, Op. 90, on the second page, where the left hand is required to play an accompaniment figure of broken chords spread over a *tenth* in each beat. There is a momentary instance in the last movement of the '*Moonlight*' Sonata – another prototypically Romantic work – where the left hand is made to take in a span of a *ninth* three times in a bar, and that is also strikingly unusual.

A more extended example occurs in the accompaniment to the middle section of the scherzo of the *Hammerklavier* Sonata. There is also a four-bar sequence in the first movement, in the left hand, just before the end of the exposition.

By comparison, notice a similar middle section to the *Hammerklavier* example in the *scherzo* movement of Beethoven's *Pastoral* Sonata of seventeen years earlier. This 'trio' fulfills a similar function musically, suddenly casting us into the furtive minor mode for contrast in the middle of a bouncy *scherzo* movement. But in the *Pastorale* Sonata the left hand accompaniment is in simple broken octaves, whereas in the *Hammerklavier* scherzo it is broken *tenth* chords.

The above examples are rare instances of such a figuration before Chopin, and all in prototypical Romantic piano works. They last only a short while, but if the pianist lets his hand *grasp* for the *tenths*, the hand will become strained.

The trick is to try as much as possible to keep the hand in its ‘natural’ position, that of a *sixth*, and move it along briskly but with ease from position to position. The first note must be released like a hot potato, as the second note is a full *tenth* away – beyond anyone’s unstrained span. The hand should move quickly and *laterally* – i.e. without stretching, grasping, or twisting around – from one note to the next.

This is more than just a ‘trick’ – it is the essential way to play, keeping the hand at all times in its natural position of spanning approximately a *sixth*.

By using this principle, Chopin was able to establish the chord of the *tenth* – as opposed to the chord of the *sixth* and the *octave* – as the basic unit of pianistic harmony. *Harmony* – not physical approach, i.e. the actual playing of the notes. The basic hand position would remain that of a *sixth* – it had to; that’s how big our natural at-rest hand span is. Evolution takes much longer than the development of harmony.

This new building block of pianistic sound transformed the quality of sound emanating from a piano from that of a keyboard sound to a much broader, svelte sound, orchestral in quality and dimension.

The main reason to expand the span of the ‘hand positions’ in piano music is to create the sound texture of multiple instruments. That is to say, the aural effect becomes that of a small orchestra. The expanded hand-position is equivalent to expanded chordal blocks. Chordal blocks are the fundamental textural building blocks of orchestral music: in an orchestral score a chord is played by several instruments, often over a very widespread range. The use of many instruments affords the possibility of much chromatic variety – crisp, clear flutes playing the upper notes of the same chord in which cellos and double basses play the weightier lower ones.

But the availability of many colours is only a by-product of the fact that the orchestra has many players: the *true* distinguishing feature of an orchestra is that the chordal harmonies can be spread out over several octaves, thus lending a depth and breadth to the sound that is unachievable by a solo violin, flute or pianoforte.

Chords in diatonic harmony contain all their components within the space of a *sixth*, so the only reason to expand the span of apparent hand positions in piano music is textural, not harmonic – i.e. to create the sound texture of multiple instruments. The effect becomes that of several instruments playing at once.

With Chopin’s new way of writing for the piano, the piano was now capable of an orchestral range of sound, and the pianist was no longer just a keyboard operator but more like a conductor, controlling waves of sound with chromatic strands throughout the texture, as well as the structure, or ‘architecture’, of the whole.

Chopin’s innovation of writing music where the chordal span of a *tenth* is carried on *consistently* throughout a piece – in so doing, establishing a new kind of pianistic texture – seems like a simple idea, but it was to the sound of the piano what the invention of the wheel – also a simple and obvious idea in hindsight – was to transportation.

The result of this new concept of chordal distribution on the keyboard was an exponential expansion of the scope and possibilities of the kind of sound which could be produced on a piano.

That's the musical side of the story. Now back to the physical. The Beethoven examples quoted above last only a short while, but if the pianist lets his hand *grasp* for the *tenths* it will unavoidably become strained. The trick is to try as much as possible to keep the hand in its natural position of a *sixth* and move it along briskly but calmly from one position to the next. The first note must be released immediately, as the second note is a full *tenth* away – a distance beyond anyone's unstrained span. The hand should move *laterally* – without any kind of twisting, turning or stretching – from one note to the next note and the next.

Chopin always emphasized the importance of smooth *lateral* movement. Physically, a *sixth* is our natural hand position – much more so than an octave, the span of which is pushing the hand close to the extremity of its natural possibility. The natural position of the hand when dropped loosely by our side is the span of a *fifth* (small hands) or a *sixth* – so in order to accommodate the harmonic and textural unit of a *tenth* there is going to have to be some sleight-of-hand.

That's what Chopin's first *Etude* is all about. If we think of this piece as being playable only by pianists who have unusually large hands, then we have missed the whole point of this *Etude*. In fact, this is one of the rare examples in the piano literature where it is perhaps – only perhaps – more convenient to have a large hand. But that is *not* the purpose of the *Etude*. The reason we should study this piece is in order to accustom our hand to moving from one note to another *without stretching it out*.

Surprising as it may seem, the size of the hand is largely immaterial, and even freakishly outsized hands like Josef Lhévinne's and Sergei Rachmaninoff's won't do us much good. Lhévinne and Arthur Rubinstein could comfortably stretch an *elevventh*, while Rachmaninoff famously could stretch a *twelfth* – an octave plus a *fifth*! However that's completely unnatural, almost grotesque, and virtually impossible to believe without seeing such a thing with one's own eyes. Above all, it is quite irrelevant to the task at hand. Hand size does not enter into the equation of the first *Etude* and the fundamental element of piano playing and hand usage which it exposes.

Even if one *could* stretch a *tenth* or *elevventh* with ease, the hand would still be *stretched*, and therefore not in its *natural position*. The resulting strain from the continual repetition – '*repetitive strain*' – of the stretch of anything greater than the hand's 'natural' span – i.e. as it falls when in an unforced, limp state – will become crippling in a very short space of time, no matter *how* big one's hand. *Our hands are not supposed to stretch at all. Not ever.*

The secret in the first *Etude* is not to try to stretch the hand positions – in fact, to *ignore* the extended hand positions implied by the extended chordal blocks, and keep our hands in their natural position, meaning *not extended any more than the distance of a sixth* – six white notes on the keyboard.

What exactly *is* the hand's '*natural*' position? This is the first thing all pianists as well as everyone using a computer keyboard or mouse must grasp and understand. The 'natural' position of the hand is a loose fist with the fingers hanging easily. If we are to avoid strain, and even injury, to our hands – and in the case of this first *Etude*, just be able to play it at all – then the hand has to stay as close as possible to this natural position at all times.

To gauge this natural position precisely we need only drop our arm limply by our side. The way the hand is positioned when we drop the arm in this way is what may be termed its *natural* state, and that's just how we must try to keep it at all times, as far as possible. There's no strain when it's in this position. There *is* strain with any divergence from this relaxed position – which is basically to say, stretching it out. Rachmaninoff's gigantic hands would be just as subject to this principle as ours, so size of hands is really almost irrelevant in the context of normal playing.

A spread-out, or splayed, hand position, which if held inevitably becomes fixed, will always injure us, and quite soon. The hand should *never* diverge for more than the briefest moment from its natural position when relaxed – where the fingers are naturally close together in this loose fist, encompassing a span on the keyboard of a *fifth*, and never more than a *sixth*.

We must endeavour to keep the hand in this position at all times, moving it along quickly and easily to the next position – '*displacing*' it from one group of notes to the next. That is one of the basic secrets, of '*technique*', and it is clearly demonstrated by Chopin in his first *Etude*. It's clear because of the impossibility of playing this piece without the hand seizing up in a cramp unless we actually keep it in a loose, natural, contained position, and move it along freely and easily without stretching it.

In the course of the *Etudes* Chopin will deal with every aspect of piano technique, from fingering to tone-production, variations in touch, hand symmetry, sound range, phrasing style, and of course emotional projection. But the first essential is to *position* our hands, through carefully considered '*hand positions*', in such a way that the fingers are free to accomplish all these things.

In the next chapter we will see how important it is to gauge the hand's position with exactitude – not just the *size* of the hand position, i.e., how extended the hand is required to be, but also the *angle* at which the hand is placed on the keyboard at each and every point.

Position is everything. It is essential for a golfer before he swings, a tennis player before he hits, a builder before he builds, and a pianist when he addresses the keyboard. If we've got the positioning right, we can virtually switch off when we perform. It doesn't matter if we have a headache or aren't feeling well. The fingers will find their mark automatically and surely, just as the golf ball will head for the green automatically if the shot has been prepared correctly or the tennis ball will clear the net if the stroke has been properly prepared. The result of the actual stroke is a foregone conclusion, just as the actual playing of each note on the piano is a direct consequence of the positioning of our hands.

On the computer keyboard a lot of us can get away with 'hunt-and-peck' style typing – using just the index finger of each hand. It's not very professional, but a lot of people can manage quite happily, especially if they are using the computer for tasks other than typing letters and documents continually. With 'hunt-and-peck' typing our hands fall automatically into their ideal position for work – their *natural* position – the way the hands fall when dropped limply.

On the piano, however, we have to use *all* the fingers, not just the two index fingers, if we want to play anything other than Chopsticks – which is naturally and unavoidably played 'hunt-and-peck' style, the hands automatically falling into their natural position and flopping loosely from the wrist.

When a musical child of seven or eight begins to take piano lessons, he or she usually gets the placement of the hands and fingers right more or less perfectly. Within a few weeks or months, that child is often playing Mozart rather well, with a Mozartian touch that's difficult for adults to achieve.

Problems usually start developing around the age of thirteen, and continue through the teen years. By the late teens, many drop out and never play again. Those who have their heart set on pursuing a musical career will persist and try hard to ignore the developing problems, but these often become embedded and slowly wear away at the young pianist's musculature. Even if they make it into their twenties and beyond, sooner or later chronic hand problems will inevitably develop and in many cases curtail a performing career.

The main troublemaker is the need to play chords, or chordal harmonies. On the computer keyboard, no matter how fast we type, it's always one key at a time – with an occasional ctrl-alt-delete or 'shift' to break up the flow. On the piano, however, the harder the pieces we play, the more complex the accompaniments in the left hand, as well as the more often multiples of notes are required to be played by both hands.

What happens when we play a chordal accompaniment to a melody, if we haven't been conditioned by years of thought and practice to watching our hands in order to make sure that the natural position is maintained at all times? In most cases, a student will allow his hand – usually the left, where chordal accompaniments most often reside – to become fixed in a set position. Instead of using the fingers individually, as does a typist, or a young pianist playing Mozart, he or she allows the hand to fall into a pattern of operating like a paw. They find the chord and then clump the hand down on it.

