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## **PART I: BEYOND A STABLE HAND STRUCTURE**

### **I INTRODUCTION**

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# AUTHOR'S NOTES

These essays outline the development of a piano technique beyond the foundation levels laid out in *The Craft of Piano Playing*. They deal with sensations of internal physical experience that are often subtle, not easily defined, and not easy to describe. It's not a book of 'quick fix' technical tips, but rather a delving into the complex issues of internal physical consciousness and its educative capacities in piano playing.

The chapters are experiential, food for your own kinesthetic learning process, not mere information. Digest this material slowly. Don't do more than one *Awareness Through Movement*<sup>™</sup> (ATM) lesson a day: give yourself time to savour and understand each one, time for the learning to sink in and and evolve.

*Don't just read the lessons. Do them.*

Awareness Through Movement lessons are best done with verbal instruction. It is difficult to maintain your attention while constantly referring to the printed page, so you may want to dictate the lessons into a recording device and follow them this way. If you do them while reading from the book, take special care to maintain the directed attention that makes the lessons effective.

*Acknowledging the legacy even in disagreement*

Although I sometimes may seem to disagree with the ideas of several renowned pianist-pedagogues, I acknowledge and indeed revere the great contribution each one of them has made to piano. These musings of mine seek not to disparage their work but rather to create a spirit of dialogue and ongoing mutual investigation which hopefully will lead to a better understanding of piano technique for all.

*Personal acknowledgements*

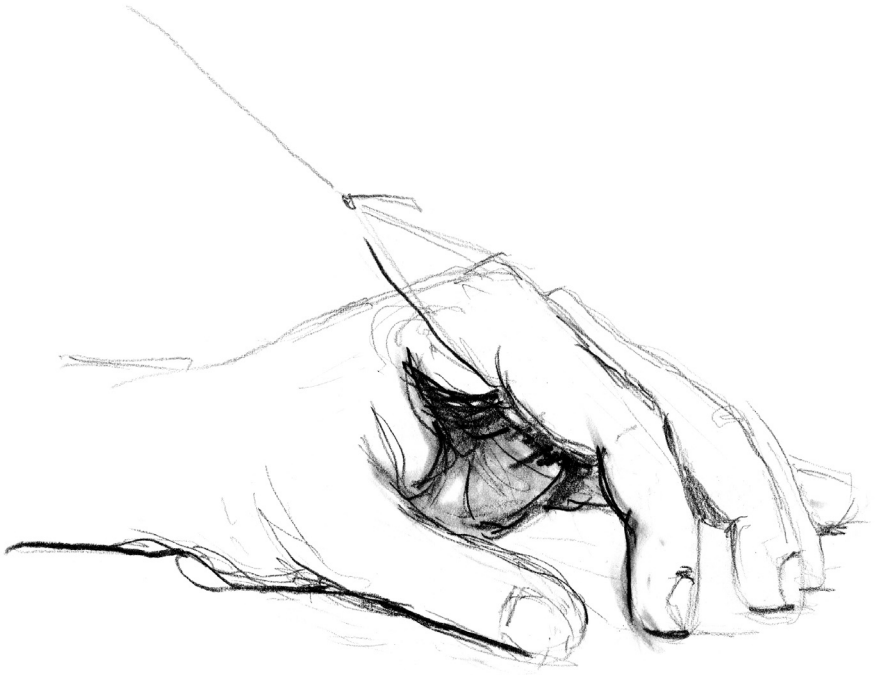
I lack the room to acknowledge everyone who has helped the development of this book. I would need to list, among others, all the students with whom I have worked over the past several years. I am grateful to every single one of them. It was through our mutual investigation and dedication to music that these ideas were developed, clarified and distilled into their present form.

I *would* like to single out several people whose input proved especially stimulating: my T'ai Chi teacher Sam Slutsky; Feldenkrais trainers Myriam Pfeffer, Russell Delman and Roger Russell; pianist-practitioners Dirk Steinkamp, Mirka Mauck and especially Anna Zenzius-Spengler, with whom this work-in-progress has blossomed in an especially fruitful way. Thanks as well to Sonya Ardan for her illustrations which really evoke the gestures of my hands and not just the position, and to Igor Peyovitch whose graphic wizardry succeeded in bringing her drawings fully to life on the page. And finally, thanks to Jovan Hadji-Djurich, whose creative enthusiasm on the business side has been a major generating force for the whole enterprise, and to my mother-in-law, Natalia Radulovich, whose many wonderful meals provided the physical food so necessary to nourish the development of this 'food for thought.'

*Alan Fraser, Novi Sad, December 2009*

PS: As the book goes to press we have been saddened by the news of John Seely's death on December 18. John has been my good friend and mentor for over 30 years, and I was with him for some time in his last illness. In fact, the urgency of that situation in which an amazing distillation and concentration of the 'life force' took place in him, helped stimulate me to finally finish this book which had languished on the shelf for several years while other projects took precedence. My being able to cut the book down to size and excise all the extra words that somehow always creep in here and there was helped by the influence of John's 'organizational ability,' and consequently I feel these pages are in some small way imbued with his spirit. Thank you, John.





*Frontispiece: a sense of moveability*

# 1 THE PIANISTIC SELF-IMAGE

Each of us approaches piano playing with a set of learned habits and responses: the way we think and feel about music, and the way we move our bodies to express that at the piano. This I call the pianistic self-image.

