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Notas de rodapé numeradas sequencialmente e no final do texto.

Ao longo deste documento aparecem alguns símbolos de notação musical, nomeadamente: *f* – forte; *ff* – fortíssimo; *fff* – fortissíssimo; *pp* – pianíssimo; *ppp* – pianissíssimo; *mf* - mezzo-forte.

[54]

CHAPTER III - On Tone

Music is a tonal art. It produces no visual image it does not speak with words or ideas. It speaks only with sounds. But it speaks just as clearly and intelligibly as do words, ideas or visual images. Its structure is governed by rules, just as the spoken language, the composition of a picture or the architecture of a building. The theory of music, the study of harmony, counterpoint, and form analysis help us discover these rules which were created by the great composers in accordance with the nature, history and development of mankind.

Performers do not analyse music, or dismember it; they recreate it in its organic unity, its integrity materially concretized in sound. From these simple and well-known premises the pianist must draw all necessary and even obvious conclusions; yet very frequently he does not.

Since music is a tonal art, the most important task, the primary duty of any performer is to work on tone. You might think that nothing could be more obvious. Yet frequently a pupil's preoccupation with technique in the narrow sense of the word (i.e. velocity, bravura) predominates, relegating tone, that most important element, to the second place.

The mistakes made by teachers and pianists with respect to the perception and production of tone on the piano can, roughly speaking, be divided into two contradictory trends: the first consists of underrating tone, the second - of overrating it. The first is more widespread.

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The player does not give sufficient thought to the extraordinary dynamic wealth and diversity of tone which the piano provides. His attention is focussed mainly on technique (in the narrow sense) about which I spoke earlier (velocity, evenness, bravura; that dazzle and crash), his ear is insufficiently developed, he lacks imagination, he is incapable of listening to himself (and of course to the music). In fact, he is more *homo faber* than *homo sapiens*, whereas the artist has to be both (with the latter slightly predominating). The resulting musical web is as drab as army khaki. To such pupils I never cease repeating what Anton Rubinstein said about the piano: "You think it is one instrument? It is a hundred instruments!" Carl Czerny, "the dry and methodical genius" who has tortured generations of pianists with an inexhaustible stream of studies and exercises,

established that it is possible to render on the piano one hundred dynamic gradations encompassed between limits which I shall term "not yet tone" and "no longer tone". How curious that two such entirely different personalities as Rubinstein and Czerny should have arrived at the same figure of 100. *Cela donne à penser.* (It makes you think.)

This, briefly, is the first mistake: underrating tone.

The other mistake is overrating tone. This occurs with those who have an excessive admiration of tone, who savour it excessively, who in music perceive first of all the sensuous beauty of tone, and do not see its entity: in other words, who don't see the forest for the trees. Such pianists - and their numbers include teachers, pupils and "accomplished" pianists, have to be told the following: The concept of beauty of tone is not sensuously static but dialectic; the best tone, and consequently the most beautiful, is the one which renders a particular meaning in the best possible manner. It may happen that a tone or series of tones taken out of context and, so to speak, relieved of all meaning, may appear to some ugly or even unpleasant (let us recall the effect of muted trumpets or the rasping of the double bassoon in the lower register, the shrillness of the E flat clarinet and the jangle of a broken-down old piano, etc.). But if these sounds, with the exception naturally of the old piano, are used for a definite purpose by a good composer who is an able orchestrator, they will, within the context, become the most expressive, the most necessary; they will be right. It is not for nothing that Rimsky-Korsakov used to say that all the sounds of the orchestra are good and beautiful; one should merely know how to use them and to combine them.

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If the adepts of beautiful tone as an end in itself were right, how could we explain the fact that we prefer a singer with a physically less good voice to one whose voice is better, if the former is an artist and the latter a blockhead? How could we explain why a good pianist plays so well on a bad piano and a bad pianist plays badly on a good piano; why a good conductor with a bad orchestra can create an incomparably greater impression than a bad conductor with a good orchestra? I suppose the reader could continue the mental exercise of finding more examples.

There is an incident in the life of Liszt which applies to this whole question of the role of tone in a piano composition. When Liszt heard for the first time Henselt, who had an extraordinary "velvet" tone, he said: *Ah, j'aurais pu aussi me donner ces pattes de velours!* (I, too, could have given myself these velvet paws!) For Liszt, with his immense horizon as composer-performer, the "velvet touch" was merely a detail in his technical arsenal, whereas for Henselt it was the main purpose. I write all this in order to stress once more that tone (together with rhythm) is the first and most important among other means of which a pianist should be possessed, but that it is a means, and not the purpose. I have so often heard piano teachers say that "the most difficult thing is to teach a pupil to acquire a beautiful tone, and that everything depends on the pupil himself". I am interested not in the difficulty of the problem but in its importance, and the need to solve it as completely as possible. Of course, work on tone is the most difficult work of all, since it is closely connected with the ear and - let's face it - the spiritual qualities of the pupil. The less refined his ear, the duller the tone.

By training his ear (which can be done in a variety of ways), we directly influence his tone. By working at the instrument, persevering relentlessly in an attempt to improve the quality of tone we influence the ear and develop it.

Briefly and clearly: mastery of tone is the first and most important task of all the problems of piano technique that the pianist must tackle, for tone is the substance of music; in ennobling and perfecting it we raise music itself to a greater height.

In my work with my pupils, I can say without exaggeration that three-quarters of all work is work on tone.

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It may be said that the sequence, the causal relationship in our work naturally falls into the following pattern: first - the image (i.e. the meaning, content, expression, the what-it-is-all-about); second - tone in time [Nota 1](#) - the embodiment, the materialization of the image, and finally, the third - technique as a whole, as the sum total of all means essential for solving the artistic problem of piano playing as such, i.e. mastery of the muscular movements of the performer and of the mechanism of the instrument.

This is my general pattern of study. I repeat myself, but do so deliberately. *Repetitio est mater persuadendi* (repetition is the mother of persuasion). In practice, of course, this pattern is constantly fluctuating according to the requirements and needs of the moment and of the specific case, but though sometimes concealed, it is always present as a hierarchical principle ordering the work. In order to acquire a so-called "good", beautiful tone (I shall subsequently attempt to unravel this somewhat superficial definition) what is needed is particularly hard, persistent, long-term, constant, obstinate work at the instrument. If in his *Conversation with a Finance Inspector*, Mayakovsky says that to become a poet, to write poetry you have to eat a pood [Nota 2](#) of salt, then for the piano you have to eat a whole ton of salt, and the reason is obvious: a poem can be carried in one's head, when walking in the country or riding in a bus [Nota 3](#); but piano playing (not music in general) can be done only at the piano; the piano is, after all, only a mechanical box, a wonderful, an amazing box, on which it is possible to express anything one wants, but a box, and to "humanize" it requires infinitely more effort than does the lovely, living, flexible, ever-ready and infinitely expressive, most human and marvellous invention of man - the human word.

Since, in this chapter, we are dealing not with sound in general, but with tone produced by the pianist's hand on the piano I must discuss the most simple things that a pianist should know just as any literate person knows his multiplication tables or his grammar.