Chords should be treated as collections of several notes played simultaneously – which is exactly what they are. Chords should not be played as clusters, but as individual notes sounded simultaneously, each note having its own touch and weight.

When played as clusters, the hand remains in this fixed position and clumps about by twisting and turning, or by small rotations. We can see this clearly with many popular or Blues pianists, or pop singers accompanying themselves – especially when they try to make the chord reverberate by tremolo-ing it: they twist their whole hand from side to side, like Fred Astaire or Gene Kelly waving a straw hat.

These popular-music pianists are unaware that unlike Fred and Gene, whose hands and whole body were as loose as loose could be, their hands have become fixed and rigid. Fred and Gene were shaking their hands *from the wrist*, but these pianists have tightened all the muscles extending from the hand through the wrist, and the wrist is just as fixed as the hand is on the chord. These pianists are shaking their hand *from the forearm*.

Shaking or rotating – this is not the way to play the piano. Firstly there is no clarity in the sound of the notes and no ease of performance, the arms and wrists being in a continual state of strain. You can immediately see the tightness in all amateur pianists accompanying themselves in modern songs. Significantly, carpal tunnel problems will develop before long because of the continual tightening in the forearm and wrist – home of the Carpal Tunnel.

The first *Etude* moves up and down the keyboard not in a sequence of broken chords of the *tenth* and *eleventh*, let alone ‘arpeggios’. It moves up and down in a repeated pattern of a *fifth*, then a *fourth* and finally a *third*. This is essential to grasp and fully understand, and vigilantly monitor at all times if we are to play this *Etude*.

Our natural inclination to stretch the hand to encompass the extended position of a *tenth* is entirely based on our perception of the *harmonic* structure of the piece. Harmonically, the ubiquitous ‘*alberti*’ chord of Western keyboard music has now been transformed from a chord of the *sixth* which has the *third* included within it to one where the central *third* has been removed and placed *outside* the octave span – it is now the *top* interval, added *above* the octave.

Therefore, even if you belong to the one percent of pianists who can stretch a *tenth* comfortably, your hand is still incapable of stretching that *tenth* in the way that the broken chords of Chopin’s first *Etude* divide its component intervals. The first bar might not be too uncomfortable if you have a large hand, able to encompass a *fifth* with the thumb and index finger without too much strain, but already in bar two the first interval becomes that of a *sixth*. Thereafter, it occurs sometimes as a *fourth*, which turns the following interval into a *fifth* that has to be spanned by the index finger and the fourth finger – impossible for *anyone* without incurring severe strain. On a couple of occasions, the first interval even becomes a *seventh*.

Whether it is a *fourth*, a *fifth*, a *sixth* or a *seventh* – all of these come up as regularly throughout the *Etude* as the first interval – because of the layout of the *Etude* the first interval must always be played by the thumb and the index finger. The span between the thumb and the index finger is the largest span among our adjacent fingers, but it still has its limits, and a *seventh* is right at the upper limit of a single grasp of the thumb and second finger even for a giant hand, while a *sixth* is stretching things too far for most pianists.

But even the sequences which begin with a *fourth* – an easy enough interval for thumb and second finger – are problematic. These sequences, as it turns out, are trickier than the ones beginning with a *seventh*, because the *fourth* segues in each case to an interval of a *fifth* in order to complete the octave, and in this *Etude* that interval must always be played by the second and fourth fingers. The second and fourth fingers *cannot* stretch an interval of a *fifth* naturally. No-one’s hand can, not without injury; we feel the webbing at the base of the fingers seem to start to tear from doing it just once, let alone repeatedly, as it must in this *Etude*.

The only conclusion from this conundrum is that *each note we ever play must be treated – as an ideal, of course – as if it is a whole hand position*. In other words, we must not try to connect each note with the next as if both belonged to the same hand position. Sometimes two adjacent notes will fall comfortably within the reach of the fingers playing them, those fingers lying in their natural position. But even in these cases, the *angle* at which the hand lies as it plays each note will change, thus changing the hand position; the position and angle of the hand on the first note of the C major *Etude* is different from that which it needs to adopt for the second note, even though the span between the two notes played by thumb and second finger is manageable. The position and angle of the hand on the first note of the C major *scale* is slightly different from that which it should ideally be in for the second note, and the third, and so on.

We will learn a lot more about the position of the hands *vis-à-vis* every note as well as every grouping of notes through the course of this book. The overall effect of understanding that each note must be approached individually and separately, and given its own treatment and its full value as an individual, is that most of our playing becomes, in effect, quasi *non legato*.

That does *not* mean staccato! It means we must never get stuck in the keys in an attempt to play with a “*finger legato*” – tying the notes together physically. *Legato* is an *aural* effect – an *illusion* which we must create without making the fingers yoke themselves to adjacent notes.

We must treat it as an illusion, one that we create with a variety of techniques – pedal, combinations of voices, but above all full value given to each individual note. If each note has its due, then the aural effect will be smooth – it will *sound legato* – considerably more so than if we tie the notes together physically, a process which will often produce a lumpy effect in the sound, because it doesn’t take into account the ‘hangover’ of sound from notes, even after they have been released.

Acoustically, tying notes to each other – and overlapping them, which only an instrumentalist can do – has an adverse effect on the aural impression of *legato*, because the reverberation of notes, i.e. the overhang, means that true *legato* is compromised while the previous note or notes are still sounding. And physically, it has a negative effect, because fingers which hold down notes while others take center-stage are compromised, their ability to deal with upcoming notes weakened.

Pianists should not feel guilty about having to use artifice – not artificial, but *calculated* techniques – in order to create a legato sound. Why should they be exhorted to use “*finger legato*”, as the French school has always done, and others as well?

Singers automatically, and of necessity, use calculated artifice with every phrase – *with every breath they take* – in order to tie the notes together in a *legato sounding* line. This is because they have a different amount of breath available for each and every note that they sing in a sequence, so they are consequently forced to use artifice to create the *illusion* of *legato*.

Throughout the course of this book we will learn a lot more about the position of the hands in relation to *a)* every individual note, and *b)* every group of notes. Having to play each key separately – from both the physical and acoustical point of view – makes most of our playing in effect *non legato*, but this is solely for the purposes of the physical reality of the sound production, not the aesthetic imperative. What we are in fact trying to do is stop our fingers from becoming ‘glued’ to the keys in a vain attempt to create a legato *sound*.

So we have a major principle here. The principle is this: we must play each and every note that we ever play – in *anything* and *everything* – by *displacing the hand* from one key to the next while keeping it in its natural, at-ease position.

Sometimes two adjacent keys are comfortably within the reach of the fingers which are to play them. However even in these cases, the *angle* of the hand changes after it has been displaced from one key to the next. Thus the new key must still be addressed separately and individually, in what is in effect a *non legato* manner – not ‘*staccato*’, but definitely not *legato*.

Another crucial element in playing the piano, and this is huge – the pachoderm in the drawing room – and being able to *continue* playing it, is the correct management and operation of *the thumb*. A considerable number of pianists have developed supposedly mysterious problems in their thumbs, and these become debilitating enough to temporarily or permanently halt their careers.

The importance of the thumb's looseness, flexion and disconnection from the rest of the hand – i.e. *it should hang away from the hand* – cannot be over-emphasised. The natural position of the thumb – i.e. the way Nature designed it – is *flexed* and hanging loosely away from the hand, about two and a half inches away from, and *below*, not beside, its neighbour the index finger. A lot will be said about this in future chapters. If you get this right, you're most of the way there. Without understanding and mastering the use of the thumb, one will *never* be free of the threat of RSI, tendinitis, carpal tunnel syndrome and any other kind of strain of the hand, wrist and arms.

The thumb must be *bent, curved, flexed*, whatever you want to call it – just make sure it isn't straight. This cannot be stressed enough. If the thumb is straight, it becomes unavoidably tightened and strained. This is injurious to all the muscles, tendons and nerves at the base of the other fingers – especially the index finger, its neighbour, upon which it more often than not presses when it is rigid – as well as its own base, the side of the wrist, and the long muscles going up the inner side of the forearm. Just don't straighten and thus tighten the thumb.

The thing we have to be aware of is the thumb has a very strong tendency to straighten and become rigid unless we watch it carefully and constantly. This is partly due to laziness on the thumb's part; it's easier for it to simply follow the leader with the other fingers – the other fingers are designed to point in a forward direction, unlike the thumb, which is entirely constructed to *oppose*, i.e. move sideways and *only* sideways.

Also, the thumb does this straightening motion as an automatic reflex action such as when we are yawning and stretching. However those bodily reflex actions last only a moment – not long enough to do any damage. If we held this position for any amount of time, we would soon start to cause strain and then injury.

When playing the piano, if we don't watch the thumb constantly, and we let it fall into its lazy, reflex, 'default' position, we will find ourselves playing for five hours with the thumb semi-permanently in this dangerous mode. The result is hand strain in no time, because the strain is prolonged and *repetitive*.

This tendency to straighten is also forced on the thumb by the need to grasp implements with pressure. The thumb might seem to be able to exert more pressure when it is straight: imagine the mode our thumb immediately slips into when we are trying to twist a cap off a jar that is sealed tight – it becomes rigid and straight. Similarly is trying to push a heavy object, such as a stalled car. It almost seems to bend *backwards* at such times – 'seems', because it is a physical impossibility for the thumb or for any of the other fingers to bend backwards; their hinges only allow a forward movement. At such times it is in fact the muscles and tendons at the side of the wrist and forearm which are pushing the thumb into a backward position; the thumb itself cannot bend back – certainly not at the joints, which work only one way: forward.

Twisting a cap and pushing a car are actions which are done only for a very short while, and in such cases no lasting harm is done. But when the thumb is straightened and tightened over any protracted period of time, or *repetitively* – as when playing the piano, or typing on a keyboard – it is without doubt injured.

In his huge scientific treatise *Physiological Mechanics of Piano Technique*, Otto Ortmann wrote: “Knowing the location of a muscle and its various angles of pull will readily prevent the assignment of impossible mechanical conditions... it will aid in distinguishing normal muscular fatigue from the fatigue of incorrect co-ordination.”

The angle of pull of the fingers does not include the direction backwards. Yet the thumb straightens almost to the point of seeming to bend backwards if it is left to its own devices and not monitored vigilantly. We thus need to watch the thumb all the time – certainly until it gets into the habit of hanging loose and bent at all times. An experienced pianist watches the thumbs constantly to ensure that they are always bent. He knows that *the thumb cannot be loose if it is not flexed*.

Keeping a constant vigilant eye on the thumb is not as hard as it may sound: it is comparable to keeping a constant eye on the rear view mirror of a car while we are driving. This is essential; if we don't do it we are sure to run into trouble very soon. If we are going to avoid tendinitis and other forms of strain, we must keep our mind on our thumb in all repetitive activities involving the hands. Gardening tools, golf clubs, carpentry tools, scissors, pens, the necks of musical stringed instruments – all of these must be held loosely and with a *flexed*, i.e. *gently curving inward*, thumb.