This image has several components:

- The **physical** – the way each pianist’s hands move that has both individual traits and recognizable patterns common to many. It is a vocabulary not only of movement choreographies, but also the internal physical organizations<sup>1</sup> that give rise to them.
- The **musical** – our musical-aural vocabulary: all the sounds, expressions, emotions and colours we believe ourselves capable of producing at the piano.
- The **emotional** – how one is as one plays: are you detached, or so involved that you drown in the experience, or perhaps treading that fine line where perception is engaged but not overwhelmed?

## *Symbiosis of the musical and physical self-images*

To widen our palette of expressive sonorities, we need a corresponding development in our physical capability. But it can also work the other way: improving physical technique can enhance our knowledge of the sounds the piano can produce. There’s a

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1.1 See chapter 2, page 19: “Physical organization: a specific pattern of perceptions, muscular contractions and relaxations, bone alignments and thoughts that is unique for each and every act we conceive and then do.”

symbiotic relationship between physical technique and musicianship, and improvement in either realm both requires, and grows out of, a change in the pianistic self-image.

*To hone is to repair, to refine, to realize...*

Some pianists may seem to possess supreme musical and physical gifts, but there is always room for improvement. It's often the greatest artists who are most humble in their self-assessment, most arduous in their search for even higher levels of perfection. They show us the way: to hone the self-image we need to repair the 'broken pieces,' refine the ones that work well, and also fill in parts of the image we may not even have known existed.

*Building on the foundation to create a transformation*

This book builds on the fundamental elements of the pianistic self-image first outlined in *The Craft of Piano Playing*,<sup>2</sup> refining them and offering further tools to develop your own solutions to technical and musical problems. It aims, by giving you a tangible experience of the tremendous potency hidden within your hand and body, to create a true breakthrough in your playing.

*Reduce effort to increase learning*

Many of the exercises presented here produce astonishingly powerful changes without requiring great 'effort.' These changes take place in the brain itself, evoked by signals from the sensory and motor nerves. Grosser efforts don't have the same effect because the electrical impulses are too strong and inexact. Reducing effort 'makes room' for us to notice details of kinesthetic sensation and so offers a neuromuscular education quite unlike that of normal exercising. Only the enrichment of sensation produced by this reduced effort evokes the changes in brain patterning that are the classic trademark of the Feldenkrais Method.

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<sup>1,2</sup> Fraser, Alan, *The Craft of Piano Playing*, Scarecrow Press, Lanham, MD, 2003.

Ruthy Alon, a student of Moshe Feldenkrais for many years, tape-recorded a series of *Awareness Through Movement* (ATM) lessons called *The Grammar of Spontaneity*, a classic in the field that empowers the student to discover his or her own spontaneity by the simple means of learning optimal movement patterns and dispensing with more limited or erroneous ones. This book aims to be a sort of pianistic *Grammar of Spontaneity*.

*Spontaneity: the gestalt of many complex elements in a unified simplicity*

The complicated process of piano playing should be experienced as easy. In the heightened state of awareness of musical performance many complex actions are synthesized, leading spontaneity to appear: the sophisticated simplicity of a unified expression. If any part of the physical mechanism functions below par, this gestalt is less likely to appear.

*The keystone of the hand's arch needs support from the whole body*

In modern piano playing, the physical weak link in the chain is most often the metacarpal-phalangeal joint (the knuckle joining finger to hand), which tends to collapse due to over-relaxation. Arm weight and whole body organization get a lot of attention these days, but the hand-finger is the crucial unit that connects arm and body to the instrument, and it too must be in top form. *The Craft of Piano Playing* already examined this in detail, but here we'll delve even further into the complex play of forces and actions needed for a hand to be fully potent on the keyboard. And we'll also expand our view outward to include the whole body – skeletal in the hand works best when it happens in the rest of you as well.

The exercises presented here take your hand through some rather unusual movements, contortions, sensory experiences – all designed to expand the number of 'movement templates' it possesses, to improve its sense of self. Which exercises you find easy, which ones are unfamiliar territory, depends on how you relate physically to the piano right now. What are your present

## 2 THE ADVANTAGES OF A PHYSICAL APPROACH

I once had a student whose weakness in her physical organization prevented her from getting the required sound in the opening Promenade of Mussorgsky's *Pictures at an Exhibition*. Her hand wasn't standing well on the board, and her arm position wasn't helping matters either.

The image shows a musical score for the first four measures of the opening of Mussorgsky's *Pictures at an Exhibition*, Promenade I. The score is written for piano and consists of two staves: a treble clef staff and a bass clef staff. The key signature is one flat (B-flat). The first measure is in 5/4 time, the second in 6/4, the third in 5/4, and the fourth in 6/4. The first measure starts with a forte (*f*) dynamic. The melody in the treble staff is a series of eighth notes: G4, A4, B4, C5, B4, A4, G4. The bass staff is mostly silent in the first two measures, then plays a steady eighth-note accompaniment in the last two measures: G3, F3, E3, D3, C3, B2, A2, G2.

### Musical Example 2.1

Mussorgsky, *Pictures at an Exhibition*, Promenade I: mm. 1-4

I showed her the required feeling of skeletal integrity in her hand, and then I held her arm and guided it in space, empowering her hand to make those chords powerful, open, free and stable instead of cramped. Quite suddenly her sound improved dramatically, becoming healthy and resonant, but most fascinating of all, acquiring dignity and magnificence: the character and emotional tone were now correct. How did that happen?

I could have asked her to imagine that dignity and magnificence and to try to bring that character to her sound, and perhaps, after much struggle, searching and failed attempts she may have succeeded more or less. But by showing her the physical organization involved, I got her to succeed 100% immediately. Why?

Every sound, every emotional colour produced by a pianist has a corresponding physical organization. If your body is organized to do A, you are not likely to get B, C or D as a result of your action. By physical organization I mean a specific pattern of perceptions, muscular contractions and relaxations, bone alignments and thoughts that is unique for each and every act we conceive and then do.