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Each phenomenon in this world has a beginning and an end. So also the tone of the piano. The usual indications which range from *pp*, seldom *ppp* or *pppp* to *f*, *ff*, and more seldom *fff*, very seldom *ffff* (mainly in Tchaikovsky) in no way correspond to the real dynamic range of which the piano is capable. In order to probe this real dynamic range, I suggest that the pupil should with complete precision obtain the first appearance of tone (*ppppp*), the softest

possible tone which immediately follows on what is not yet a tone (a certain zero which is obtained if the key is depressed too slowly, when the hammer rises but does not strike the string); by gradually increasing the force of the action - F and the height at which the hand is raised - h [Nota 4](#) we come to the upper limit of volume (*ffff*), after which we get not tone but noise, since the mechanical (lever) arrangement of the piano does not allow excessive speed (v) coupled with an excessive mass (m), and especially not a combination of these two excessives. [Nota 5](#) This test can be carried out either on one note (the "atom" of the musical substance) or on two-, three- or four-part chords (the "molecule"). This very simple experiment is important because it gives an accurate knowledge of the tonal limits of the piano. By depressing a key too slowly and softly, I get nothing, zero; it is not yet a tone; if I let my hand fall on the key too fast and with too much force (the forbidden excessive " v " and " h "), I get a noise; it is no longer a tone. Between these limits lie all the possible gradations of tone.

"Not yet tone" and "no longer tone", this is what whoever has to do with piano playing must probe and experiment. Just as any workman knows the limits of power and productivity of the machine he is operating, so also a pianist who "operates a piano" must know his instrument, his machine. Some people may object, saying: "What dry and boring examples. Even if this is approximately so, what has it got to do with the playing of the great virtuoso pianists who give us such spontaneous delight?" I agree.

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The highly gifted seldom give such matter a thought; they just do their job. They are much more capable of creating laws than of analysing them. But, on the other hand, the lesser talents, or the totally ungifted don't think of such things at all, yet the resemblance (a very superficial one at that) between them and the highly gifted is not to their advantage and of no use to them. "Cold reason and a warm heart" - this is my educational slogan, and cold reason will not despise this mite of precise knowledge gathered and tested by experience.

Almost all my technical considerations, advice and exercises are the result of deduction. For instance, the procedure I have just described (first appearance of tone, etc.) occurred to me when I was playing Scriabin or Debussy which at times require the tone to melt away, to disappear almost completely (yet still be there). Here is an exercise which I sometimes recommend as equally useful for developing the ear and for getting to know the keyboard:

Nota de revisor: a seguir apresenta-se uma pauta na clave de sol, correspondente ao Ex. 21, que evidencia três mínimas, cada uma com indicação de intensidade por cima, mas ao mesmo tempo as três notas têm a indicação de um sinal de diminuendo.
As três notas são: dó no terceiro espaço em forte, si na terceira linha me meio piano, lá no segundo espaço em pianíssimo (dois pp).



The significance of the exercise lies in the fact that each consecutive note is played at the same level of volume as that to which the previous note has dwindled at the time and not at which it was originally struck - (detestable word!). This exercise, which is a protest against the percussive quality of the piano (for one must first of all learn to make the piano sing, and not only "strike" it) occurred to me when I was trying on the piano to get as close as possible to the human voice in the inspired recitative of the first movement of Beethoven's Sonata in D minor op. 31, no. 2:

Nota de revisor: a seguir apresenta-se uma pauta com cinco compassos, na clave de sol e que corresponde ao Ex 22. A tonalidade é ré menor, sem indicação de compasso.

Compasso um: apresenta apenas dois tempos, uma pausa de colcheia e três colcheias (lá no segundo espaço, lá no segundo espaço e si na terceira linha). Estas três notas encontram-se ligadas até ao terceiro tempo do compasso dois.

Compasso dois: constituído por quatro tempos: primeiro tempo é uma semínima (lá no segundo espaço), o segundo tempo é uma semínima (sol na segunda linha) ligada para a colcheia do tempo seguinte, o terceiro tempo é uma colcheia com dois pontos (sol na segunda linha) e uma fusa (sol na segunda linha) a partir desta nota inicia-se uma ligadura até ao segundo tempo do compasso três, quarto tempo é uma colcheia com dois pontos (mi no quarto espaço) e uma fusa (ré na quarta linha)

Compasso três: constituído por quatro tempos: primeiro tempo é uma semínima (ré na quarta linha), o segundo e o terceiro tempo é uma mínima (dó sustenido no terceiro espaço, quarto tempo é uma semínima (mi no quarto espaço). Este último tempo encontra-se ligado até ao segundo tempo do quinto compasso.

Compasso quatro: constituído por quatro tempos: primeiro e segundo tempo são uma semínima com ponto (mi no quarto espaço) e uma colcheia (sol na segunda linha), o terceiro e quarto tempo são uma semínima com ponto (si na terceira linha) e uma colcheia (lá no segundo espaço).

Compasso cinco: constituído por três tempos: primeiro tempo é uma semínima (sol na segunda linha), o segundo tempo é uma semínima (fá no primeiro espaço), estes dois tempos tem a indicação de um sinal de diminuição de intensidade, o terceiro tempo é uma pausa de semínima com um sinal de suspensão.



My advice: play beautiful melodic passages (for instance from Chopin) much slower than they should be played; for convenience I call this slow motion.

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This advice was born of my love for the beauty and melodic line of a passage - and hence its expressiveness - of a desire to examine it at close quarters, as one can examine a beautiful picture, in close-up or even with a magnifying glass, in order to penetrate, however slightly, its mysterious concordance, its harmony and the accuracy of the brush strokes of a great painter. The slowing down of a process in time is the exact counterpart of the enlargement of an object in space.

Almost all the details of my "methodology" are the result of such deductive thinking.

In my forty-four years of teaching (unofficially, longer still!) hundreds of pupils passed through my hands, representing all the degrees of talent - from the musically defective (there was a time when I didn't scorn even such pupils; you have to try everything) to the geniuses, with all the intervening degrees. The experience of a lifetime, the encounter with this great wealth and variety of human nature led me to methodological conclusions which differ somewhat from the usual schoolbook methods.

It is essential to understand in the fullest possible manner that, on the one hand, the teaching of music, and musical literacy - for which purpose the piano is the best, the irreplaceable, if not the only, means - is part of general culture, that the study of music is just as essential for a cultured person as the study of languages, mathematics, history, sociology, natural sciences, etc. (if I had my way, I would introduce the compulsory study of music by means of the piano, in all secondary schools). Even the musically defective, those who have absolutely no ear for music - and these are not so numerous, for the population of our planet is mostly musical - may acquire a theoretical knowledge of music which is bound to be useful to them in their spiritual life. For music is just as much the product of human thought as all else that was created by man, and is governed by the same laws. As in any other aspect of spiritual life, the dialectics of art, and consequently of music is a continuation and development of the dialectics of nature.

On the other hand, musical education encompasses also those who are exceptionally gifted; the elect, who are destined to be the masters of music, its creators, its performers.

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It is obvious that instilling general musical knowledge as one of the facets of culture and educating the few great talents, is as different as the role of the piano itself in our "social" life; on the one hand it is the most popular, widely used instrument played by millions of people, for the piano is as essential to any musician or amateur as a tongue, words and speech to any man; on the other hand it is the most difficult, individual instrument in the hands of a great pianist, and great pianists come in dozens compared to the many millions that use the piano.

Who, then, is such a pianist, such a great pianist? I cannot fail to recall the simple but beautiful words of Alexander Blok [Nota 6](#): "What sort of a person is a poet? Some one who writes in verse? No, of course not; he writes in verse because he is a poet, because he brings words and sounds into harmony. ..."

This idea can be paraphrased to say: "What sort of a person is a pianist? Is he a pianist because he has a good technique? No, of course not; he has a good technique because he is a pianist, because he finds meaning in sounds, the poetic content of music, its regular structure and harmony,"

That is what technique is needed for; a technique that is adequate to the force, height and clarity of the spiritual image; that is why pianists work at it until the end of their days and constantly set themselves new aims and solve new problems. That is why great men are always hard workers; that is why so many have said that genius is diligence. Pushkin said that prose needs, first and foremost, ideas. A pianist playing to an audience needs, first and foremost, meaning. And in order to reveal that meaning, he needs technique and more technique.