The position in which the thumb should be at all times: bent at the joint, hanging away from the rest of the hand a good couple of inches, much looser than the other fingers, almost lifeless. It should feel lifeless. The hand itself should lie on the keyboard as it falls, in a loose fist, over a space of about a 'sixth', gently curved

What has all this to do with Chopin's first *Etude*? Everything. The first *Etude* is all about playing the piano *with the fingers*, and *only* the fingers, while minimizing the involvement of the arm and wrist to the greatest extent possible. It is about *not tightening our hand into a fixed, rigid, set position*. In this *Etude* this is an almost unavoidable tendency, because of the chordal basis of the piece, broken chords moving up and down the keyboard as quasi arpeggios. They are not arpeggios at all – they're chords of a *tenth*, sometimes *eleventh*, repeated up an octave three times and down again four times. If we allow our hands to become set in fixed positions we simply will not be able to get to the end of the piece – or the first page for that matter.

*A*s with our hands, our *body* must also be positioned correctly, so that it can give maximum support to our arms and hands. Although Chopin will show us that the fingers themselves must be the primary focus of our energies, and their independence – not just from each other, but from the hands and arms – should be our main objective, our posture at the piano is of crucial importance in providing the freedom we need for the fingers to be able to do their job properly.

If we sit with our back straight and our upper body pointing forward we can gain all the support in the world from the centre of our upper back – between the shoulder blades – and minimize tension in the forearms. In effect, we must use the piano bench not as a seat on which to perch ourselves comfortably, but as a *fulcrum* on which to pivot our body.

When we sit on the bench with our full weight, our spine inevitably becomes curved, the vertebrae pressing down on each other. Apart from the long-term physical problems this will cause, we lose all the advantage of having the power of our torso back up the thrust of our arms and the strength in our fingers. Instead, our whole body should be poised and ready for action like a leopard – not relaxing and passively leaving our arms to carry the burden of struggling to hold themselves up in the air. With the correct posture, the weight of our body can be distributed to create reserves of energy and power which will back up our fingers.

As with dancing or playing a sport at a high level, it actually *feels* good when we use our hands and body correctly and accomplish a physical activity perfectly. It puts us in another zone, one where all the tension flows out of our back, through our body, down through our arms and out of our fingers. We feel as if we are floating.

When we sit comfortably in or on a chair, we are making ourselves *apparently* comfortable, but we are not providing any support for our arms if they are to be raised and outstretched. Once we raise them to the keyboard they are out on their own. There is no back-up, no help from anywhere. And while it may seem like a small imposition, if we do this to our arms for hours, they are going to get very tired. We are hunched over when we sit on a chair; this is unavoidably our body's position when sitting. If it's an armchair, it's perfectly comfortable if all we are intending to do from this position is watch television or read a book. But if we are intending to do anything constructive from this position, we are going to have to engage muscles to raise our arms and operate our hands and fingers.

When a pianist walks out on stage and takes his seat at the piano you can tell immediately if he's master of the piano or if he belongs to the ninety-five percent of performers who may be talented, even full-time professionals, but will sooner or later develop carpal tunnel problems and tendinitis.

How can we tell this? If someone sits down on the piano bench as if it is a chair, then they are not placing their body in a position whereby the arms and hands will be able to function freely and naturally for any protracted period of time, or accomplish complex repetitive movements with the hands and fingers. Specifically, the muscles in our forearms are working unnecessarily on a long-term, unrelieved basis. Just try it, without the distraction of a keyboard. Or try doing something with your hands on a tabletop from a comfortably seated position. How long can we hold our arms up and out horizontally without them starting to feel like fifty-pound weights? We start to feel the strain almost immediately, and it becomes untenable in a minute.

Now try moving the chair back a little and sitting more forward, closer to the edge. We're not sitting purely for relaxation purposes now, as in an armchair. We are in a working position, *pivoting* our body at the front of the seat in order to be poised for action in our arms and hands. Our elbows are no longer by our side but thrust back. And the big job which the muscles in our arms formerly had to do has now completely evaporated. The task of maintaining our forearms in a horizontal position now falls naturally to the much larger muscles higher up – those in our shoulders, and even further, in the top and centre of our back.

The piano keyboard is much wider, of course, than a computer keyboard, and requires much more activity from our body than the kind of task at which we would be working at on a table top, such as writing a letter, or eating. So in order to balance ourselves and not fall off the bench when we move from one part of the keyboard to another, it's necessary to pivot ourselves by putting one leg – the right one most of the time – *forward* and the other one back. We're actually *pivoting* our bodies in this way, and the chair becoming a fulcrum rather than a chair.

That's why piano benches are just that – *benches*, rather than chairs with backs. This is a comfortable and secure position for our bodies, and there's an added advantage in that our backs are stretched out straight. In the normal armchair-style sitting position this is not the case at all; when sitting normally our backs are *curved*, the vertebrae pressing down on one another, and our shoulders are hunched up. The disadvantages of this require no explanation.

With the computer keyboard it's not necessary to adopt this poised position for our legs – like a tiger getting ready to pounce. It doesn't do any harm, and may even make us feel more relaxed, but it's not necessary in order to avoid strain. Sitting forward towards the edge of the seat, however, is definitely better when we are playing the piano, where we are using our hands assiduously, over a wide lateral range, as they are not impeded by the extra, unnecessary, tiring strain of simply holding up our arms. Also, by this means our back can be stretched out straight, and can impart reserves of support to our forearms and hands. Sitting forward, with a straight back, is always helpful whenever we're working on a table top or keyboard with our hands over an extended period. For serious piano playing it's indispensable.

All Russian pianists sit at the piano in this way. Very few others do. There's a reason for this: by sitting up high, perched atop a seat looking down at the keyboard, pianists not entirely confident of their abilities have a sensation of power, of control. But this feeling is misplaced. Horowitz, who had no worries about his playing abilities (he suffered from debilitating nerves for entirely personal reasons, not his playing abilities, of which he was always confident) never in his entire life slackened his ramrod-straight back, forward-inclined, when performing. Perched on the edge of the piano bench, he unfailingly maintained this straight back and forward-leaning position.

One could make geometric drawings of every photo ever taken of Horowitz at a piano, on tracing paper placed over any of the photos taken of him at any stage of his life, from early youth to old age, and always see the same perfect triangle of straight back at a 25 – 30 degree angle, horizontal forearms (no 'high wrists', low wrists or any other such arbitrary ideas), and perpendicular line from his nose down to the edge of the keyboard, more or less exactly above middle C. The same was true of Horowitz's great predecessor Anton Rubinstein, the acknowledged father of the Russian piano tradition, which has never altered since Rubinstein brought it back from Paris after encountering Chopin and Liszt.

The Russians understood that the physical principles of piano playing are not open to question or opinion or theories; they are immutable anatomical facts.



The perfect posture. In a career that spanned 68 years, Horowitz never altered this posture for a single moment whenever he sat at a piano. The same posture was true of Anton Rubinstein, Sergei Rachmaninoff and every other Russian pianist to this day – and this came from Chopin and Liszt

Glenn Gould famously sat on a piano bench that was only 14 inches high. He took this bench with him wherever he went during his performing days, and said that the piano on which he played was not as important to him as the bench. When Gould was ten years old he injured his back as the result of a fall from a boat ramp on the shore of Lake Simcoe in Canada. His father then made an adjustable height chair for him, which Gould used for the rest of his life.

However, the outlandishly low sitting position which Gould adopted was not so much the result of his accident as of an understanding of the operation of the **extensor** and **flexor** muscles which operate the fingers – of which we will hear much in the course of this book – and the understanding that finger strength and clarity is only achieved through the *flexors*.

Optimum finger strength and clarity is achieved *only* through the use of the *flexors*, and these are brought more into operation the lower one sits: the flexors *pull* the fingers, while the extensors stretch them and force them to *strike* the notes. The first and foremost principle of piano playing is that the fingers must *pull*, or grasp, the keys. ‘*Draw* the sound from the piano,’ said Chopin often to all his students. Glenn Gould’s teacher, Alberto Guerrero, took this as a central principle of piano playing – pulling the keys instead of striking them from above – and thereby gave his young pupil the means by which he would be able to achieve stunning finger articulation, separation and clarity of each note – particularly advantageous in the keyboard works of Bach.



Anton Rubinstein in perfect performing posture – absolutely straight back, forward inclined, body anchored by right leg in forward position

If we sit high, with our arms inclined downwards, we feel nicely comfortable and more in command than if seated lower (especially shorter pianists, and those with a Napoleonic complex). However, a higher position short-circuits our ability to use the *flexors* of the fingers freely. Try it – without a keyboard: if you wish to simply activate the ends of the fingers in a pinching, pulling motion, you naturally raise the hands, inclining them upwards from the wrist. Inclined downwards, it is much harder to pull the ends of the fingers inwards.

The ideal position of our arms in order to be able to pull the fingers inwards – i.e. to allow the *flexors* of the fingers to operate freely – is *horizontal* to the keyboard. However, sitting lower – with the arms thereby inclined upwards – will increase the capacity of the flexors to pull the fingers towards the palm. Thus, if one wishes to play predominantly ‘fingery’ piano music, such as the music of Bach, a lower sitting position is decidedly better. If one wishes to command a broader textural scope, with chordal and wide-ranging passages, as in Romantic music, a slightly higher position, plus a greater distance from the keyboard with a greater forward incline of the back, is better. A horizontal plane for the arms is the optimum balance.



The only known photograph of Rachmaninoff in performance. The straight back, sharply inclined forward, was de rigueur for all the great Russian pianists. It is the ideal position.

Note also the flexed – i.e. curved – thumb, hanging below the hand (huge hand!), and very definitely not on the same plane as the other fingers

In his *Introduction to the Art of Playing on the Pianoforte*, Clementi strictered that the hand and arm should always be completely horizontal. His pupil Kalkbrenner, as well as Dussek, Hummel, and all other authorities, agreed fully with this attitude. A fellow by the name of John Baptist Logier even invented a contraption he called a ‘chiroplast’ – a brass and wood device which was clamped to the keyboard – that ‘assured a correct hand and arm position’, and determined ‘positively’ the correct height of the piano bench for each individual, the objective (quite rightly) being that the arms should be perfectly horizontal to the keyboard. Logier, a German who settled in England in his twenties, made a fortune from his 1814 invention. Logier, as well as Kalkbrenner, who firmly advocated this odd device – was right. There *is* an exact height of piano bench for every pianist – one which determines the angle at which the back can lean straight in to the piano and at which the arms will be horizontal, or slightly inclined upwards, so that the flexors of the fingers can operate freely.