The systematization of an art involves specifying the physical organizations involved, learning their nature and learning how to communicate them. Every student of medicine learns anatomy from a textbook and needs not repeat the work of the many scientific pioneers who first made those discoveries. But piano teachers often demand a certain sound or emotional tone from the student but leave them more or less to their own devices when it comes to producing it. Or we demonstrate the way we think it should be played, then ask them to do the same - to learn by imitation. We may have learned instinctively, and may be more able to demonstrate than to explain what we actually did. We are basically asking them to re-invent the wheel, which leaves pedagogy in a kind of hit or miss situation.

If I understand my own physical organization and can guide the student physically in recreating it, I have much more chance of empowering that student to succeed musically. Why should I leave my student to find her own way? I can speed up her learning process dramatically by guiding her in the physical alignments and muscular impulses needed to make a piano behave in a specific fashion. Working in this way she develops a whole repertoire of ways to touch the keyboard and discovers the entire scope of the piano's tonal palette, much of which was likely unknown to her.

Physically guiding a student actually takes imitation a crucial step further. I am now communicating my internal process to her: she senses what I am doing internally to produce the external result. Having experienced it through me, she still has to recreate that inner process on her own, but recording the experiential template kinesthetically helps her succeed much sooner. And

this is not imitation so much as a response to a learning process. I don't turn her into a robot following my guidance automatically; I awaken her physical mechanism to its potential for effective movement – she is 'learning how to learn.'<sup>1</sup>

But if I speak only about the physical, again I mislead her and create a wrong impression of artistic work. She then believes that piano playing consists of holding your hand a certain way, moving the fingers like so, feeling effort in this or that part of your arm. No, the learned physical organizations always serve a musical purpose, in this case the stately dignity and alive magnificence of Mussorgsky's Promenade. Her physical experience must always be linked to the artistic image that's primary in her mind. At the end of this long apprenticeship, the physical organizations will be learned so well that she thinks no more about them: she simply uses them automatically to fulfill her artistic intentions. Her 'miraculous cybernetic sensing control mechanism' is being put to its good and proper use.

### *Natural vs. artistic expression*

Learning to speak is a natural process. Children don't go to a special school to learn how to pronounce each word. They get informal coaching from family and friends, but mainly they just pick up language from their surroundings. On the other hand, an actor takes lessons in diction, voice projection and voice production, oration, declamation, elocution, breathing and posture, the better to know the specific physical sensations associated with each expression, with every nuance of emotional tone. He learns his craft: the logical extension and enhancement of natural abilities.

An old London stage veteran rehearses in his studio. A friend arrives; the actor delivers an oration that literally has his friend in tears, but the instant it's over the actor says in a completely normal, conversational tone, "Not bad, eh? Would you like it again?" He delivers the same lines with the same power and emotional impact, then again immediately returns to his everyday

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<sup>21</sup> One of Moshe Feldenkrais's definitions of his method.

demeanour. It is his craft, his job. His art is to create specific emotional tones and impressions, and his voice and his body are the tools he uses to achieve this. Classical pianists too are obliged not just to play 'naturally' but to explore and develop all the expressive capacities of their art, to master them.

Each musical composition has an innate content that requires optimal physical organization for its full expression. Stray from that organization and you disturb the musical content. The best ear in the world will not give you the result if your physical movement isn't serving it totally. Furthermore, attention to the physical can guide your musicality, teaching you and enlightening you, as long as it is aligned to your ear. An educated kinesthetic sense can feed your ear just as an educated ear feeds your kinesthetic sense. If this were not so, then how could I take a student's arm and transform her playing from wooden and lifeless to magic, without ever having said a word? I do try to explain it in words – the mystified young woman should at least have some chance of understanding what is going on! But the essential communication is musical, and the medium is kinesthetic: neuro-musculo-skeletal system to neuro-musculo-skeletal system.

The more we pianists understand the exact physical organization we use to produce each type of sound, the more command we have over our means of expression, and the more fluent we become in our pianistic/musical language. The more I show my students physically how to do what we are doing, the more they can do what... the composer wanted.

### *Emotions, muscle tonus and musical tone*

The ultimate goal of this process: the body is so well-organized its muscle tonus reflects the actual character of the emotion, and this in turn is translated cleanly into the piano sound. When the body is freed from all interference (parasitic contraction<sup>2</sup>), what you feel emotionally will indeed translate directly into the tone of the music you make.

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<sup>22</sup> Contractions that serve no useful purpose.



# 6 THE THREE INTERLOCKING ARCH STRUCTURES OF THE HAND

*(DVD 1-ii)*

When it's structurally sound, increased weight on its keystone strengthens an arch instead of crumbling it - as the great Russian pedagogue Heinrich Neuhaus was so fond of demonstrating by leaning all his weight onto a student's hand as he or she held a chord. He was empowering the 'Russian Arch,' but the hand has other arch structures hidden within it as well, all of which give the hand a wonderful sense of potency when they work as they were designed to. In this ATM we'll learn to sense these arches by improving their functionality.

## **REMEDIAL PIANISM ATM 4 (6.1)** ***THE MULTIPLE ARCHES OF THE HAND***

*(DVD 1-ii)*

### *Functionality of the Russian arch*

The Russian arch runs from fingertip up to its peak at the metacarpal-phalangeal joints (the top knuckles), then down to the wrist.