This is as old as art itself. But young people are frequently unaware of it and make the mistake of attempting to master art "from the other end". A speaker in whose speech beauty of language prevails over depth, truth and passionate thinking is not a very good speaker.

This is something the concert pianist must remember. After all, he, too, is an orator and is engaged in propaganda. For pianists who have virtuosity on the brain there is nothing better than to listen to great composers play their own compositions. They are not specially concerned with piano technique, yet their rendering of their music is magnificent. The reasons are obvious and I need not dwell on them.

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So I, too, have a methodology if you can call "methodology" something which remains essentially true to itself, yet is always changing and developing in accordance with the general rules of life, the life within me and without. Methodology is knowledge gained by deduction and by experiment; its source is a definite will, a relentless striving towards a goal which is determined by the artist's character and his outlook on life. Textbook methodology, which mainly lays down prescriptions, so-called hard and fast rules (even if they are tested and reliable) will always be but a primitive, primary, simplified method, which at any moment when coming into contact with reality needs development, rethinking, clarifying, livening up, in short - a dialectic transformation.

Teaching (and I have in mind a good teacher-performer) where the ways of influencing a pupil change constantly and are infinite in their variety while unwaveringly pursuing one aim, fully bears out this statement.

After a short excursion into general methodology, I come back to the particular question of tone and how to produce it on the piano.

We teachers inevitably and constantly use metaphors to define the various ways of producing tone on the piano. We speak of the fingers fusing with the keyboard, of "growing into the keyboard" (Rachmaninov's expression) as if the keyboard were resilient and one could "sink" into it at will, etc. All these extremely approximate definitions are without a doubt useful, they arouse the pupil's imagination and when accompanied by illustrations at the piano they help to develop his ear and his motor-sensory mechanism, what we call the "touch".

One of my favourite pieces of advice is the following: play a note, or several notes simultaneously with a certain amount of force and hold them until

the ear ceases to detect even the slightest vibration of the strings, in other words until the tone has completely died away. Only those who clearly hear the continuity of the piano's tone (the vibration of the strings) with all the changes in volume, can, first of all, recognize all the beauty, the nobility of the piano (since this continuity is in part much more beautiful than the original tone when struck) [Nota 7](#); secondly, they will be able to master that essential variety of tone which is necessary not only for playing polyphonic music, but for any clear rendering of harmony, the relationship between melody and accompaniment, etc., but especially, in order to create tonal perspectives which are just as real for the ear in music as for the eye in painting.

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Everyone is aware of the fact that visual and auditive perspective are identical; the only difference being that they are created and perceived by two physically different organs, the eye and the ear. How often the playing of a great master makes us think of a picture with a deep background and varying planes; the figures in the foreground almost leap out of the frame whereas in the background the mountains and clouds are lost in a blue haze. Remember for instance, Perugino, Raphael, Claude Lorrain, Leonardo, our own great painters, and let them influence your playing, your tone. [Nota 8](#)

At least twice a week I remind my pupils (because I have to!) of Anton Rubinstein's saying which I mentioned earlier: "You think the piano is one instrument? It is a hundred instruments!" Of course, I doubt whether anyone will be sufficiently daring to attempt to catch up with and even surpass the great Anton, but these words of his must be borne in mind.

In his book *Von der Einheit der Musik* (The Oneness of Music), Busoni devoted about one and a half pages to the piano under the heading: *Man achte das Klavier* (Respect the piano!). In a highly laconic and perfected style he gives such a clear and accurate description of the piano's characteristics that it is all I can do not to give it in full. I shall confine myself to a few extracts. After pointing to the obvious defects of the piano, its impermanent sound, the implacable division into semitones, Busoni speaks of its qualities: its exceptional dynamic range from an extreme pianissimo to the greatest fortissimo, its tremendous compass from the lowest to the very highest notes, its equality of timbre in every register, its ability to imitate any other instrument (a trumpet can only be a trumpet, and a flute can sound only like a flute, and a violin like a violin, etc., while in the hands of a master, the piano can represent practically any instrument). In conclusion he mentions that magic means of expression which is the attribute of the piano alone - the pedal.

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In addition I often say to my pupils that the piano is the best actor of all the instruments for it can play the most varied roles. Compared to the sound of other instruments that are emotionally much more specific, much more expressive, as for instance the human voice, the French horn, the trombone, the violin, the cello, etc., it is a certain abstract quality in the sound of the piano - perhaps precisely this abstract, cerebral quality - that gives it its incomparable tone, its unquestioned individuality. It is the most intellectual of all instruments

and hence it embraces the widest horizons and encompasses boundless musical vistas. For apart from the immeasurable quantity of indescribably beautiful music written for the piano "personally", one can perform on the piano everything that is known by the name of music, from the melody of a shepherd's pipe to the most gigantic symphonic and operatic works.

This description of the piano (for which I used Busoni's admirable page) was essential in order to arrive at certain deductions concerning the piano's tone. Just as I said that the piano is the best actor of all the instruments, [Nota 9](#) I have to remind pupils constantly of the orchestra to give them an idea of orchestral sounds; I cannot work otherwise! Although I am a pianist, I consider that the orchestra [Nota 10](#) is the first solo instrument, with the piano as second in importance. I think that this cannot be taken as an offence for either the piano or the pianists.

Because the piano is, as I believe, the most intellectual instrument and is not endowed with the emotional substance of other instruments, the player's imagination should, indeed must, be peopled by the most expressive and specific musical images, by every existing variety of shade and timbre contained in the human voice and in every instrument on earth in order to reveal fully all the wealth of the piano's potential.

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But the main reason why it is absolutely essential for the pianist to know and feel all this - and a pianist who does not understand this is wearing blinkers, to say nothing worse - is because the pianist, on his own, on a single instrument, without help from anyone, gives an absolutely complete image, creates something full and perfect - a piano composition; the whole of music is in his hands and his hands only, he is at once master and servant, "both Tsar and slave, both worm and God". [Nota 11](#)

When speaking to my pupils, I often make use of a very simple metaphor which even kindergarten pupils can understand but which is equally useful for advanced pupils and even pianists who have completed their studies. I say to them: the pianist and the piano, they are at the same time: (1) the conductor (the head, heart, hearing); (2) the players (both hands with ten fingers and both feet for the two pedals); and (3) all the instruments (a single piano or, in Rubinstein's words, a hundred instruments, which is as many as there are in a symphony orchestra).

All this is very simple and very well known, and honest to goodness I wouldn't repeat these truisms if. . . well, if I did not feel daily more convinced of the fact that not only pupils, but even many accomplished pianists, are not aware of this.

I am afraid that my many references to the orchestra, the conductor, etc., may be misunderstood and so I shall try to explain myself.

I don't at all demand of a piano pupil that he should, at the piano, imitate an orchestra, thinking of it all the time, considering the piano as a sort of poor copy of another, better sound. First of all, the piano has its own individual beauty of tone, its own "ego" which cannot be mistaken for anything else in the world. Secondly, you have to know and love this individual, particular "ego" of the piano in order to know and master it fully. Anyone who has ever heard how

some conductors or singers treat the piano (not knowing it) will know once and for all how not to play it.

I hope that this apparent contradiction will be understood correctly, that everyone will understand the dialectic of this phenomenon and why I speak, practically in the same breath, of the piano being the image of the orchestra, and of the piano as such.

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It is only by demanding the impossible of the piano that you can obtain from it all that is possible. For the psychologist this means that imagination and desire are ahead of the possible reality. A deaf Beethoven created for the piano sounds never heard before and thus predetermined the development of the piano for several decades to come. The composer's creative spirit imposes on the piano rules to which it gradually conforms. That is the history of the instrument's development. I don't know of any case when the reverse occurred.