Clementi went on to say that the hand and palm should be stationary and only the fingers should move. This is *exactly* correct. It is of course an impossible ideal, but it is the ideal to which we should strive. Chopin and Liszt advocated exercises of a kind to promote this ideal – which we shall discover in later chapters. Super craftsmen such as Michelangeli and Horowitz would almost make a game of this – seeing just how still they could keep their hands and arms, as well as body, while moving *only the ends of their fingers* – i.e. the *flexors*. They seemed as if they had a stroke as they sat at the keyboard in recitals, nothing at all moving but the ends of their fingers.

*I*t is rare to hear a note-perfect performance of Chopin's first *Etude*, one in which its fulminating spirit emerges with clear definition, and yet in which all the notes come out correctly – especially in the central section, where we move through a series of broken chords that are extremely awkward to negotiate. This series of modulations shows Chopin even at this early age already using far-reaching modulations with a seamless ease and fluidity comparable to Bach and Mozart. This episode moves in a Bachian manner by step through a sequence of related keys. At the central point of the *Etude* we find ourselves in the distant key of A major without having noticed any abruptness in arriving at this particular key, and over the following bars we move seamlessly and imperceptibly back to C major, arriving, as always in Bach, with a feeling of complete inevitability.

The A major arpeggio at the centre of the *Etude* is the most awkward of all to negotiate physically, because of the C sharp in each of the positions of the passage, up and down. This 'arpeggio' can only be played by moving, or *displacing*, the hand, not just from one *position* to the next, but from each *note* to the next – in a *non legato* fashion, i.e. without actually connecting any of the notes. If we try to connect them, our hand will be forced to twist and turn to accommodate the C sharp, and we simply won't be able to play this arpeggio.

The elemental, fearless, extroverted, quality of Chopin's first *Etude* was emphasized by Sviatoslav Richter, considered with justification by many to be the greatest all-round pianist of the second half of the twentieth century. With all his peculiarities, Richter was certainly in a class apart, nothing like any other pianist. He was an existential artist in the manner of Anton Rubinstein – perhaps the only other pianist with whom we might think of comparing him. Like the legendary Rubinstein, with Richter there was never the slightest concession to pianistic or platform niceties. The music was all-enveloping, all-consuming. Performer and music literally became one. Nobody cared about wrong notes or impatient abruptnesses, although at his best, Richter could play more right notes than any other pianist.

In a live performance recorded in 1963, we hear Richter bringing out the organ-point bass line of the first *Etude* with uncompromising strength of purpose and forward movement. The right hand arpeggios are spectacularly played, but they take a back seat to the dominating bass line, which unequivocally evokes Bach the organist.

For the fulminating rush up the keyboard of each arpeggio, with crystalline clarity, no pianist could ever surpass Martha Argerich's performance at the 1965 Chopin Competition in Warsaw – also recorded live. The first *Etude* is, in fact, the ultimate piano competition piece, demonstrating a larger range of contrasting pianistic qualities than almost any other work – power with clarity, poise alongside daring, nerve yet control. It deals virtually with the right hand alone, of course, but anyone who can play the first *Etude* even passably knows what they are doing.

James Huneker, the late-19th century New York music critic, writer and author of books on Chopin and Liszt, was very much a man of his time, given to unabashed hyperbole, in a prose style very much in keeping with his time, the age of Sarah Bernhardt. Nevertheless, Huneker did understand Chopin.

Of the first *Etude*, he wrote, “Here in all its nakedness is the new technique; new in the sense of figure and pattern, new in a harmonic way. The old order was fairly horrified at the modulations, the younger generation fascinated and also a trifle frightened. A man who could thus explode a mine that assailed the stars must be reckoned with. The nub of modern piano music is in this study. With this study Chopin unlocked the kingdom of technique.”

*I*n the next chapter we will explore the basic anatomy of the hand and see how it actually works. We will discover the central importance of the thumb and the need to understand how easily it can be strained, thereby tightening and straining our whole hand as well as the forearm and carpal tunnel. We shall see the importance of fingering, and why it is prescribed in detail by Chopin in the next *Etude*.

Chapter Two

SMALLER HAND POSITIONS, SAME HAND

Etude No. 2 in A minor: Hand Positions; Use of the Thumb; Fingering; Mirror-image hand positions

The basic anatomy of the hand and how it works, with the central importance of the thumb and the need to understand how it may be used without tightening and straining the whole hand, the forearm and the carpal tunnel in the wrist. The crucial role of fingering.

With the second *Etude* we see Chopin approach the basic question of the anatomy of our hand from a completely different angle to that from which he approached the first *Etude*. We are now going to look at the way our hands are actually constructed, and fully understand the crucial importance of the thumb. We'll find out why the thumb affects our entire ability to use our hands without strain. If we can master the correct movement of the thumb we can avoid not only temporary strain of the hands, but also the long-term afflictions of tendinitis and carpal tunnel problems. This subject is of on-going relevance to *everyone*.

The first two *Etudes*, dated November 2nd 1830 in the manuscripts carefully copied out by Chopin's elder sister Louise, are probably the most significant of all the *Etudes*, and two of the most original piano pieces ever written. Most of us will never be able to perform them satisfactorily, but they are both essential for every pianist to learn and try to understand – understand them the way we might take apart a watch mechanism and understand it. The lessons they teach us apply to almost everything we will ever play.

These two *Etudes* zero in on the fundamental concern which confronts us when we approach the piano keyboard: how to physically accomplish what is required of us without straining our hands and arms, even injuring them. That primary necessity, without which we cannot proceed to a level of pianism of any real sophistication or quality, accompanies all our efforts at the piano simply because of the mechanical nature of the piano. We are, after all, operating a machine – which is not the case with any non-keyboard instrument. There are mechanisms involved with wind instruments, certainly, but those instruments are primarily dependent on breath and breath control. With string instruments, which have no mechanism at all, a hollow sounding box is being acted upon by the vibration of strings which are played for the most part by a bow which is a virtual extension of our arm and body.

A keyboard, however, requires the same dispassionate treatment as a control panel confronting a pilot. The last thing a pilot needs to worry about is straining his arms and hands, incurring carpal tunnel syndrome, when he's trying to successfully land a jet plane. If his arms and hands are causing him strain and he is thinking about them, or even aware of them, it would be better not to be on that plane.

The first and overriding requirement of ‘technique’ in playing the piano concerns our actual physical situation – the positioning of our body and hands – in relation to the sound that we wish to produce. We must first of all precisely identify the natural ‘hand position’ – the position the hand would be in if it were completely unstrained and unencumbered – for each and every phase of the piece to be played, and that means every phrase, every individual note. That’s always the first thing we must get right, and that is what Chopin’s first two *Etudes* are all about.

In the first *Etude* we learnt that we must **never** stretch the hand out, other than momentarily – in short quick bursts, or grasps – in so doing manage to let it become set in a fixed position, because we’ll quite simply injure ourselves. We literally won’t be able to get halfway through that *Etude* if the hand is fixed in a splayed position – which it will automatically do unless we watch carefully that it doesn’t.

The hand will do exactly the same thing in the second *Etude* – also become set in a fixed position, thus rigid, and from that rigidity strained – unless we take positive steps to ensure that it doesn’t. In the second *Etude*, the lurking ‘fixed’ position is also a stretched one (a bad hand position is *always* a stretched one), but instead of being displaced up and down the keyboard over four octaves, the stretch is now one which moves along in minute steps. The hand must, as always, remain as much as possible in its natural position, diverging only for the briefest moments in order to grab the stretched chords – or, in the first *Etude*, *broken* chords.

As we learnt in the first *Etude*, all pianists, as well as everyone using a computer keyboard or mouse, must understand the ‘natural’ position of the hand – a loose fist with the fingers hanging easily. If we are to avoid strain, and thereby inevitable injury, to our hands, we have to keep them as close as possible to this natural position at all times. They need to diverge from this ‘natural’ position in order to play stretched chords, true enough, but these divergences have to be in the nature of a ‘breakout’ – jumping back to the natural position as quickly as possible like an elastic band.

Chopin maintained that the natural position of the hand is the basic starting point of piano playing, and that the ideal hand position – the one in which the hand is most relaxed and in its natural state – is the position it’s in when the fingers are resting on the notes E - F sharp - G sharp - A sharp - B (or B sharp). This is instantly clear when we look at our hands as they are positioned on these notes, the long middle finger having unrestricted room to stretch out over the black note G sharp, not being forced to cramp up in order to accommodate a white note, as in the C major scale for instance. On either side of it, the next two longest fingers – the index finger and the fourth finger – also rest unhindered on black notes, while the thumb is allowed to **hang down** and fit perfectly into the position required by the lower white note E in the right hand, B in the left, and the fifth finger also has a white note onto which it can drop easily without the hand having to twist or swivel in any way.

By contrast, when we look at the hand as it rests upon the first five notes of the C major scale, C - D - E - F - G, we see that in that position the thumb cannot hang down naturally – it is forced to be on the same plane as the other fingers; the index finger has to scrunch up, the long third finger is bottled in, the fourth contracted, and the fifth raised. C major may be the easiest key to read, with no sharps or flats to consider, but it’s the worst key to play, Chopin asserted, understandably, as there’s no mixture of black notes with white ones to parallel the natural contour of the hand.

The key of C major is the easiest to read because it has no sharps or flats, but on the piano, because of the design of the keyboard, that translates into *no black notes*. Because black notes are recessed *and* raised half an inch, they allow our hands to manoeuvre about in positions which are much more suited to their natural contour than a flat surface. A completely flat surface is the *only* surface that white notes provide – as with computer keyboards. *This is the main reason that keyboards give rise to chronic hand problems*. With the computer keyboard it's *all* flat; with the piano keyboard there are contours thanks to the black notes (except in C major), and we must take full advantage of these.

Chopin had his pupils accustom themselves to the ideal five-finger configuration, E - F sharp - G sharp - A sharp - B (or B sharp), by resting their hand upon it gently, getting used to connecting with the keyboard in this manner, then gently and easily – *without any force or strain* – depressing each of the notes one by one.

From Carl Mikuli, Chopin's student, we also know that Chopin recommended beginning to play scales with the ones where the white notes were intermingled with plenty of black ones, the best scales of all being B major for the right hand and D flat major for the left, then progressing only gradually to the more awkwardly configured scales, ending with the hardest, the most awkward of all – that of C major.

*P*hysically, the second *Etude* addresses exactly the same problem as that which concerned the first, but you would never realize this simply by listening to the two pieces. Everything 'musical' about these two *Etudes* is in the sharpest possible contrast. This juxtaposition of two vastly different sounding *Etudes* dealing surprisingly with the same physical question is a pattern which Chopin establishes here at the outset and will follow in a number of pairings throughout the series.

Where the first *Etude* was extroverted and grand, in blazing C major, the second is hushed and intimate, in the relative minor key, A minor. Where the first was built upon wide-ranging arpeggio-like passages extending from one end of the keyboard to the other, the second consists of a meandering chromatic scale tightly contained within the central area of the keyboard. Where the first *Etude* was founded upon a majestic organ-like bass, the second is underpinned by light and playful *pizzicato* chords, like juggler's balls bouncing gently up and down.