**Step 1:** Rest the heel of your right hand on a table with your fingers naturally curved. Draw the heel of your hand slightly closer to your fingertips. And now be your own Neuhaus: use your left hand to press into your right second finger's top knuckle, organizing your right hand to resist the downward pressure. What must your hand do to bring its 'Russian' arch into full potency? How can you alter the way it lies, bringing this finger a little closer, that one further away, until your arch is like a rock rising up like St. Peter's dome under the pressure from your left hand? Can you help your right hand discover its full structural potency by relaxing something further up your right arm as well?

Remember to cock your metacarpals before exerting weight on your arch. When you don't, this classic arch tends to flatten out, its functionality reduced. The arch's apex angle is now too shallow, and weight exerted on the keystone collapses instead of strengthening the arch.

Also remember, this is an exercise: don't try to play using this pressure. I've seen students not necessarily leaning on one hand with the other, but somehow managing to recreate the feeling of the hand dome withstanding a lot of weight pressure from above. Big mistake! Compressing the hand like that just impinges on its moveability. Cocking the metacarpals to prime the fingers empowers your arch while freeing it from compression.

*A second arch: the hand's transverse arch*

**Step 2:** Rest the heel of your hand on a table with your fingers naturally curved. Trace a line running along the row of metacarpal-phalangeal joints from your thumb's (which is lying on the table) up to the apex of your second finger's, then falling to your fifth's (whose metacarpal is also lying on the table). This transverse arch is recognized in anatomy books (though not generally by pianists), and is just as important in the pianist's hand as the Russian arch.

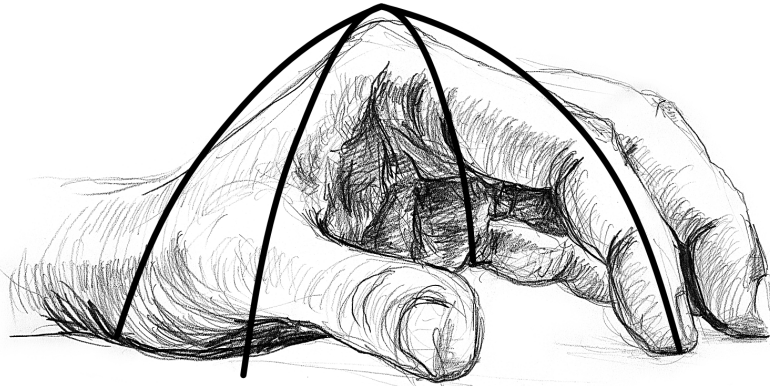


*Illustration 6.1 – The hand at rest, a line along the transverse arch*

**Step 3:** Lay your hand on table and gently move your thumb and fifth finger away from each other. Splay them slightly – the center of your hand sinks lower towards the table, flattening the transverse arch as well as the Russian arch. Then draw them towards each other – draw your thumb right in under your hand. Your second knuckle rises, and your transverse arch is more strongly expressed.

*Combining arches 1 & 2: the Gothic arch*

Thus the whole shape of your hand resembles a cupola, with the second metacarpal-phalangeal the peak of not one but two arches. Combining the traditional Russian arch with this lesser-known transverse arch makes a four-ribbed structure similar to the vault of a Gothic cathedral.



*Illustration 6.2 – Gothic arches in the hand (superimposed)*

*Cathedral vault hand structure gives new voicing solutions*

Pianists often stiffen their fifth finger at right angles to the hand to better bring out a top voice. This seems to use skeletal structure to the best possible advantage, but it also reduces mobility.

## 8 MOVEABLE PYLONS: BEYOND STABILITY

*Sensing the key to enhance precision*

Many of the old master pianists managed to give exceptional definition to each note, producing a sort of “putta putta putta” sound regardless of whether the playing was legato or détaché. This quality, ‘beyond evenness,’ results from an exceptional exactitude of touch, a combination of precision and lightness. To get that sound, the finger must really feel the key’s weight, its three-dimensionality. The sense of precision comes from an experience of manipulating the key, not just pressing it down.

*Standing is 2-dimensional, manipulating 3-dimensional*

When you discover the innate skeletal structure of your hand by ‘standing’, the key is already down on the keybed. Your finger is occupying a space, but the action of descending the key through that space to the keybed has already occurred. You can no longer manipulate the key; the moment to do any of the myriad subtle adjustments so necessary to creating a wealth of tonal differentiation has already passed.

*Standing is stable, manipulating unstable*

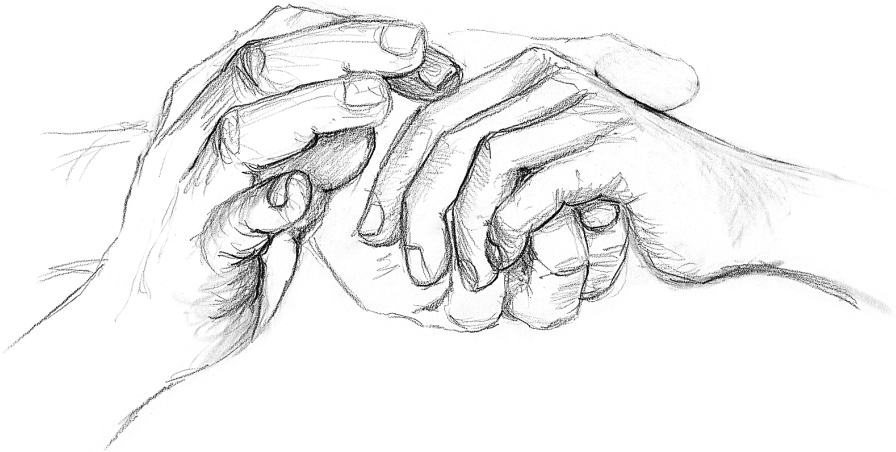
A walking or running human is constantly falling forward: as each leg meets the ground it catches the person and launches her or him further forward. The function of standing is present, (the pushing leg also bears the body’s weight as it launches it forward in space), but this standing is never static, it is in constant mechanical flux.