I shall not repeat all that has been known so well and for so long; that polyphony is the best way of obtaining a diversity of tone, that melodic cantabile pieces are indispensable for learning to sing on the piano, [Nota 12](#) etc., etc., that it is essential to develop the strength of the fingers, a strong attack in order to play rapid passages with all the necessary clarity and accuracy and to be able to tackle the toccata-type literature of the piano.

From the locomotor point of view, "good" tone is always accompanied by fullest flexibility (but by no means weakness), [Nota 13](#) relaxed weightiness (in other words, an arm which is relaxed from the back and shoulder to the fingertips touching the keys, for all accuracy is concentrated in the fingertips!) and a sure, adequate control of this weight from a hardly perceptible contact in quick, extremely light notes [Nota 14](#) to a tremendous pressure using if necessary the whole body in order to obtain the maximum tone. All this mechanism is not at all complicated for anyone who can hear well, has a clear purpose, is able to realize the flexibility and freedom of body with which nature has endowed him and knows how to put in a lot of stubborn work on the piano.

I frequently tell my pupils, half seriously, half in jest, that to get inside an over-crowded trolleybus is a much more difficult problem from the locomotor point of view than settling down at the piano.

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By the way, it is perfectly natural and quite legitimate that I should occasionally dash into another chapter, in this case the chapter on technique. All the phenomena grouped under the heading "piano playing" are indissolubly linked with each other. That is why when speaking of tone it is impossible not to speak of the way it is produced, i.e. of technique; speaking of technique it is impossible not to mention tone, just as one cannot speak of the pedal separately from tone, or of all these components of piano playing separately from their origin, which is the musical intention.

Each master pianist has his own individual palette. I feel this so strongly that it sometimes seems to me that the lighting or architectural appearance of the Great Hall of our Conservatoire varies with the performance of the pianist

(for instance, Richter, Sofronitsky, Gilels). I know that this is just my fancy, but a fancy which recalls reality to a remarkable degree.

There is no tone "in general", just as there is no interpretation "in general", or expression "in general"; nothing is "in general". In this connection I would recall those pages of Stanislavsky's book in which he refers to the expression "in general" as a very great misfortune.

Someone asked Anton Rubinstein if he could explain the tremendous impression which his playing made on the audience. He said roughly the following: "Perhaps it is due partly to the very great volume of sound, but mainly because I have put in a lot of work in order to succeed in making the piano sing". Golden words! They should be engraved in marble in each classroom in each school or conservatoire where piano is taught.

And here I shall go back to something I said earlier: since the basis of all audible music is singing and since piano literature is full of cantabile, the first and main concern of every pianist should be to acquire a deep, full, rich tone capable of any nuance, with all its countless gradations, *vertically and horizontally*. An experienced pianist can easily give three or four dynamic nuances simultaneously: for instance *f*; *mp*; *pp*; *p* to say nothing of using horizontally every possibility inherent in the piano's tone.

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The mistaken idea born out of the no less mistaken trend of the adepts of so-called *neue Sachlichkeit* (new objectivity) that the piano is only a percussion instrument, is contradicted by the whole history of piano literature and applies only to the few works by these *sachlich* "businesslike" composers.

In actual fact "work at tone" is just as inaccurate an expression as that of work on the artistic image. We are too enslaved by our inaccurate words and expressions, we trust them too much. People always say of any good pianist: What a beautiful tone! How wonderful it sounds! etc. But what gives us the impression of a beautiful tone is in actual fact something much greater; it is the expressiveness of the performance, or in other words, the ordering of sound in the process of performing a composition. I am convinced that you could never say of a not very musical performer that his playing sounds wonderful, even if he knows hundreds of ways of producing tone and has gone through the whole business of working at tone quality. In the best of cases, it will sound good in places, but not throughout. With a really creative artist and pianist "a beautiful tone" is a most complex process combining and ordering the relationship of tones of varying strength, varying duration, etc., etc., into a single entity. All this proves yet again what I have just said: tone is one of the means of expression available to the pianist (like paint, colour and light for the painter), it is the most important means, but still only a means and nothing more. It is obvious that a good pianist with a bad tone is a *contradictio in adjecto* - an impossibility. It is possible to work effectively at the tone quality only when working at the work itself, the music and its components. And this work is, in turn, inseparable from work on technique in general.

The difference and variety of the tonal picture presented by various great performers is infinite because of the differences in their personalities, just as the paint, colour and light of great painters differ. Compare, for instance, Titian and Van Dyke, Velasquez and El Greco, Vrubel and Serov, [Nota 15](#) etc. And

remember, similarly, the tonal pictures of Busoni and Hofmann, Petri and Cortot, Richter and Gilels, Sofronitsky and Oborin, etc. The lower the artistic level of the performer, the less the personal, individual element in his playing, the more monotonous and similar to that of other, like performers is the tonal picture he produces.

[69]

A concert given by above-average pupils, for instance, clearly demonstrates that it is extremely difficult to distinguish one pupil from another even if all of them play "very well".

It is obvious that all piano playing, since its object is to produce tone, is inevitably work at tone, or with tone, regardless of whether the "thing played" is an exercise or a great musical composition. To play scales with a "bad" tone is just as wrong as to play the Chopin Nocturnes with a bad tone. When a great pianist is working at some technical problems, what strikes one first of all is not the velocity, accuracy or force, etc., but the tone quality.

I assume that when working at tone quality, each pianist - if he sets himself that task specially - does so his own way, according to his own personal characteristics. It would be hard to imagine, for instance, that Chopin, whose ceiling of tone according to his contemporaries was about mezzoforte (*mf*), worked in the same way as Rachmaninov whose ceiling was incomparably higher (five or six fortes). But at the same time we should not forget that according to these same contemporaries Chopin had, within the limits of an extreme pianissimo and the mezzoforte referred to, such a variety of sounds, or nuances, such a rich palette as no other pianist endowed with much greater absolute strength ever dreamed of. This needs to be stressed quite particularly because this, precisely, is more important than anything else.

I could confine myself to the considerations about tone and work at tone quality that I have set out in this chapter. I will just add some of the advice I have to give my pupils when there is something wrong with their tone.

1. As I have already said, the condition *sine qua non* for a good tone is complete freedom and relaxation of the arm and wrist from the shoulders to the tips of the fingers which should always be at the ready, like soldiers at the front. (After all, the decisive factor for tone quality is the contact of the fingertips on the keys; the rest - hand, wrist, arm, shoulders, back - that is "behind the lines" and must be well organized.)

[70]

2. At the very first stage of pianistic development, I suggest the following very simple exercise for acquiring variety of tone, essential for all playing but particularly for performing polyphonic music:

Nota de revisor: a seguir apresenta-se uma pauta, correspondente ao Ex 23, com cinco compassos, na clave de sol, sem indicação de tonalidade e sem indicação de compasso.

Compasso um: compasso com dois tempos sendo a nota de baixo uma mínima (mi na primeira linha), esta nota tem a intensidade de forte e um sinal de

acentuação e a nota superior é uma semínima (sol na segunda linha) e pausa de semínima e tem a intensidade de piano.

Compasso dois: compasso com dois tempos sendo a nota de baixo uma semínima (mi na primeira linha) e uma pausa de semínima, e a nota superior é uma mínima (sol na segunda linha) e tem a intensidade de forte e é uma nota com acentuação. A divisão para o compasso três é uma barra dupla.

Compasso três: compasso com dois tempos sendo a nota de baixo uma mínima (mi na primeira linha), esta nota tem a intensidade de forte, as notas seguinte são semínimas (sol na segunda linha e si na terceira linha) e pausa de semínima e tem a intensidade de piano. A divisão para o compasso quatro é uma barra dupla.