Even the kind of piano one needs to play these two *Etudes* is entirely different. The first *Etude* requires a strong, sturdy, orchestrally full-bodied piano, with a solid action we can grip with vigorous abandon as we grasp the sequences of diatonic chords lustily displaced over four octaves. The second *Etude* requires a piano with the lightest possible mechanism, one where our hand can remain completely calm and float effortlessly up and down the keyboard. The first *Etude* requires a full application of the pedal, the second the merest touch – or better yet, almost none at all.

But the fundamental technical problem is *exactly* the same, even though it is approached from the opposite end of the sound spectrum. That problem is the basic one for all pianists: how to use the hand – the right hand in these two cases – in every position, no matter how seemingly awkward, without tightening and thereby straining it. In both these *Etudes*, apparent awkwardness of hand position is stretched to the limit, and the objective is to reduce it as much as possible. That requires *identifying* the hand positions accurately, and thereby keeping the hand as free as possible. And the key to that freedom is *the thumb*.

Let's see just why it is so crucial to keep the thumb free. If we turn our hand over and look at its construction we can see that the thumb is much more than just a finger. It's not really a finger at all – it's virtually *half the hand*. It closes with the other half – the half with four fingers sticking out from its mass – to *grip*. When in a relaxed state, the thumb falls *below* the rest of the hand.

Next, the thumb isn't constructed at all in the same way as the other fingers, nor is it designed to be used in the same way as the other fingers, with vertical movements. The other fingers have *three* joints, the base and two knuckle joints, all of which which move the finger up and down vertically. The thumb has only two, the base and central joint, and they move it from side to side – laterally. The thumb is not built to strike, as are the other fingers (which also should never 'strike', but rather press, or depress – press down). The thumb is designed to '*oppose*', as its defining movement is called.

On the piano, or any keyboard for that matter – piano, harpsichord, organ or computer keyboard – the temptation is to let the thumb be used in the same way as the other fingers, moving in an *up-down* direction. As the thumb is not built to move in this direction – it can only be *forced* to move vertically by the long muscles extending up into the carpal area, i.e. the wrist – this movement is very awkward for it, and immediately straining. With this unnatural movement of the thumb comes the accompanying disaster of the huge, fleshy chunk at its base, which operates the movement of the thumb – a major component of the hand itself – being raised unnaturally to the level of the other fingers.

This 'tendinous expanse' of the base of the thumb emanates from the base of the hand, where it meets the wrist, and all movements of it are controlled from that point. If we operate the thumb from this point – i.e. the base of the thumb – it becomes untenably strained. You can feel the smarting pain at the side of the wrist very quickly when you use the thumb vertically. The strain is especially acerbated when we hold the thumb in this raised position in a prolonged manner, even after just a few seconds. The strain becomes crippling to the hand, and we have to stop playing altogether for a moment and drop the hand into a resting position until it recovers. Over time we can do ourselves real damage.

Therefore, one of the absolute essentials of piano playing is to carefully monitor the thumb to ensure that it does not slip into the mode of behaving like the other fingers – i.e. playing the keys with an up-down motion. That motion will inevitably tighten the thumb, and then strain, even *injure*, the nerves and muscles connecting it to the forearm.

The muscles which control the movement of the thumb all originate up in the arm – at the top of the forearm, by the elbow. If the thumb tightens, that means we're tensing, or *contracting*, the muscles and nerves which extend up the underside of the forearm. We can feel it immediately. After a short while there will be jabs of pain in the forearm, which eventually leads to *tendinitis*. If we go on acerbating this situation by tightening the thumb in this way, before long the narrow tunnel in the wrist, known as the *carpal* tunnel – through which all the nerves to the hand and fingers run – will become inflamed.

For a pianist that's fatal. But it's also debilitating for non-pianists, whose capacity for movement of the hand is diminished by the very same process – the aggravation of the nerves and muscles inflaming the carpal tunnel is produced by the same incorrect and strained movements of the hand, and the thumb in particular.

The moment the thumb becomes rigid, it tightens and strains the nerves and muscles going through the carpal tunnel and up into the forearm.

The first effect in this particular *Etude* is that we literally break down with cramp and simply cannot continue. If the pattern is continued over time, it's *Carpal Tunnel Syndrome* down the line, and not so very far down the line. It's a streetcar named Carpal Tunnel whose last stop is the surgery. Many pianists have had their careers curtailed in this way, and they never realized it was all just a question of a simple adjustment in the movement of the thumb. (Exactly the same applies to the way we use the computer keyboard.)

Chopin's second *Etude* consists of a quiet, sinuous chromatic scale which weaves its way up and down the keyboard with nonchalant suavity. With its regular pendulum swing, the humble left hand part keeps the momentum of the scale going, while in the right hand Chopin has added a chord to the scale on each beat, co-inciding with the jugglers' balls in the left hand; this little chord on each fourth note of the rising and descending scale renders it obligatory to play the chromatic scale with only three fingers – the third, fourth and fifth.

You can only play this scale if the thumb – which comes in only on each chord, four times in each bar – is completely free and loose. If the thumb tenses at all, the hand will seize up, making it impossible to continue with the scale. So if you're playing this *Etude* and you *can* get to the end, you've got the freedom of the thumb more or less right. The point, however – the point of this whole book – is that you won't be able to get it right unless you've understood it.

Exactly the same situation applied in the first *Etude* – it's impossible to get to the end of that *Etude* unless the thumb stays completely loose and never allows itself to remain – even momentarily – stretched out sideways or contracted inwards as the hand negotiates the wide-spread arpeggiando passages. Here, in the second *Etude*, the looseness of the thumb is addressed in the context of a natural impulse towards an *up-down* movement – a movement of the thumb which must be avoided at all costs.

The trick here – the *only* way this piece can be played – is to **release** the little two-note chords on each beat in the right hand as soon as they've been played – specifically the lowest note of the chord, that played by the thumb. Otherwise these little chords will tie down the lower half of the hand, and strain the upper half as it tries to play the chromatic scale with the weakest fingers of the hand.

As well as *releasing* them immediately, the thumb should also play its notes extremely lightly. It should play them as lightly as a feather, almost as if hardly at all; the thumb should glance off the notes it has to play, dusting them nonchalantly, as if they are not important. No need to worry – they will sound, as they are the bass note of each chord; the ear will *think* it heard them just as strongly as the other notes in the chord. The thumb must simply not hold on to them, not for a micro-second.

One can injure oneself in no time at all with this particular *Etude*, as with the first one, if one doesn't consistently release the thumb in that *Etude*'s wide-ranging passages very quickly – instantly, in fact. One contemporary critic, Ludwig Rellstab – a caustic commentator who took delight in being spiteful about Chopin, but who later did a *volte face* when he realized that he was entirely alone, even asking Liszt for a letter of introduction to Chopin when he visited Paris – complained about the *Etudes*:

“If you’re going to try to learn these pieces,” he wrote in the Berlin musical journal *The Iris*, “it would be advisable to have a surgeon standing by.”

It was Rellstab who said that the first movement of Beethoven’s C sharp minor Sonata suggested to him a vision of “moonlight on Lake Lucerne,” which is why it has ever since been known as the ‘*Moonlight*’ Sonata. Beethoven asked his student Carl Czerny, “Why does everyone always go on about the C sharp minor? I’ve written better sonatas.” Everyone has always gone on about Beethoven’s C sharp minor sonata because first and foremost it’s a striking and deeply moving work, but also, a catchy title is always an aid to public recognition.

Nevertheless, it’s probably a good thing that Chopin’s second *Etude* didn’t become saddled with a title, courtesy of Rellstab, such as ‘*The Unplayable*,’ or ‘*The Surgeon’s Delight*,’ the kind of name which could easily become attached to a piano piece in the mid-19th century. The first English edition of the G minor Ballade was entitled ‘*La Favorite*’; the first set of Nocturnes, Op. 9, ‘*Murmures de la Seine*’; various mazurkas ‘*Souvenirs de la Pologne*’; the two Nocturnes, Op. 37 ‘*Les Soupirs*’; and the diabolical-sounding Scherzo in B minor ‘*Le Banquet Infernal*’ – all of which the reticent and discreet Chopin would have hated.

The second *Etude* is a celebrated *tour de force* for all pianists, one which most of whom work at their whole lives. It is no more than a minute and three quarters long. It is quiet and innocent-sounding in a gently seductive way, but it’s deceptively clever. This *Etude* is one of the pinnacles of piano writing. Chopin has neatly separated the tasks to be performed by the two halves of the right hand – the thumb and second finger in the lower part; the third, fourth and fifth fingers in the upper, and he has given us the possibility of playing this near-impossible scale by having it accompanied by a left-hand part which complements it physically in an ideally supportive manner.

The purpose of the second *Etude*, as with *all* the *Etudes*, is to guide us towards complete independence of the fingers – not just independence from *each other*, but independence *within themselves*: independence of one finger-joint from another, as well as independence of everything else that we use when we play – independence of the hand from the wrist, independence of the wrist from the arm, and independence of our arms from our body. To play the second *Etude*, one half of our right hand has to be independent of the other half.

There are two essential considerations to piano technique, and they go together hand-in-hand. The first is the positioning of our hands and body. The other essential, which is strikingly addressed by the second *Etude*, is the question of *fingering*.

Fingering was one of the major preoccupations of Carl Philipp Emmanuel Bach’s “*Essay on the True Art of Playing Keyboard Instruments*”, and for a very specific reason. At that time, the concept of using all the fingers was brand new, introduced by the greatest keyboard virtuoso of the age, Johann Sebastian Bach.

Up until that time, use of the thumb by the right hand had been largely avoided, as was that of the little finger. The extreme lightness of the harpsichord’s action allowed – even *encouraged* – the playing of melodic passages and runs without the anchor of the thumb tying the hand down to the keyboard.

The fingering system used by Bach, which became known in Germany as “Bach’s Fingering”, and which his son’s great treatise promoted, called for the thumb to “pass under” the hand in order to connect hand positions in scale and arpeggio figurations – which means, to all intents and purposes, *all lateral movement* over the keyboard – with a firmer, stronger grasp of the keyboard than was formerly possible.

Conversely, the other fingers would pass *over* the thumb when going in the other direction. ‘Passing the thumb under’ (or over) became a cornerstone of keyboard technique, an immutable mantra repeated unthinkingly by piano teachers and manuals over the next two centuries, even though Chopin would significantly alter this conception, as we shall discover in a later chapter, when we come to the question of the lateral movement of the hand.

The whole question of the role of the thumb was to become central with the piano, as the new instrument’s firmer action required a much stronger grasp of the keyboard than did earlier instruments; and related to this grasp of the hand, a method of grouping notes together in ‘hand positions’.