If a hand stands static, immovable on the keyboard, standing has become a hindrance not a help – there’s no movement in its standing.

The hand needs an element of structurally secure instability as it plays, like the body's instability in walking or running.

*Play your own fingers as if they were keys*

To help one student recreate that 'putta putta' sound, I freed her hand from a pressed, overly stable feel by making her finger as loose as the key itself. Nothing stops a piano key from moving, and nothing should stop a finger either. I took my student's hand in mine, and with the fingers of my other hand I very lightly 'played' her fingers as I would the keys. An extremely light, quick, small movement, just to jog her fingers so quickly and lightly they didn't have any time to think, to react, to resist, and so they would just flutter. I could jog them and they would instantaneously return to their natural 'at rest' position. I hesitate even to use the word 'position', as it implies something fixed in space. No, this 'position' is simply the place in space where your fingers hang out if you just let them go.



***Illustration 8.1 - Teacher's left hand supports students left hand while teacher's right hand plays students left fingers***

# 13 USE BONE TO PRODUCE TONE

The sensory education offered by these piano ATM's need not be done in isolation: here we apply some of the same ideas to a composition. What follows is a type of 'stream-of-consciousness' ATM: I've transcribed all the words, images and evocations I used in a lesson to give a student a visceral experience of 'bones,' not just a theoretical explanation.

*Different roles of each voice in a Chopin etude*

The voices of this etude differ clearly in their function.

The musical score shows the first four measures of Chopin's Etude in E-flat minor, Op. 10 No. 6. The tempo is marked 'con molto espressione' and the dynamic is 'p'. The right hand features a slow, melodic line in the upper voice and a subordinate alto voice. The left hand features a spidery, running sixteenth-note tenor line and a steady bass foundation.

**Musical Example 13.1**  
**Chopin, Etude in E flat minor Op. 10 #6, mm 1-4**

The right hand's upper voice is a slow, lonely melody, so stark it touches something beyond despair; its subordinate alto voice supports by growing out of certain notes of the main melody. The left hand's primary voice is the spidery, running-sixteenths tenor, constantly twisting and turning in a fretful chromatic ostinato changing-note pattern, the subtly pestering, insistent voice of a subtle pain that just won't go away. The interplay of these three voices rests on the bass foundation that steadily offers its support at each downbeat. The entire etude is written in strict four-voice counterpoint.

*Slower voices louder, faster-moving voices softer*

A general rule: slower-moving voices need to be played louder; quicker-moving voices softer. Quicker-moving notes are heard anyway, and they can very easily become too intrusive, drawing attention away from the longer-lasting note that is dying away. You should be able to hear a longer-lasting note for its entire length, even though the attacks of the quicker notes happening later will tend to obliterate its sound.

REMEDIAL PIANISM ATM 11 (13.1)  
*THE SENSE OF 'BONES' IN A CHOPIN ETUDE*

*'Bones' in the ostinato voice*

Let's use our new 'bones' feeling to facilitate the orchestration of this etude.

**Step 1:** To control the 'least important' of the four voices in this etude – the running sixteenths – find a way to make your hands feel like bones, nothing else. Let your hand hang by your side and imagine that it is literally just its skeleton. Now how does a skeleton behave? It certainly doesn't indulge in any sort of slightly spasmodic movement tics. Bring your hand up to the keyboard to play, and begin to notice all those little jerky contractions you do unconsciously. If you maintain the feeling of 'bones' in your hand, you'll begin to feel how the tics are unnecessary.

When you do the 'bones' thing it gets rid of all the parasitic contractions, the little deformations in your fingers. Any slight finger deformation must have been caused by superfluous effort – the 'bones' thing gives you the way to play with the absolute minimum amount. And then you can get the exact touch you



need – a simple “pah tah tah tah tah tah” that allows for a really continuously controlled *ppp* in that voice.

*‘Bones’ in the longer tones*

**Step 2:** You can use ‘bones’ in the singing voices as well. With a tiny sort of internal explosion the note will resonate richly with no external trappings... With ‘bones’ it’s easier to bring any one voice out, because all the muscular holding that prevents a clear differentiation of finger actions has been eliminated. There’s no over-trying associated with inner tension, just a clean ‘mini-explosion,’ an exact, instantaneous muscular action free from all the usual spasmodic, uncontrolled elements.

*‘Bone whips’ and arm weight: both useful but different*

Arm weight can help you feel ‘bones,’ but the musical result is far from the same.

**Step 3:** Hold your hand somewhere above a table and just let it go ‘thunk’: drop it onto the table. Do you feel your bones manifesting themselves more clearly because of the absence of muscular effort? Do you feel how this is fundamentally different from doing it with muscles? Using arm weight should give you this clear experience of your skeletal structure.

The falling arm shows you the exact skeletality available when you free yourself from unnecessary contractions. It stimulates your hand-skeleton into a richer sense of itself. But don’t play with that kind of ‘arm-thunk’. Your arm is too ungainly and heavy to control the fine distinctions in movement we need at the keyboard. Just use the sensation of that ‘let go’ feeling to cultivate the feeling of ‘bone-whips’ - exact muscle contractions creating precise movements of unconstricted bones.

With this you can use the entire force of your skeletal frame to bring out a singing voice. It gives an amazingly defined sound.