Compasso quatro: compasso com dois tempos sendo a nota de baixo uma mínima (sol na segunda linha), esta nota tem a intensidade de forte, as notas seguintes são semínimas (mi na primeira linha e si na terceira linha) e tem a intensidade de piano. A divisão para o compasso cinco é uma barra dupla.

Compasso cinco: compasso com dois tempos sendo a nota de baixo, as notas de baixo são semínimas (mi na primeira linha e sol na segunda linha) e tem a intensidade de piano, a nota seguinte é uma mínima (si na terceira linha), esta nota tem a intensidade de forte. O compasso termina com barra dupla



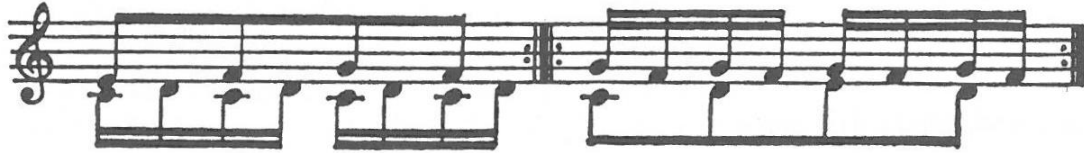
Then do the same thing on four- and five-part chords; it is sufficient to do this in some three or four tonalities. The following elementary exercises are also useful:

Nota de revisor: a seguir apresenta-se uma imagem de uma pauta com dois compassos, na clave de sol, corresponde ao Ex. 24. Esta pauta não evidencia indicação de tonalidade nem indicação de compasso.

Compasso um: compasso constituído por duas vezes com quatro tempos, a voz de baixo corresponde a oito semicolcheias (dó na primeira linha inferior, ré no primeiro espaço inferior; dó na primeira linha inferior, ré no primeiro espaço inferior; dó na primeira linha inferior, ré no primeiro espaço inferior; dó na primeira linha inferior, ré no primeiro espaço inferior) a voz de cima corresponde a quatro colcheias (mi na primeira linha, fá no primeiro espaço, mi na primeira linha, fá no primeiro espaço). No final do compasso existe uma barra de repetição.

Compasso dois: o compasso inicia e termina com uma barra de repetição.

Compasso constituído por duas vezes com quatro tempos, a voz de baixo corresponde quatro colcheias (dó na primeira linha inferior, ré no primeiro espaço inferior), a voz de cima corresponde a oito semicolcheias (sol na segunda linha, fá no primeiro espaço, sol na segunda linha, fá no primeiro espaço, sol na segunda linha, fá no primeiro espaço, sol na segunda linha, fá no primeiro espaço).



They should be practised in several tonalities, slowly, then in moderate tempo and fast, alternately playing one part legato, the other staccato.

3. If in polyphonic music a pupil cannot manage to reproduce the polyphonic web with sufficient relief, or plasticity, the method of exaggeration will be useful, as for instance playing the following difficult passage from the Fugue in E flat minor out of Bach's *Wohltemperiertes Klavier* (Book I, no. 8) with the following dynamic indications: (for greater clarity I have written the two top parts on separate staves). For the inexperienced pupil the difficulty lies in the crossing of parts.

Nota de revisor: a seguir apresenta-se a imagem de uma partitura musical, correspondente ao Ex. 25. Estão presentes duas pautas na Clave de sol, na tonalidade: mi bemol menor; sem indicação de compasso. A quantidade de compassos corresponde a três.

Primeira pauta:

Compasso um: constituído por dois tempos, primeiro tempo duas colcheias (dó no terceiro espaço e si na terceira linha) e segundo tempo é uma semínima ligada para o primeiro tempo do compasso dois (lá no segundo espaço).

Compasso dois: constituído por quatro tempos, primeiro tempo é uma colcheia (lá no segundo espaço) e duas semicolcheias (sol na segunda linha e fá no primeiro espaço), o segundo tempo são duas colcheias (si na segunda linha e lá no segundo espaço), a partir do terceiro tempo a intensidade é forte marcato, o terceiro tempo é uma semínima (si na terceira linha) e o quarto tempo é uma semínima ligada para o primeiro tempo do terceiro compasso.

Compasso três: constituído por quatro tempos, o primeiro e o segundo tempo são colcheias (mi na primeira linha, ré natural ni primeiro espaço inferior, mi na primeira linha e fá no primeiro espaço), o terceiro tempo são suas colcheias (sol na segunda linha e fá no primeiro espaço), o quarto tempo é uma semínima (mi na primeira linha).

Segunda pauta:

Compasso um: constituído por dois tempos, primeiro e segundo tempo são colcheias (lá no segundo espaço, sol na segunda linha fá no primeiro espaço e mi na primeira linha).

Compasso dois: constituído por quatro tempos, primeiro tempo é uma semínima (ré natural no primeiro espaço inferior), o segundo, o terceiro e quarto tempos são colcheias (mi na primeira linha, fá no primeiro espaço, a partir do terceiro tempo a intensidade é pianíssimo (dois pp), sol na segunda linha, fá no primeiro espaço, sol na segunda linha e lá no segundo espaço)

Compasso três: constituído por quatro tempos, o primeiro tempo são duas colcheias (si na terceira linha e lá no segundo espaço) o segundo tempo é uma colcheia (sol na segunda linha) e duas colcheias (fá no primeiro espaço e mi na primeira linha), o terceiro tempo é uma semínima (ré natural no primeiro espaço inferior), o quarto tempo é uma semínima (mi na primeira linha).



Ex. 25

[71]

4. A very frequent mistake among pupils (even among the advanced ones) to which one has to draw attention frequently, is the dynamic "similarity" between melody and accompaniment, the lack of an "air cushion" between the first and second levels or between different planes, which is just as unpleasant for the eye in the case of a picture, as for the ear in the case of a musical composition. Here, too, an exaggeration of the dynamic distance between melody and accompaniment can explain a great deal and help the pupil to understand. This is a fault of which many conductors are guilty, when they allow the wind instruments, specially the brass, to play too loudly in places where they should only supply the harmony.

5. It is very often necessary to repeat that time-worn truth that when the score indicates crescendo one should (at that place) play piano and if the indication is diminuendo one should play forte. An exact understanding and rendering of the gradual dynamic changes (i.e. their perspective) is vital for a true musical image. Yet with many pianists and conductors a protracted crescendo immediately turns into an outright forte; this weakens the growth and culmination which the composer had intended; the mountain summit becomes a plateau. To drive the point home I usually remind my pupils of the difference between an arithmetic and a geometric progression; this applies also to a rendering of *ritenuto* and *accelerando*.

6. It is told of Tausig, the famous pianist, that when he came home after a concert he would play the whole of his programme all over again, very softly and not too fast. An example worth following! Softly - that means with utmost concentration, carefully, conscientiously; accurately, painstakingly, with a beautiful tender tone; an excellent diet not only for the fingers but also for the ear, an instant correction of any inaccuracies or accidents that inevitably occur during an impassioned, temperamental concert performance!

7. It has to be frequently repeated that since the piano does not have a lasting tone like other instruments, it needs much richer and more flexible shading not only of the melodic parts but also of runs and passages (exaggerated if compared to other instruments) in order to render clearly the intonation (rising and falling) of the music. [Nota 16](#)

[72]

Of course there are exceptional cases when what is needed is a completely even sound devoid of any shading, as for instance the dead, monotonous

sound in the Organ Fugue in E minor, arranged by Busoni (in the Supplement to the First Book of the *Wohltemperiertes Klavier*) or, as frequently happens, a protracted, powerful and even *f*, etc.