We have seen the need for clear definition of these groupings, or *positions*, in the first *Etude*. But the interconnection of these ‘hand positions’ would bring with it the need for a whole new approach to the way in which the thumb was treated. ‘Passing the thumb under’ describes what *appears* to be happening when we move from one hand-position to another, because the thumb is the point at which most new hand positions begin. The thumb is the *anchor* of any ‘hand position’, as it is around the thumb that each hand-position must pivot in all scales, arpeggios, broken chords – in fact, virtually all lateral movements of the hand.

But what’s *really* going on – or *should* be going on – is a smooth and unruffled *displacement* of the hand – meaning the transportation of the whole hand from one position to the next. It is our task to ensure that these displacements should be done as quickly and effortlessly as possible, without allowing the thumb to become trapped, stuck beneath the hand as the hand passes over it.

Any amount of tucking the thumb under – or just pressing it against the hand – will stiffen it and strain all the muscles connecting the thumb to the forearm, especially those at the base of the thumb by the side of the wrist. We feel the strain and potential injury right away. ***This action is the major source of all debilitating hand and arm problems for pianists***, with carpal tunnel syndrome at the top of the list. It’s that inevitable streetcar.

But our main concern at the moment, in the second *Etude*, is the fingering of scale passages *not* involving the thumb – a highly unusual circumstance, one we will not encounter anywhere else in a protracted sequence other than in Chopin’s second *Etude*. Liszt’s *Grand Galop Chromatique* is the only other instance that comes to mind. In that delightful romp, a scale passage rollicks up the keyboard, then tumbles down again, over and over again, the scale played by the third, fourth and fifth fingers, with little two-note chords on the beats. But this principal motif is interspersed with other sections, whereas Chopin’s *Etude* consists *exclusively* of this pattern, and in its quiet way is much more difficult, as it weaves its way up and down in many ways.

Chopin is harking back to the fingering generally employed on harpsichords, and in fact, the lightness of this *Etude* ideally requires a piano of light action, one requiring the lightest touch and pressure from the fingers.

Chopin was the first pianist to realize the vital importance of planning the correct fingering for each and every note at any given point in a piece. With the sole exception of Rachmaninoff, who sometimes recommended specific fingerings for certain passages, Chopin remained practically unique in this understanding. He believed, quite rightly, that there are certain principles of fingering which apply to everyone – because we all have the same anatomy, the same hand structure. Larger hands might find large chords easier, or long, thin fingers may have their own preferences, but the basic principles of finger movement apply to everyone, size of hand largely immaterial.

Chopin makes the point here by writing an *Etude* which can only be played with certain fingering patterns, and he writes – in the score of one of his pupils – the exact finger with which we must play each and every note in the right hand. The fingering which Chopin has so meticulously written out in the right hand in this *Etude* is not at all eccentric or unexpected, as the only fingers which are available for the melodic scale passages are the 3rd, 4th and 5th. Because the thumb and index finger are occupied by the two-note chords on each beat, there are in fact few alternatives.

Some of Chopin's fingerings are certainly unorthodox, as, for example, passing the longest finger of the hand over the shortest, without recourse to the thumb – as Chico Marx liked to do as a stunt – and Chopin has no hesitation at all about using the thumb on a black key – a practice rigorously avoided, with no justification, by the 'Old School', as one might avoid a black cat. These unusual fingering patterns may have arisen from the special character of Chopin's own rather bony and flexible hands, but for the most part they are unavoidable, being the only ones possible – for *any* hands. Perhaps Chopin included the fingering simply to reassure his student, and others, none of whom had never seen such writing for the piano, that this *Etude* was indeed playable, and that they should persevere.

One of Chopin's most felicitous and distinctive fingering patterns – referred to by von Bülow like "Bach's Fingering" as "Chopin's Fingering", consists of avoiding the thumb in lyrical passages and sliding the fifth finger under the fourth in a descending theme or lyrical scale passage – or for instance in the cascading scale on the second page of the E flat *Nocturne*, Op. 9 (he wrote this fingering into the published score of the *Nocturne*).

The real purpose of 'fingering' – selecting exactly which fingers are to be used on each note – is, however, *not* to satisfy the preferences of the fingers – which are basically just weak little appendages at the ends of our hands and no more than subservient pawns for our hands – but to determine the *position* of our hands at each and every moment.

If the position of the hand is correct – i.e. exactly as it *should* be at any given moment in order to produce the exact sound desired with the least possible strain of the hand and arm – then we might just as effectively play the notes with the end of a pencil or the end of our nose.

The finger itself is no magic stick – it's a simple little mechanism with a couple of small muscles in it. The *position* in which we place the fingers, and our whole physical configuration, is what counts, and *that* is what 'fingering' is for: *to put our hand in the optimum position – the correct position – for each and every note.*

As we have already observed in the first *Etude*, **positioning is everything**. If a tennis player or a golfer places his body and arm in the right position, thereby preparing his shot perfectly, the actual stroke itself becomes a technicality and the result a foregone conclusion; he doesn't even have to think about it, and can turn his attention to the next move. Stockbrokers tell us not to worry about our shares' ups and downs – the only thing that counts, they assure us, is that we be well 'positioned' for future movements in the market.

One of the most important uses of fingering – if you forget about the function of actually make the note go down and 'sound' (which can equally well be done by a pencil-end) – is to determine the position of our hands so that they can be in '**mirror-image**' of each other. Mirror-imaging of the hands is of major importance and it's a constant consideration.

As the position in which our hands find themselves is far and away more important than any other factor in allowing the fingers to do their job, and as the fingers will do the best job possible if they are completely free to do so, and as the primary determinant of that freedom is the position of the hand, one of the most important factors becomes the **angle** at which the hand is positioned.

What does '*mirror-image*' mean?

Hold your hands out – do you see how the left and right hands face each other in a mirror image? Now slowly angle one of the hands outwards. The other hand instinctively and automatically wants to counter-balance it in the opposite direction – to exactly the same degree that the first one is angled. It requires an act of will and physical effort to prevent it from doing so. The same applies when one hand is angled *inwards*. Same thing with our feet, legs, arms – there is an automatic natural pull for the two sides of our body to mirror each other. Our limbs come in twos, and they balance each other in mirror-image.

This anatomical principle applies in everything we do, and certainly in everything we play on the piano. For the optimum effective use of our hands we should have the two hands balanced at the same angle against each other at every point in a piece of music. This alignment will alter with each phrase, in fact with each and every note.

Let us just look at the first line of this *Etude*. As we can see, the left hand, on the surface, seems to be locked in to a set of hand positions: it consists of a simple pendulum swing of the hand from one chord to the next which is consistent throughout the piece. The right hand's manoeuvrings are *much* more complicated, and there are obviously many more notes involved. But if the right hand is to be able to accomplish its task comfortably, the left has to be in synch with it at all times in a perfectly balanced 'mirror-image'.

The left hand is not as locked in to a fingering pattern as may at first seem to be the case. In order to balance the right hand in mirror-image, the left hand's fingering can be adjusted with advantage to 5 – 5/3/1, 5 – 5/4/1 instead of the obvious 5 – 4/2/1, 5 – 4/2/1. Although it seems innocuous enough when we look at the left hand alone, the standard 4/2/1 fingering angles the hand slightly towards the *left*, i.e. facing *away* from the centre of the keyboard.

Because of the natural way in which our hands form a mirror-image, the right hand is forced into the same angle inversely, i.e. *away* from the center, outwards towards the right of the keyboard centre.

At this angle, in this position, the 3rd, 4th and 5th fingers of the right hand become squeezed into a strained, scrunched-up position which is debilitating. But with 5/3/1 and 5/4/1 in the left hand, the right hand automatically angles more towards the center, releasing the struggling 3rd, 4th and 5th fingers. Now the hands are not angled *outwards* but slightly *inward* towards the centre of the keyboard. At this angle the truly difficult passage, the chromatic scale, is able to work with the unavoidable fingering 3,4,5 *and* release the little chords on each beat. Angling the *other* way, it is *not* able to release those little chords, which hang around, tightening the thumb and handicapping the upper part.

There is another application of hand-positioning to be observed here in the second *Etude*. This may seem to the reader to be a case of ‘tricks’ of the virtuoso performer, almost in the nature of magician’s tricks that are somehow not quite proper to be spoken of in polite pianistic society, and if one does use them, one should only do so on the quiet, and talk about it as little as possible, for fear of outraging people with the possible implication of ‘cheating’. We are referring her to the occasional preferability of taking certain notes written for the right hand with the left, and vice versa.

This *Etude* provides us with a clear instance where ‘simplifying’ is not the issue; the question is how do we achieve the correct hand position for each and every situation – not just every bar or measure, but every note – because frankly, without the correct hand position in every beat, we will simply not be able to play this fiendishly difficult piece of music; we won’t even get to the end of the second line – if we do manage, with a lot of strain, to get to the end of the first.

The very first note, or chord, places us in the invidious position of having to move the whole hand immediately, the moment it plays the first note. Which is to say, the first note, or chord, is a complete ‘hand position’ in itself, one which must be abandoned immediately it has been played.

Right away in the first *Etude*, we learned that we must take careful note of hand positions and move the whole hand along laterally, easily and smoothly from one position to the next without twisting or swiveling it around, or stretching it to grasp at the next hand position. But with a hand position of just one solitary beat – in this case C/E/A, played by 1/2/5, or 1/2/4 (the latter being Chopin’s suggestion) – we are in a very weak position, unable to have any comfort or firmness on this first chord/ hand position and having to literally throw the hand over to the next note, A sharp, in a kind of lunge. It cannot be done without twisting the hand, or playing the first chord in an awkward manner, the hand stretched out unnaturally in the direction of the A sharp.

In this case, it is not cheating, but natural hand-positioning for the best effect – if we can manage a *tenth* – to play the first beat not as written, i.e. a three-note-chord, but instead as a *two*-note chord, E/A, with the thumb and index finger, with the bottom note of the chord, C, given over to the left hand and the top note of a *tenth*. This *tenth* is easier than most *tenths*, as it is right at the beginning of the piece, so we can prepare for it. Also, it need not be very firm – in fact the lighter it is the better: we need just pick the two notes lightly, *pianissimo*, with a pincer movement.

Now we have a new hand-position in the right hand, one lasting the whole first beat of four notes: E/A - A sharp - B - C. This is an infinitely more secure way in which to begin this *Etude*, sparing us the stress and weakness of having to throw the third finger over the little finger – or over the fourth, if we use Chopin’s fingering. Either of them is very fragile for an opening hand-position, as whichever one we choose, it will last no longer than a semi-quaver before we have to throw the hand over onto the next position, and what’s more, throw it without any support underneath, like jumping off a cliff on to an adjacent crag, or from one rooftop to another. With the new hand-position, we have a secure foundation for the first four notes of the scale – the notes to be played while the hand is in this initial, unchanging position.