Horowitz's characteristic sound: incisive, every voice chiselled, defined. 'Bones' gets rid of all the superfluous stuff. When you focus in on the actual feeling of the three bones of the finger just going 'tuk' down into the key, all of a sudden you're doing it in the most efficient way. An object, a hard surface - the distal phalange incising itself in a key... your sense of your actual bone structure lets you distinguish this process from any extra effort that makes you do something else. Any deformation already means an increase in effort, a sort of spasm that has no purpose. Maybe you feel cool making one of your standard gestures, but you are just diverting yourself from the essential thing: the manipulation of the key in the most efficient way possible.

*Feeling out of control to gain greater, more evolved control*

We're looking for the most efficient way to make the key go down. 'Bones' gives you the most complete and absolute sense of the key, and therefore the highest possible control of it. But you may feel weirdly out of control, because this control is so different from the holding on, the forcing something to be a certain way, the use of effort to make it happen that we are so used to. This new type of control has a sense of complete non-effort - it's very close to the Buddhist non-action, non-doing - 'let the arrow shoot itself.' It's the strange, potent sensation of unstable equilibrium, something unfamiliar to us yet essential.

*Trick your mind to really minimize effort*

'Bones' is Zen put into practice. 'Non-effort' is not so easy to achieve! Sensing a series of bones effectively trains you to 'not-do.' Of course, the muscles actually are doing something - bones can't really move themselves! But the muscular effort is so miniscule compared to what you're used to, it really does feel like non-effort. The most practical way to attain this is to tell your system, "OK, my bones are just going to do it by themselves." It's illogical, but if you tell yourself this, your system gets the message, "OK, really no effort," and a new kinesthetic image emerges that really feels like the bones doing it themselves.

## 22 THE THUMB: CO-DEPENDENT OR INDEPENDENT?

(DVD 3-i)

### *Pianistic co-dependence*

We've looked at the third and fourth notes of the Revolutionary Etude left hand, but maybe your problem arose even earlier - did you tend to fall on your thumb? If so, there's a good reason: the fingers end at the knuckle, but the thumb ends way up at the wrist. It's a very different sort of digit - almost another hand, separate from the main one - but in piano it often doesn't know how to be separate. Falling on the thumb is endemic in the world of piano.

The underlying reason: the thumb normally opposes itself to the hand, but too often in piano playing we do the opposite: something I call pianistic co-dependence.

In psychology, co-dependence originally referred to the interaction between an alcoholic and his or her spouse. A wife tries to cure her alcoholic husband; but if he reforms, she divorces him and marries another alcoholic! She needs to fail in her goal, and he needs someone to fail in curing him. In the name of trying to get better, they perpetuate the dysfunction.

REMEDIAL PIANISM ATM 21 (22.1)  
*PIANISTIC CO-DEPENDENCE*

(DVD 3-i)

In pianistic co-dependence, when the arch structure weakens (because we're all taught to relax), big brother thumb comes along and, wanting to help the arch stand up, tenses and raises itself.

**Step 1:** Play the opening left hand passage of the Revolutionary again, paying special attention to your thumb. Is it entirely free of tension as your fingers play, or does it lift and tense? For most of us it tenses – can you detect it?

When it's time for thumb to play, he is so used to raising himself he can't descend and so the arch further collapses to help push thumb into its key. Like that married couple, thumb and hand try to help each other but only perpetuate the dysfunction. They need to individuate, to differentiate. The arch needs to stand up on its own, and the thumb needs to release down.

**Step 2:** Play another passage, make up something where the thumb doesn't play, and let your thumb fall in under your hand as your fingers play. Inhibit any tendency it may have to rise and tense itself. Consciously force your thumb to continually brush the white keys. Keep it in constant contact; don't let any air appear between it and the ivory. It's amazing how persistently your thumb wants to lift, how insidiously the metacarpal-phalangeal arch falls to help your thumb. Can you catch yourself letting this happen?

**Step 3:** Standing on your thumb, make it push your top second knuckle up into prominence, making a buoyant, cupola quality appear in your palm. Create as big a space as you can between your thumb in its strong exertions and your curved, relaxed forefinger.

**Step 4:** Leaving your four fingers on key, reach down with your thumb to grab the underside of the keyboard. This makes the whole space between thumb and forefinger open up – feel the wonderful separation between thumb and hand. Then bring your thumb up to the key to play a note. Leaving your four fingers always on key, with your thumb alternately reach down and grab, come up and play. Your arch instantly finds its shape each time, and your thumb stays down under the hand where it needs to be – you can feel the separation of function.

**Step 5:** Press your thumb firmly against the keyslip, the strip of wood that runs along just below the keys, and slide it along the keyslip while your fingers play a scale. This only works for scales going away from your body – ascending in the right hand, descending in the left. Press your thumb firmly but lightly enough that it can slide easily, and feel how clearly this differentiates the thumb's function from the right work of the fingers.

**Step 6:** Try the opening of the Revolutionary again with your 'new thumb.' Does the sensory education you've just given it make a difference? Does it now offer a more viable standing support to your second finger, just as your second learned to stand and offer support to the fourth? Has it ceased and desisted from falling in when you play A flat-G? Are you at least more aware of that falling tendency?