8. What very gifted pupils achieve by instinct (though, of course, with the help of hard work) - a complete coordination of the fingers and hand, the whole locomotor system, with the demands of the ear, the musical intent - can, to a great extent, also be explained to and developed in much less gifted pupils. Let me give two examples of this coordination: every experienced pianist knows that to get a tender, warm, penetrating tone you have to press the keys very intensively, deeply, keeping the fingers as close to the keys as possible, with "A" at a minimum, or in other words "h" equal to the height of the key before it is depressed. But to get an open, broad, flowing tone (think of Caruso or Gigli) you have to use the whole swing of the finger and hand (with a completely flexible legato). These are but two small examples but they can be multiplied *ad infinitum*; it is important to know, and to know from experience, that the anatomy of the human hand is ideal also from the point of view of the pianist and is a convenient, suitable and intelligent mechanism which provides a wealth of possibilities for extracting the most varied tones out of a piano. And the mechanism of the hand is, of course, in complete harmony with the mechanism of the piano. In good pianists there is a complete symbiosis between hand and keyboard. But that this does not always happen - and not only with pupils but also with mature pianists - that, too, we know full well. Sometimes, when playing a protracted *f* or *ff* some pianists get excited, they boil and pant and apparently do not notice that the volume of sound does not increase, but that the reverse happens, that their tone becomes weaker and sometimes degenerates into mere thumping. This is like the man who is beginning to lose his voice and tries to talk as loudly as possible, instead of which he merely gets hoarse.

[73]

With the pianist this happens precisely because there is no coordination between the musical demand and the work of his muscles, which, in such cases, are usually stiff, tense and hampered. As a matter of fact it should never be forgotten that this physical freedom at the piano is impossible without musical or spiritual freedom. A pianist who is unable to render musical expression without hysterics or cramp will inevitably have a hysterical and cramped, in other words an imperfect, technical mechanism and the main components of music - time (rhythm) and tone - will be perverted and distorted. The old Latin adage - *mens sana in corpore sano* - retains all its meaning for the pianist. These simple truths have to be frequently mentioned in class and that is why I repeat them here.

9. The question of tone in compositions which require the use of pedal - in other words almost always - cannot be considered separately from pedalling, just as it is impossible to decide on proper pedalling separately from tone, from tone quality. I have already referred to this. Of course it is useful to play a piece without pedal in order to check the accuracy and clarity of each note, but it is more useful still to study a composition with proper pedalling since it is only with its help that the required tonal effect can be obtained. But I shall take this in greater detail in the section dealing with pedal.

10. One of the most difficult but satisfying tasks for the pianist is to create a multiplane tonal texture. I have already mentioned this when I compared a musical composition to a painting. Any kind of polyphony is in itself a multiplane structure - one has to play expressively and independently the theme and all the other parts that accompany it. The fundamental tendency of polyphony (its "Protoform") is the movement of parts in contrary motion; the purest example - possible only in two-part writing - is the F sharp major Prelude from the Second Book of Bach's *Wohltemperiertes Klavier* (bars 53 and 55) and the bars preceding the end of the Fugue in A flat major, No. 17 in the Second Book. There is also the "mirror" movement of notes and fingers, bars 9, 10, 11 and 12 of the Prelude in D minor (Book 2, No. 6) or the second subject in the second movement of Prokofiev's Fourth Sonata (I have left out the accompanying semiquavers):

[74]

Nota de revisor: a seguir apresenta-se a imagem de uma partitura musical, correspondente ao Ex. 26. Estão presentes duas pautas uma na Clave de sol e outra na clave de fá na quarta linha, sem indicação de tonalidade e sem indicação de compasso. A quantidade de compassos corresponde a três.

Clave de sol:

Compasso um: constituído por quatro tempos, dividido em duas mínimas (ré sustenido na quarta linha e ré natural na quarta linha).

Compasso dois: constituído por quatro tempos, os primeiros dois tempos são uma mínima ligada para a nota seguinte (dó sustenido no terceiro espaço), o terceiro e quarto tempo são colcheias (dó sustenido no terceiro espaço, dó sustenido no terceiro espaço, dó natural no terceiro espaço e si na terceira linha).

Compasso três: constituído por um tempo, uma semínima (si bemol na terceira linha).

Clave de fá:

Compasso um: constituído por quatro tempos, dividido em duas mínimas (ré sustenido e mi).

Compasso dois: constituído por quatro tempos, os primeiros dois tempos são uma mínima ligada para a nota seguinte (mi sustenido), o terceiro e quarto tempo são colcheias (mi sustenido, mi sustenido, fá sustenido e sol).

Compasso três: constituído por um tempo, uma semínima (lá bemol).



We find a similar example in the concluding part of Prokofiev's Third Sonata. This tendency of juxtaposition, of "mirroring" can be achieved in polyphony with more than two parts, mainly by means of different nuances, or dynamic planes corresponding exactly to the polyphonic texture and its meaning.

This multiplane texture is even more essential in transcriptions of orchestral works (for instance the famous concluding scene from *Tristan*,

"Isolde's Death", arranged by Liszt) but also in any piano composition, whether a Chopin fantasia or a Beethoven sonata, a Schumann fantasia, etc. (those who so wish may find their own examples).

Examples of multiplane structure may be found first of all in any polyphonic composition, beginning with the Inventions and Fugues of Bach and Handel and ending with the fugues of Glazunov, Taneyev, Reger, Szymanowski and Shostakovich.

But, of course, examples of multiplane abound in the most varied styles. Here are a few typical instances:

(a) Chopin Etude in E flat minor, op. 10 (No. 6). Foreground: melody; second level: bass, long bass notes lasting a whole bar or half a bar; third level: semiquaver movement in the middle part. If this natural three-level structure, which sometimes becomes four-part, is not observed, the whole composition becomes misty and unclear, regardless of the expressive way it may be played. [Nota 17](#) I have had to explain it in class many times; very often the semiquavers of the middle part were played too loudly compared to the bass (see para. 11), the music lost its support and became "legless". It is very appropriate here to remember that Anton Rubinstein called the two fifth fingers "conductors" leading the music.

[75]

The limits of sound (both upper and lower) are to music what the frame is to a picture; the slightest blurr (which is particularly frequent at the lower limit) in the bass results in a diffuse, shapeless picture; the musical composition then turns (as I sometimes tell my pupils) into either "a headless horseman", if the bass and harmony swallow the melody, or "a legless cripple" if the bass is too weak, or "a potbellied monster" if the harmony swallows both bass and melody (unfortunately the latter frequently happens with the orchestra). Although what I write here is elementary and generally known, yet it has to be repeated in class very frequently. There is obviously a considerable distance between knowing a thing and carrying it out (theory and practice, planning and implementing, knowing and doing).

(b) Chopin's Nocturne in C minor, repetition of the first subject (agitato). This is far from easy to render in a clear, plastic manner because of the very full harmony that accompanies it (the "middle"), the octaves in the bass and the fact that the melody is left to the fifth finger alone and yet must prevail over the rest. If there is here a lurking danger of the "headless horseman" I suggest using the method of exaggeration which I mentioned earlier and attempt to play the melody very *f*, the accompaniment *p* and the bass *mp* (approximately).