If we have thus ‘simplified’ the opening right-hand chord, it is tempting to play the four notes in the upper part with 2-3-4-5. This seems the easiest and most natural fingering, but our objective is to achieve – at every point – the most natural and unchanging *hand positions*. Fingering is at all times the servant of *hand-positions*. With 2-3-4-5, the hand is forced into a scrunched-up position, from which it will have to open out in the next position, creating a gear-change.

A gear-change right at the beginning of our journey! One beat after we have pressed the accelerator and moved off the starting line. 5-3-4-5 (the first beat being a two-note chord, E/A, played by 1/5) is actually better in this situation than the seemingly easier 2-3-4-5, even though we are beginning the scale with the weak little finger. But it is not weak in *this* position, because the *hand* is in a comfortable position – not stretched, not scrunched, but opened just the right amount.

Position is everything. There’s nothing magical about fingers – unlike voices, which *do* have special qualities. If our hand is in the wrong position, we cannot play a passage comfortably or securely with the best-trained fingers in the world.

The next hand-position in the *Etude*, beginning on the second beat – can also be improved. If we take the lowest note of the right-hand chord, E, with the left hand – perfectly easy for the left hand in this case, as it creates the chord of just an octave, not a *tenth* – then this hand-position will begin on the very secure position of a two-note chord, A/C sharp, played by 1/3. The security of this position is derived not from the starting chord being small – a two-note *third* chord instead of a three-note *sixth* chord, but from the fact that the hand glides into it easily and smoothly, without any expansion or contraction, from the previous hand-position.

In this configuration, the thumb – the lower note of the right hand chords – slides smoothly and easily across from E to A. The upper part is completely unhindered in its scale trajectory: the angle of direction of the upper part of the hand – the third, fourth and fifth fingers – is unchanging. If we have to ‘cheat’ in order to create smooth transition from one hand-position to another, so be it. Smooth transition between hand-positions must be our constant objective.

At the end of the first line – i.e. the last beat of the second bar – we have another opportunity to take one of the right hand’s little chords with the left hand without disturbing the integrity of the score in any way. At the same time, we are able to vastly improve a hand-position in the right hand. In this case, the hand is required to take another of those unsupported leaps – the hand having to jump from a hand-position at the top of the phrase to one a *third* lower, with nothing to support this freefall leap.

Not only is this an unsupported leap – nothing below us – but the weakness is compounded by the fact that the new hand-position is distinctly different from the previous one: the E played by the index finger in the new position causes the hand to twist around and change its angle.

If, however, we take the bottom note of the little chord on the last beat in the right hand, C natural, lightly dusting it with the tip of the left hand thumb, we have created a brand new hand-position in the right hand, starting on E/A, played by 1/5. In fact, this is hardly a new position at all, as the hand moves very little from the preceding hand position (only the top note, the fifth finger, has to move) such that the position of the hand is made more compact; but the hand itself doesn't actually have to move anywhere at all.

In the next bar the same possibility arises again – in the corresponding place: the fourth beat of the bar. Once again, the left hand can comfortably take one note away from the chord in the right hand, thus – and this is the crucial point of these adjustments – enabling the right hand to stay quiet, in a less busy sequence of hand-positions; i.e. it doesn't have to jump about from one position to another, with positions varying in size and angle: *that's* the killer for causing weakness and strain.

This instance is another of those cliff-jumpers if played as written – the hand has to leave the position on the third beat – starting on A/C/D sharp – and jump, with no support underneath, no safety net, to a different-sized position a *third* lower, E/A/B – the different size brought about by the stretched span of the thumb and index finger. By taking the E with the left hand, the right hand can stay in the same position in which it found itself previously, and thus have a hand-position which lasts more than a full bar – from the second half of bar 3 till the end of bar 4! *It is almost impossible to become strained or play a wrong note in an unchanging hand-position.* There is no danger of weakness in the melodic line or wrong notes.

It goes without saying that we allow the left hand to take the two-note chord in the lower part of the *augmented seventh* chord in the right hand on the last beat of the fourth bar. This chord as written is awkward and straining *not* because it stretches the hand close to its limit of stretchability, but because it forces a sudden expansion of the hand from a scrunched-up position to a much different position, a splayed one. In order to preserve the hand position – the position that has now gone on for six beats – the scale passage in the top part should avoid the thumb, which would make the hand twist around and start a *new* hand position – thus 2-5-4-3 - 2-~~5~~-4-3 – and thereby slide easily into the reprise of the subject starting in the fifth bar – on the *two*-note chord of E/A.

A long-enduring hand-position is the holy grail: the less we have to swivel around, jump from one position to another, alter the shape of the positions into which our hand is forced, the better. It is virtually impossible to make a mistake – i.e. play a wrong note – when a hand-position doesn't change.

We can think about the weather, or what we had for dinner, or how many unsold seats there are, or if the pretty girl in the fifth row is enjoying our performance, and our fingers will automatically play the right notes firmly and securely if our hand-positions are secure. It's the *change-over points* between hand-positions which are the weak links – *that* is where the fingers are insecure.

*I*n the central section of the *Etude*, beginning half-way down on page two, with the gradually building series of modulations, there is a recurring spot where it seems natural and easy to play a note with the thumb, in this thumbless *Etude*. The first thumb-opportunity occurs at the end of the first bar of this middle section, and that one is fine, but then it occurs again, in the first beat of the next measure.

Here, we have a different situation, one which forces the hand to twist around in order to play the notes immediately following the thumb note. *Twisting and turning is always a bad sign*. We may be able to do it at home, in a slower and more relaxed practice tempo, but when it comes to performance, a twisting hand bodes no good. Twisting means an awkward change of hand-position, or an incorrectly defined hand-position – by using the thumb at this point we have actually created *two* hand-positions in the one beat – each no more than two semiquaver notes' duration. By using the seemingly weaker fingering of 3-5-3-5 instead of 3-1-3-5 we achieve instead a hand-position which is firm and unchanging, blending smoothly with the hand-position that came before it and the one that comes after it. The hand virtually glides into the next position, covering the second beat of the new bar; it is in fact almost the same hand-position, continued.

One more example to illustrate the fundamental issue of the need to avoid awkward transitions from one hand-position to another, causing twisting and turning (*every* note and passage in every piece of music has to be considered in this way) – let us take bar 26 of the this *Etude* – the second bar at the top of the third page. Chopin's suggested fingering is not really good (he had a very light-actioned French Pleyel piano, very different from our much heavier-actioned keyboard, so his fingering suggestions are not to be treated as gospel, though they nearly always have a point):

Playing the top E flat with the little finger puts the hand in a weak, vulnerable, exposed position, and makes it twist around in order to accommodate what follows. On the other hand, if we play the E flat with the *third* finger, even though this requires a big jump of the hand, all will be right with the world. Why? *Not* because the middle finger is the longest and the strongest; the littlest finger can be the strongest *if it is in the right position* – **position** is what gives any individual (finger in this case) his, her or its power and strength.

By playing this chord with 1/3, the hand changes position by not the tiniest iota, despite the jump up to it, and for *this* reason it remains unruffled and is completely secure. This hand-position is impregnable – one can never have a slip here with this fingering – and it works every time. What's more, that hand-position is *so* secure it provides enough reserves of energy for the right hand to last till the next major hurdle, the tumbling-down sequence in the right hand, half way down the page.

In order to achieve the full effect of this strong hand-position at this point, we must precede this chord with 5-3-2-1. The whole hand moves easily and smoothly up to the G/ E flat chord. It moves easily and smoothly because – and for no other reason – *it is not required to change its angle in any way at all*.

At the end of this bar, we again end on the thumb – 3-5-3-1 – and move up smoothly and gently to the first chord of the next bar without altering the angle of the hand – the G minor chord played with 1/2/5. The hand should move laterally – i.e. from side to side across the keyboard, as if it is playing a *glissando*: no swivelling, twisting or turning.

The above fingering for the first chord of bar 26 in the second *Etude* neatly produces this *glissando* movement of the hand: no turning or twisting about. We can't miss the otherwise perilous jump, even if our attention wanders. And it feels good – smooth and gliding.

*A*t the same time as all this is going on in the right hand, we must watch the mirror-image positioning of the hands in relation to each other. Chopin has given us the possibility of playing this near-impossible scale by having it accompanied by a left-hand part which complements the right in an ideally supportive manner from a physical stand-point – but we must be *aware* of the dynamics of the positions.

All of the above discussion of hand-positions – a clear identification of which is necessary in order to establish the correct fingering, and vice versa, correctly chosen fingering being essential to creating smoothly progressing hand-positions – assumes that in effect *each note is itself virtually a hand-position*. That is to say, each and every note must be approached as if it is our only concern at that moment, no matter how quick the moment, and thus each note is given its full value in terms of weight, pressure, length, relation to simultaneously sounded notes, as well as previous ones, and every other consideration. The ultimate effect is that to all intents and purposes there is a virtual *non legato* approach to *each note*. This will not cancel out the effect of *legato* – quite the contrary.

In his famous '*Versuch*' – '*Essay on the True Art of Playing Keyboard Instruments*', Carl Philip Emanuel Bach wrote that "notes which are neither *staccato* nor *legato* are held for half their value unless the word *tenuto* is placed over them."

Another well-known manual, '*Klavierschule*' of 1789 by Daniel Gottlob Türk, claimed that "when playing notes in the ordinary manner, that is, neither *staccato* nor *legato*, the finger should be lifted shortly before the written value of the notes requires it."

This eighteenth-century approach is exactly right. These authorities may have been speaking of 'keyboard instruments' in general, but in fact they were accustomed to the sound of large, reverberant harpsichords, as well as the new fortepiano. By 1803, when the pianoforte was virtually alone, harpsichords having for all practical purposes disappeared, Clementi introduced the idea of "finger legato" in his manual, '*The Art of Playing the Pianoforte*', insisting that one should "keep down the keys of the instrument the *full length* of every note."

Although the piano was now well and truly established, Clementi was accustomed to a much thinner-sounding, less reverberant instrument than are we. From an aural point of view, therefore, holding down notes for their full value was essential on Clementi's piano in order to compensate for the lack of reverberation. Beethoven asked for this *specifically* – to hold down the notes – via the sustaining pedal, not the fingers, for long periods in slow, quiet movements, famous examples being the first movement of the *Moonlight* Sonata and the slow movement of the 3rd concerto – both composed in 1800.

Holding down the notes with the fingers did not introduce any great physical problem, because the keyboard action was much lighter than that which was to develop over the next century. But Clementi's advice about holding notes for their full value is not helpful in the context of modern instruments.

It is in fact detrimental, from both the acoustic point of view as well as the physical: the overhanging reverberation from each note will cause a blurred, muddy sound unless there is a slight gap after each note in order to clear the air. From the physical point of view, on a firmer actioned piano, unless we release all the notes at the earliest opportunity, they will lock the hand into rigid positions, by way of some fingers holding down notes too long unnecessarily, creating ‘excess baggage’ for the hand.