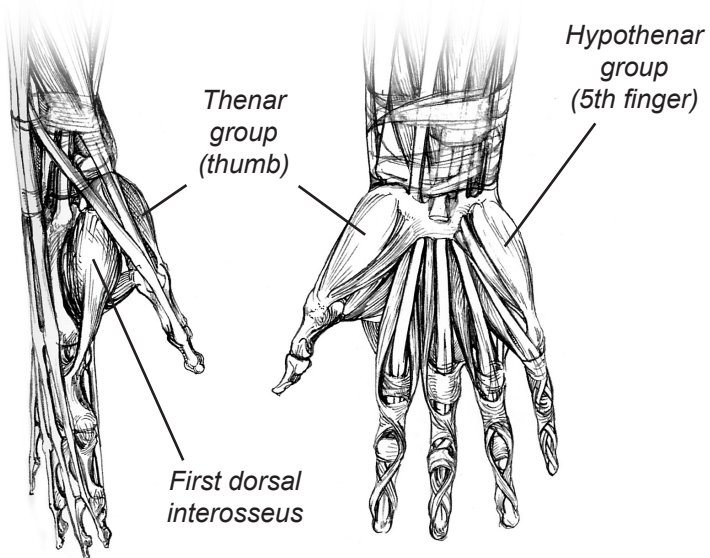
7: Third finger standing on A flat, repeat your thumb note G several times, ensuring that no falling takes place. Use your thumb to push your hand 'up' each time it plays its G – when you do that, you can't fall!

**Step 8:** Play the passage again, keeping the sensation of step 7. Then make up more exercises, your own variations (standing constantly on thumb G, alternately play third A flat and second F for instance), each time returning to the passage to check for improvements. Above all, always link the sensation of improved standing to improved melodic evenness and more mastery over just how you will inflect the left hand melody.

### *The thumb's metacarpal*

The third bone of the thumb isn't embedded in the flesh of the hand; it moves freely like the fingers' proximal phalanges. Why then is it called a metacarpal?

1. **Hidden structural similarity.** All five metacarpals attach to the wrist. Carpal refers to wrist, meta-carpal means beyond the wrist.
2. **Musculature.** The metacarpals of thumb, second and fifth all possess much more musculature than the other finger bones. The first dorsal interosseus attaches to the second metacarpal and empowers the space between thumb and forefinger. The fifth metacarpal also possesses a big mound of fleshy musculature, the hypothenar that defines the outside of your hand. The thumb metacarpal is even more generously endowed than the second and fifth, wrapped in the thenar muscles that are especially potent and important, the largest muscle group in your hand.



**Illustration 22.1 – Metacarpal musculature**

## 25 ARM WEIGHT PROS & CONS

### *The benefits of arm weight*

Good skeletal alignment facilitates the efficient transmission of forces to the key. When I relax my arm, sensing its weight exerting itself down through my hand into the key, the resulting let-go in my shoulder allows the humerus to line up with my shoulder exactly as it should, helping all the arm bones down to my fingertip to align and all the muscles to work efficiently.

Completely joining fingertip to key gives real control of that key. Again, letting my arm's weight express itself is a wonderful, easy way to achieve this absolute contact, and because my arm remains supple behind my finger, the tone really is warmer and more resonant.

A free arm facilitates ease and agility in all fingerwork. There is a complex relationship of arm weight to muscular effort, and there is an art in employing it to best effect.

Arm weight seems as well to help one arrive at that mysterious interpretative state where inspiration, intuition play their part, supplanting that vaguely dissatisfying feeling that the intellect is too much in control. One's playing becomes more human.

### *The dangers*

Arm weight technique often creates a basic structural weakness in the hand. Letting the arm go allows one to feel structural alignments superbly, but over-softening and caving in the hand can undermine that crucial structure – it's too much of a good thing!

The 'down' movement often causes the caving. If arm weight 'clamps' the finger to the key without the necessary precision, it disturbs the exact sensation of contact, encouraging the hand to collapse. Then the 'down' motions of the arm tend to produce a melody that, for all its beauty of tone, has a certain plodding regularity, a note-by-note quality that destroys the sense of melodic shape.

Complete release of tension leads to collapse. The arm weight school advises lifting the arm with the hand hanging, then allowing the weight to drop through the hand, releasing all tension. But if all tension were really released, the finger would slip off the key and the hand would end up on one's lap. Arm weight cannot be transmitted into the key if the hand and wrist are totally flaccid.

Using joint fixation to transmit the weight of the arm to the key cramps the hand. The idea of joint fixation is widespread, but it goes against the basic aim of arm weight which is to loosen the joints. It implies arm weight replacing crucial finger activity instead of enhancing it. If a joint is fixed, it can't move – but being fluent at the keyboard requires being in constant movement.

The arm doesn't really move the key. The arm weighs much more than the finger: if it did really move the key, such an awkward mass couldn't possibly have as fine control as the tiny, precise finger does.

The arm doesn't produce tone – bones make tone. Your arm's movement and momentum can give physical life, breath to a phrase. It can make the sound alive. But if the arm's natural inertia is consistently used to produce the tone of each single note rather than a phrase movement or rhythmic impulse, the phrase will be stifled. The arm cannot phrase if its weight is wholly devoted to each individual note rather than groups of notes.



## 39 WINDOWS IN TIME

Music consists of groups of notes that occur consecutively in time. The specifics of what these notes express depends largely on the manipulation of where exactly in time, in relation to the previous and subsequent note, each note sounds.

### *National traditions in piano playing*

Two types of traditions have grown up around this. One is the transmission of a particular aesthetic, consisting of various types of rubato, phrase shape, tempo, etc. Thus pianists often exemplify the French, German, Russian or some other tradition, and traits of this school are audible in their playing. These traits are passed down through generations of piano teachers and students, and sometimes a pianistic pedigree lends them further importance. A pianist who studied with a teacher who studied with Leschititsky, Anton Rubinstein, Cortot or even Liszt, presumably to some extent phrases a certain way because that's how the master did it.