A similar difficulty is to be found in the whole of the end of Chopin's Polonaise-Fantaisie op. 61 (after the unison passage in both hands until the end). [Nota 18](#)

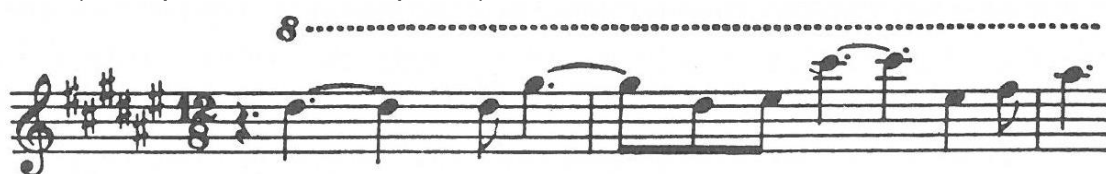
(c) Scriabin, Fourth Sonata, the whole of the end (*ff*). Same difficulty. In spite of the tremendous *f* with an accompaniment of seven- and eight-part chords and a full bass in octaves, the melody, which is only in the fifth finger, has to predominate:

Nota de revisor: a seguir apresenta-se a imagem de uma partitura musical, correspondente ao Ex. 27, com uma pauta na clave de sol, tonalidade Fá

sustenido maior ou ré sustenido menor e compasso doze por oito. A quantidade de compassos corresponde a dois compassos completos e um incompleto. Todo o trecho musical é para ser executado em oitavas. Compasso um: constituído por uma pausa de semínima com ponto, uma semínima com ponto e uma semínima, ambas ligadas (as duas notas são ré na quarta linha), uma colcheia (ré na quarta linha) e uma semínima com ponto, ligada para o primeiro tempo do compasso dois (sol no primeiro espaço superior).

Compasso dois: a primeira nota vem ligada do compasso anterior, é composto por três colcheias (sol no primeiro espaço superior, ré na quarta linha e mi no quarto espaço), duas semínimas com ponto, ambas ligadas (amas são um dó na segunda linha superior) uma semínima (mi no quarto espaço) e uma colcheia (fá na quinta linha).

Compasso três: compasso incompleto, apresenta apenas uma semínima com ponto (lá na primeira linha superior).



Poor fifth finger, what a lot is expected of it! Hence the conclusion: develop the little finger in every way, make it into the strongest pillar under the dome of the hand. (But fingers will be discussed in the chapter on technique.)

[76]

(d) Much easier to perform are such examples of multiplane structure as, for instance, the second subject in D flat major in Chopin's Third Scherzo (C sharp minor), not only because of the extreme contrast in register, but also because the various tonal patterns follow each other and are not simultaneous (horizontal instead of vertical).

A similar example - the Debussy Etude *Sonorités opposes* from the Second Book. But here too, though actual execution is easier, it is essential first to predetermine with the ear the finest shade of difference and quality of tone and then execute it with the fingers; but this requires a well-developed ear and touch.

(e) In modern music, Scriabin, Rachmaninov, Debussy, Ravel, Prokofiev, Reger, Szymanowski and others, there is an immense number of particularly telling examples of such multiplane texture. I recommend anyone who is interested to seek out such pieces and passages and then study them in order to perfect tonal technique. There is endless scope for such activity. It is obvious that if the player understands this musically, i.e. if he *hears* this multiplane texture, he will inevitably find the means of rendering it; if, however, he is still too bogged down by technical difficulties and is unable to hear the music mentally, the teacher must help him.

11. Time and again I have to remind pupils that long notes (minims, semibreves, notes lasting several bars) must, as a rule, be played with more force than the shorter notes that accompany them (quavers, semiquavers, demi-semiquavers, etc.). This again being due to the fundamental "defect" of the piano: the extinction of its tone (with the organ this rule obviously does not

apply). I have often been amazed to find that even very talented pupils did not always appear to have a sufficiently demanding ear in this respect and did not render the musical texture with sufficient plasticity. An insufficiently educated ear is also frequently reflected in too much volume in the bass when playing *f* ("booming"). This booming is particularly unpleasant in Chopin, where a rough, thundering bass is definitely not permissible (in Liszt, on the other hand, one can often hear kettle-drums and cymbals in the bass, but this in no way implies that one can thump and bang on the piano).

[77]

12. A fault which is very prevalent and which has a fatal effect on tone quality is found in pupils with small hands (especially women); it is the dynamic dominance in the right hand of the thumb over the little finger in chords and octaves. This is particularly inadmissible in cases when the octave is a doubling of the melody (for instance the end of Chopin's Third Ballade) and thousands of similar cases:

Nota de revisor: a seguir apresenta-se a imagem de uma partitura musical, correspondente ao Ex. 28, com duas pautas na clave de sol e clave de fá na quarta linha e com tonalidade lá bemol maior ou fá menor. O compasso é seis por oito e a quantidade de compassos é dois.

Clave de sol:

Compasso um: Primeiro tempo é composto por três colcheias (primeira colcheia é um mi na primeira linha, a segunda colcheia é um sol na segunda linha e um ré na quarta linha), e a voz superior por uma semínima (mi no quarto espaço) e uma colcheia (fá no primeiro espaço, ré na quarta linha e fá na quinta linha).

Segundo tempo é composto por três colcheias com várias notas em cada colcheia. De seguida são indicadas as notas que fazem parte de cada colcheia: Primeira colcheia – sol na segunda linha, si na terceira linha, ré na quarta linha, mi no quarto espaço e sol no primeiro espaço superior.

Segunda colcheia – lá no segundo espaço, ré na quarta linha, mi no quarto espaço e lá na primeira linha superior.

Terceira colcheia – si na terceira linha, ré na quarta linha, mi no quarto espaço e si no segundo espaço superior.

Todo o primeiro compasso tem um sinal de crescendo.

Compasso dois: Primeiro tempo é composto por três colcheias (primeira colcheia é um dó no terceiro espaço, a segunda colcheia é um mi no quarto espaço e um lá na primeira linha superior), e a voz superior por uma semínima (dó na segunda linha superior) e uma colcheia (fá na quinta linha, fá no quarto espaço superior).

Segundo tempo é composto por três colcheias (primeira colcheia é um mi no quarto espaço, a segunda colcheia é um lá na primeira linha superior e um dó na segunda linha superior), e a voz superior por uma semínima (mi na terceira linha superior) e uma colcheia (ré natural na quarta linha, ré natural no terceiro espaço superior).

Os dois compassos da clave de sol estão ligados por uma ligadura.

Clave de fá:

Compasso um: composto por seis colcheias, em duas vozes em oitava, todo o compasso encontra-se com uma ligadura e um sinal de diminuendo. As notas do compasso são: dó, si, lá, sol, fá mi.

Compasso dois: é composto por três colcheias, uma semínima e uma pausa de colcheia.

A primeira colcheia é um fá e uma oitava. A partir da segunda colcheia existe uma ligadura até à semínima e um sinal de crescendo, a segunda colcheia (mi e dó) a terceira colcheia (lá e mi), a semínima (dó e lá).



In such a case I advise the pupil to learn each part separately and thoroughly and, in addition, to play the excellent exercises for double notes which Godowsky gives in his comments to his arrangements for the left hand of Chopin's Etude in double thirds op. 25, beginning with the chromatic seconds, frequently encountered in such piano literature as Ravel and Szymanowski and ending with octaves. The main significance of these exercises lies in the fact that they are taken as exercises in polyphony in two parts, not just double notes, but two parts which one must be able to play differently from each other. I will give these exercises here as Godowsky's arrangements of the Chopin Etudes are very difficult to get. I shall take as an example chromatic minor thirds. Exactly the same exercises are recommended for octaves, sixths, and as I have already said, for any type of double note.

Nota de revisor: a seguir apresenta-se a imagem de uma partitura musical, correspondente ao Ex. 29 A, que mostra uma pauta na Clave de sol, sem indicação de tonalidade e sem indicação de compasso. Exibe um ritmo de cinco tempos, cada um com quatro semicolcheias. Algumas notas apresentam uma numeração que será mencionada em cada nota.