All of the above is determined and locked in place by the fingers which we select to play each and every note in any given piece – i.e. ‘*fingering*’. Selection of the right finger for each note in terms of the sound we wish it to create and in the context of its surrounding notes is a puzzle which may take months of trial and error, and patient experimentation, even years in the case of great pieces of music, but once we have definitively established the correct fingering for every note in any given piece, we never have to ‘practice’ that piece again – we just need to refresh our memory whenever we are to perform it. Nor will we ever be nervous about performing it. Once we have locked the complete fingering into our brains, we *know* that piece.

Nervousness about performing is *always* the result of not knowing exactly what we must do with each note and phrase in a piece. Emotionally, we might feel that we know the piece, because we ‘feel’ its general contours and its message, and we think we know the notes. But generalities are not helpful to performance; in fact they are detrimental. Successful performance requires precision and detailed craftsmanship. A pilot doesn’t fly a jet plane with a general feeling of exhilaration at being airborne, but through calm and precise manipulation of every knob on his dashboard and taking care of every detail. Subconsciously, we will be aware that there are gaps in our knowledge of a piece, certain places where we haven’t yet arrived at a definitive fingering, and these gaps are where we will undoubtedly come to grief in performance.

*T*echnically, the second *Etude* is indeed difficult, but an even greater challenge is the *psychological* one. It’s frightening to walk onto a stage and have to expose one’s weakest fingers – the fourth and fifth – and send their fragile sound productions out on their own into the dark yonder. Without all the fingers supporting each other with the whole hand operating as an entity in itself, any pianist will feel exposed and nervous.

The imposingly powerful Sviatoslav Richter, who possessed the most awesome technical equipment of any pianist ever, quaked before this tiny piece. When performing the twelve *Etudes* Op. 10 as a set, he hesitated and skipped over the quiet but treacherous second *Etude*. Richter was certainly not the only pianist to feel this way about this little *Etude*. It is not Chopin’s aim here to make us nervous, however – which is the effect this *Etude* invariably has on any pianist, no matter how often he plays it – but to help us in the pursuit of complete finger independence.

Apart from the daunting challenge of playing the flowing melody of this *Etude* with the third, fourth and fifth fingers of the right hand alone, these fingers in an exposed position, the most intimidating thing about it is the actual *speed* it must go. If it went along gently, at a leisurely pace, it would still be a sinuously atmospheric, seductively beautiful piece of music, and a very valuable *Etude* indeed. But Chopin has given us a definite metronome indication – one which makes a big difference.

In fact, Chopin has given us a metronome marking for every one of the *Etudes*, and although, like all great music, the tempo might vary somewhat without loss of musical sense or quality according to the particular piano being used or the acoustics of a particular concert hall, Chopin's indications are there in front of us, and they're quite specific. Nearly *all* of Chopin's metronome markings are decidedly on the fast side, faster for the most part than we would instinctively choose to play them on a modern Steinway.

There are several reasons for this. Firstly, Chopin was very much akin to Mozart. When Mozart said that Andreas Stein's daughter Nanette was in danger of squandering her talent by not acquiring "great rapidity... that which is the most necessary, the hardest, and the principal thing in music – tempo," he was talking about rhythm and forward movement, which are the *definition* of ordered sound – which is what we call 'music'. Chopin felt exactly the same way. For all his supposed dreaminess and use of *tempo rubato*, he believed music should always *move* and never become mired in self-indulgence or exaggeration. '*Tempo*' is the principal, most necessary thing in music. Then, the size and power of a modern concert grand is far beyond that of any piano of Chopin's time, and the sound is much fuller than that of the Pleyel pianos he used, which were light and pearly sounding. A fuller sound automatically requires more breathing space to resonate.

The lighter touch and sound of the Pleyel is a very French thing. The French use the expression '*jeu perlé*' – 'pearly playing' – to describe an ideal to which they aspire. French pianists in general have always had a distinct predilection for the music of Mozart – whom they call '*Mozaar*' – where '*jeu perlé*' can be shown to best advantage. It's the kind of *sound* they like, more than a question of the musical content or emotional substance. Thomas Beecham's *bon mot*, "The English don't really *like* music; they just like the sound it makes," would have applied in a paraphrased form to the French, who have always prized style at least as highly as substance.

The kind of music the French prefer is that which presents an elegant, charming, smoothly tailored sound world, dramatic on occasion but always within the bounds of decorum, with finesse but with no great amount of depth. '*Mais c'est charmant*', was the best compliment Saint-Saëns could pay his young protégé Leopold Godowsky.

Although a modern Steinway *can* produce the sound of smooth pearly runs, that's not what it was designed or built for. The action of a Steinway is much heavier, requiring a great deal more pressure and weight behind the finger-attacks in order to fill a two-and-a-half-thousand-seat auditorium with a rich, multi-coloured sound of orchestral depth. Chopin, and Liszt for that matter, almost never performed in halls for more than three or four hundred people; they didn't exist.

On Chopin's light-actioned Pleyel, one could sit back and let one's fingers glide like feathers over the keys. If you did that with this particular *Etude* at its required speed on a Steinway, nothing would come out – as Mozart remarked of pianofortes of his time. Unless, perhaps, you had Horowitz's specially altered Steinway with its extremely light action. But even then, all you could be sure of is a greater degree of control of the finesse, or quality, of the sound. A 9-foot Steinway is a completely different proposition to a Pleyel grand of Chopin's time.

The second *Etude*, which taxes the weakest fingers to the limit, was designed to be played on a light-actioned French piano of Chopin's time. It's much harder, and completely nerve-racking, on a modern grand at the speed Chopin has requested.

Nevertheless we must try. Even with his special light-actioned Steinway, Horowitz steered just as clear of this *Etude* as did Richter. Like Josef Hofmann, Horowitz played a number of the *Etudes* often, all his life, but certain ones he resolutely avoided. And if a pianist is going to be spooked by any of the *Etudes*, the second *Etude* will surely be the first!

But the challenge is there. Hence the pressure and the nerves which not only Richter and Horowitz felt, but which all pianists feel when approaching this piece. There are all kinds of mental calculations which have to be made in order to try to meet this challenge: ‘How fast can I take this *Etude* and still get to the end without breaking down with a cramp in the right hand?’ is the first question to ponder. Then, ‘exactly what sound level do I need to maintain in order to have the hand at it’s optimum lightness for this piece?’, and ‘how quietly can it be played on this piano in this hall at the desired speed without losing control?’

These questions interrelate inextricably, of course, as do most considerations of art and technique, and the calculations can be fine indeed. Often, however, it might seem like a better option just to skip over this *Etude*.

In the end, the most daunting aspect of performing the second *Etude* as part of the set of Op. 10 comes from playing it immediately after the first *Etude*. On its own, it’s a difficult and intimidating little piece, but perhaps not completely impossible. But following straight on from the first *Etude* it does become almost impossible, because of the vast gear-change in technical demands.

Chopin has addressed the same essential technical issue in these two *Etudes*, namely the importance of clearly articulating each and every hand position in a piece. The first *Etude* pushes our endurance to the limit with *fortissimo* passages in which we have to fight to resist *extending* the hand positions, i.e. stretching the hand out, while the second *Etude* has our hand contained within a small, circumscribed position, and the struggle in this case is to prevent it from becoming too tight and constricted.

In both *Etudes* we are aiming at an almost impossible ideal of keeping the hand completely loose all the way through. But it’s an *ideal* – something to which we must aspire, even if it is not completely practical. And that’s the whole point of *Etudes* – especially Chopin’s *Etudes*. Stopping the hand from tightening may be the primary objective of the first two *Etudes*, but it’s an ideal which is not fully realisable in practical terms. Plainly put, our right hand is usually exhausted by the end of the first *Etude* – complete looseness here being an impossible ideal – and we are not ready to go straight into the second *Etude* without a break, both mental and physical.

On top of that, the second *Etude* requires more anticipation than most pieces of piano music – it’s just like taking a deep breath before swimming underwater for a minute and forty seconds, which is the length of time it takes to get to the other side of this piece. Perhaps it was more a matter of having to play the second *Etude* immediately after the first which gave Richter pause, and not the intrinsic difficulty of the *Etude* itself, which he could certainly manage. The similarly gossamer, quicksilver Etude by Liszt entitled ‘*Feux Follets*’ – the fifth of his *Transcendental Etudes* – elicited from Richter the lightest, fastest, most magical performance ever. But in that famous performance, recorded live in 1959, Richter hadn’t just played Chopin’s first *Etude*.

One of the best performances of *all* the *Etudes* comes from a somewhat unexpected quarter. The great German pianist Wilhelm Backhaus, despite his later persona as a Beethoven and Brahms specialist, with an uncompromising Germanic approach, was in his youth one of the most brilliant of all virtuosos, with a fearless Horowitzian technique and sparkling lightness. With a Romantic shock of hair and debonair manner, Backhaus was, at the age of twenty-one, first-prize winner of the Anton Rubinstein piano competition in Paris in 1905 (second prize went to the twenty-four year-old Hungarian pianist Béla Bartók).

Backhaus' repertoire during the first half of his career, which was based in England, where he was much admired, was likewise a virtuoso Romantic one, with all manner of Lisztian transcriptions and the like. This is a little less surprising when one remembers that Backhaus was a student of the Scottish-German pianist and composer Eugène d'Albert, one of Liszt's favourite pupils – also, like Backhaus, a rigorous Beethovenian (he was known as “the little giant”), as well as a Lisztian.

Backhaus recorded the entire set of Chopin's twenty-four *Etudes* in the early 1930s. It was one of the first examples of what was to become a common practice in the era of LP recording, the phenomenon of ‘complete’ recordings. There doesn't seem to be any trace of constriction or difficulty in Backhaus' very fast performance of the second *Etude*, and on its completion, on the chord of A major, he fancifully improvises a nonchalant arpeggio as a cadence – not something that would be dared by anyone who hadn't been born in the 19th century. Perhaps Backhaus was breathing a musical sigh of relief at having conquered the one-and-a-half-minute little monster, or, much more likely, demonstrating a witty, very Chopin-like dismissal of the extraordinariness of his just-accomplished feat.

But as we are neither Chopin nor Backhaus, let us take a deep breath, and do what a pianist's got to do.

*I*n the next chapter we will see Chopin try to simulate the human voice.

In this context, we will examine the crucial distinction between the two different types of muscles which operate the fingers – the *extensors* and the *flexors* – a clear understanding of which is necessary to everything we ever play, and one which is absolutely essential for the cultivation of ‘singing’ tone.

We shall find Chopin taking the piano, with all its new developments, and turning it into an instrument capable of almost, though not quite, simulating the human voice – or at any rate, taking a good shot at it. Although it was still much smaller in every way than the modern grand piano, there was enough there for Chopin to try to emulate the *bel canto* voices he heard often at the Paris Opéra. It was Frederic Chopin who gave us the ability to play the piano with a ‘singing’ tone, through careful manipulation of the sonorities of the notes and imitation of the breathing and phrasing patterns of the human voice.