It is fascinating to discover that indeed, sometimes the masters did do it that way, but this is not always to their credit. I remember a Welte-Mignon piano roll recording of Scriabin playing his own composition that would be greeted with ridicule today. Hackneyed phrasing, mannered in the extreme, and seemingly having little to do with the phrase shapes and emotions that we consider inherent to the composition (the phrase shapes Scriabin himself notated seem virtually obliterated). How could the composer himself play with mannerisms so unrelated to his own musical thought?

### *Strange mannerisms passed down through the generations*

Yet you can hear strong echoes of exactly this style in certain versions of the great 'Russian School' still alive today. One typical

strategy is to stop the flow of the music whenever something 'important' is about to happen. Stopping dead does call our attention to a significant harmonic turn, a new formal section or the peak of a melody. It also succeeds in destroying the underlying sense of ongoing connected events that bring life and cohesion to musical form. Manipulating the musical flow by stopping it has so many negative effects that one assumes it is done out of sheer mimicry, not intelligent music making.

Even Horowitz and Rachmaninoff could be guilty of this. In their recordings of Chopin's third Ballade, both seem remarkably insensitive to the lilting, dance-like character so inherent in Chopin's 6-8 meter, that so pervades the naïve, innocently seductive, pastorale atmosphere of this work. The 'lilt' idea runs like a thread through the Ballade from first bar to last, beckoning, enticing, yet both these titans of the piano manage to cut that thread repeatedly in the name of 'expression,' or 'Romantic tradition.'

*Interpretative traditions in piano playing*

There is another type of 'school', that is less national in character. Rachmaninoff and Horowitz were Russian, but much of Horowitz's 'Horowitz' was acquired from Cortot, whose playing, although he was French, is remarkably free from the particular expressive mannerisms we usually associate with the French. In this 'school,' something radically different to the tradition of imitation is going on.

Cortot's phrasing, sound and rhythm depend on the sound that is actually happening in the moment. When a note or chord sounds, it becomes a preparation for, a passage to, the next note or chord. Exactly when the next sound occurs depends on the exigencies of the moment as well as the exigencies of the musical composition. No two halls are the same, no two pianos are the same; no two moments are the same, you and I in one moment are not the same as you and I in the next moment. This is why Horowitz said, "I never play same way twice." He was aware of the fact that he couldn't play the same way twice even if he wanted to, because as he plays, he is not reproducing the piece but

experiencing it. Whenever a note sounds, a window of possibility opens as to when (a little earlier or a little later in time than expected, or exactly bang on) the next note will sound. The greater a pianist's talent, the wider this window of possibility becomes.

*Interpretation as spontaneous experience, not reproduction*

The playing of Misha Dacic is a case in point. Brought up on a musical diet that consisted almost exclusively (although not entirely) of Horowitz's recordings, he is now often categorized as an admirer-imitator of the old man. But listen carefully to Misha's recording of Chopin's C sharp minor mazurka, an old Horowitz warhorse. Misha's method of sound manipulation may resemble Horowitz's but the result is uniquely Misha's. You may notice similarities between the two performances but the differences are also distinct. Misha possesses a similar energy to Horowitz's. A similar emotional or musical fire burns within him; his playing is not an imitation of Horowitz but an inevitable fulfillment of Misha's own essential self. He gravitated to Horowitz as to a kindred spirit – you can't fault him for that.

Misha's playing possesses this 'windows in time' quality to an exceptional degree. He bends time without breaking it, and he can do so because he is sensitive to what is going on in the moment rather than following a pre-arranged plan. Mind you, the pre-arranged plan exists; Misha's preparation is exceptionally thorough. But it's a preparation. The pre-arranged plan is the map, not the trip – it illumines a living process that liberates the composition. It consciously cultivates spontaneity rather than tying the interpreter into the straitjacket of tradition. It's a way of approaching music that doesn't supply ready-made answers to specific musical problems.

*The exception not the rule...*

A comment by music critic Harold Shonberg shows how far we are from understanding this. Writing about the then-young wunderkind Evgeny Kissin, Shonberg says that "Kissin is not afraid to try out a new idea, follow a new train of thought in performance,"

s if this was some extraordinary phenomenon.<sup>1</sup> But this should be the basic tool of a pianist's trade, an accurate description of what a pianist-interpreter normally does – not the exception.

The basic sound of a pianist involved in this process differs fundamentally from that of someone locked into an interpretation. This must be so, because the physical states are so different.

*Physical tabula rasa aids interpretative spontaneity*

There is always a certain amount of unneeded tension in the physical mechanism of the reproducer, because he is imposing a pre-conceived idea on what is, rather than dancing with what is. The true interpreter is at one with his materia, the physical as well as the musical. The mystical union is between malleable man and inert instrument, and the body must reach a profound level of subtlety to adapt itself ideally to this environment.

The 'skeletal' and the maintenance of a vital neutrality that are the trademarks of my 'physical approach' serve as a highly effective antidote to stylistic habits. Quite simply, to maintain these qualities one must remain present to one's actual physical relationship to the piano, and this performance habit keeps you effectively in touch with what the music demands in the moment, and prevents you from indulging the habits of mannerism and imposed musical taste. Thus the physical *tabula rasa* I aim for ends up cultivating a musical *tabula rasa*.

*"If you know what you're doing you can do what you want"*

When you follow tradition, unconscious physical habits tend to come as a part of the package. You think you know what you're doing, but take a close look at how many aspects of your physical organization are inadvertently working against the fulfillment of music's intentions. Cleaning up your physical act takes you a long way towards healthy rhythm, healthy phrasing, healthy orchestration, a music-making refreshingly free from the foibles of a tattered tradition.

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<sup>39.1</sup> New York Times, September 27, 1990