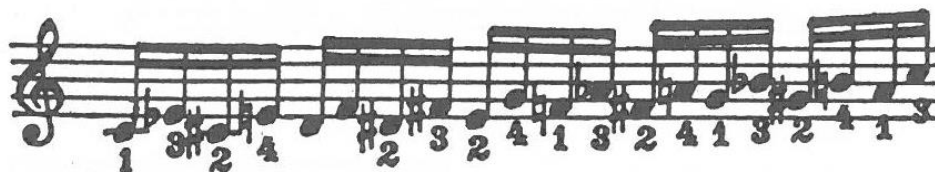
Primeiro tempo – Dó na primeira linha inferior (número 1), mi bemol na primeira linha (número 3), dó sustenido na primeira linha inferior (número 2) e mi natural (número 4).

Segundo tempo – Ré no primeiro espaço inferior, fá no primeiro espaço, ré sustenido no primeiro espaço inferior (número 2) e fá sustenido no primeiro espaço (número 3).

Terceiro tempo – Mi na primeira linha (número 2), sol na segunda linha (número 4), fá natural no primeiro espaço (número 1) e lá bemol no segundo espaço (número 3).

Quarto tempo – Fá sustenido no primeiro espaço (número 2), lá natural no segundo espaço (número 4), sol na segunda linha (número 1) e si bemol na terceira linha (número 3).

Quinto tempo – Sol sustenido na segunda linha (número 2), si natural na terceira linha (número 4), lá no segundo espaço (número 1) e dó no terceiro espaço (número 3).



[78]

Etc. etc two octaves up and two down. The same may be played legatissimo:

Nota de revisor: a seguir apresenta-se a imagem de uma partitura musical, correspondente ao Ex. 29 B, que mostra uma pauta na clave de sol, sem indicação de tonalidade e sem indicação de compasso. Está presente um ritmo de seis colcheias e duas vozes.

Voz inferior – composta por cinco colcheias: dó na primeira linha inferior, dó sustenido na primeira linha inferior, ré no primeiro espaço inferior, ré sustenido no primeiro espaço inferior e mi na primeira linha.

Voz superior – composta por uma pausa de colcheia e cinco colcheias: pausa de colcheia, mi bemol na primeira linha, mi natural na primeira linha, fá no primeiro espaço, fá sustenido no primeiro espaço e sol na segunda linha.



etc. (the fingering remains always the same)

Nota de revisor: a seguir está presente uma imagem de cinco pautas na clave de sol, correspondente ao Ex. 29 C, D, E, F, G (glissando from above downwards, as everywhere). As pautas apresentam-se sem indicação de tonalidade e sem indicação de compasso.

Primeira pauta – primeiro compasso apresenta seis semicolcheias com a indicação inferior “e assim por diante”, as notas são: mi bemol na primeira linha, dó na primeira linha inferior, mi natural na primeira linha, dó sustenido na primeira linha inferior, fá no primeiro espaço e ré no primeiro espaço inferior. Separação com barra dupla. O compasso seguinte apresenta cinco conjuntos de semicolcheias, o último apresenta apenas duas semicolcheias com a indicação inferior “e assim por diante”. As notas têm a indicação de um número por baixo de cada nota que será mencionado.

Primeiro conjunto: mi bemol na terceira linha superior (número 4), dó na segunda linha superior (número 2), ré no terceiro espaço superior (número 3), si no segundo espaço superior (número 1).

Segundo conjunto: ré bemol no terceiro espaço superior (números 4 e 3), si bemol no segundo espaço superior (número 2), dó na segunda linha superior (número 3), lá na primeira linha superior (número 1).

Terceiro conjunto: si natural no segundo espaço superior (número 4), lá bemol na primeira linha superior (número 2), si bemol no segundo espaço superior (número 3), sol no primeiro espaço superior (número 1).

Quarto conjunto: lá na primeira linha superior (número 4), fá suspenido na quinta linha (número 2), lá bemol na primeira linha superior (número 3), fá natural na quinta linha (número 2).

Quinto conjunto (incompleto) – sol no primeiro espaço superior (número 4) e mi no quarto espaço (número 1).

Segunda pauta – apresenta duas vozes com ritmos diferentes. A voz inferior encontra-se com a indicação em staccato e as notas são todas semicolcheias: dó na primeira linha inferior, dó na primeira linha inferior; dó suspenido na primeira linha inferior; dó suspenido na primeira linha inferior; ré no primeiro espaço inferior; ré no primeiro espaço inferior; ré suspenido no primeiro espaço inferior; ré suspenido no primeiro espaço inferior; mi na primeira linha; mi na primeira linha; fá no primeiro espaço; fá no primeiro espaço; fá suspenido no primeiro espaço; fá suspenido no primeiro espaço; sol na segunda linha; sol na segunda linha; sol suspenido na segunda linha; sol suspenido na segunda linha. A voz superior encontra-se com a indicação de legato e é composto por colcheias. A cada colcheia correspondem duas semicolcheias da voz inferior: mi bemol na primeira linha, mi natural na primeira linha, fá no primeiro espaço, fá suspenido no primeiro espaço, sol na segunda linha, lá bemol no segundo espaço, lá natural no segundo espaço, si bemol na terceira linha, si natural na terceira linha.

Terceira pauta – apresenta duas vozes com ritmos diferentes. É o inverso da pauta anterior. A voz inferior é composta por colcheias e cada colcheia corresponde a duas semicolcheias da voz superior. A voz inferior encontra-se com a indicação de legato e são colcheias: dó na primeira linha inferior, dó suspenido na primeira linha inferior, ré no primeiro espaço inferior; mi bemol na primeira linha, mi natural na primeira linha, fá no primeiro espaço, fá suspenido no primeiro espaço, sol na segunda linha, sol suspenido na segunda linha.

A voz superior é composta por semicolcheias em staccato: mi bemol na primeira linha, mi bemol na primeira linha, mi natural na primeira linha, mi natural na primeira linha, fá no primeiro espaço, fá no primeiro espaço; fá suspenido no primeiro espaço; fá suspenido no primeiro espaço, sol na primeira linha, sol na primeira linha, lá bemol no segundo espaço, lá bemol no segundo espaço, lá natural no segundo espaço, lá natural no segundo espaço, si bemol na terceira linha, si bemol na terceira linha, si natural na terceira linha, si bemol na terceira linha.

Quarta pauta – composta por semicolcheias, cada nota tem a indicação de um número por baixo: mi bemol na primeira linha (número 3), mi natural na primeira linha (número 4), fá no primeiro espaço (número 5), fá suspenido no primeiro espaço (número 3), sol na segunda linha (número 4), lá bemol no segundo espaço (número 3); lá natural no segundo espaço (número 4), si bemol na terceira linha (número 3), si natural na terceira linha (número 4), dó no terceiro espaço (número 5), dó suspenido no terceiro espaço (número 3), ré na quarta linha (número 4), mi bemol no quarto espaço (número 3).

Quinta pauta – composta por semicolcheias, cada nota tem a indicação de um número por baixo: dó na primeira linha inferior (número 1), dó suspenido na primeira linha inferior (número 2), ré no primeiro espaço inferior (número 1), mi bemol na primeira linha (número 2), mi natural na primeira linha (número 2), fá

no primeiro espaço (número 1), fá sustenido no primeiro espaço (número 2), sol na segunda linha (número 1), lá bemol no segundo espaço (número 2), lá natural no segundo espaço (número 1), si bemol na terceira linha (número 2), si natural na terceira linha (número 2), dó no terceiro espaço (número 1).

Nota de revisor: a seguir apresenta-se uma imagem de duas pautas na clave de sol, sem indicação de compasso e que corresponde ao Ex. 29 H, I.

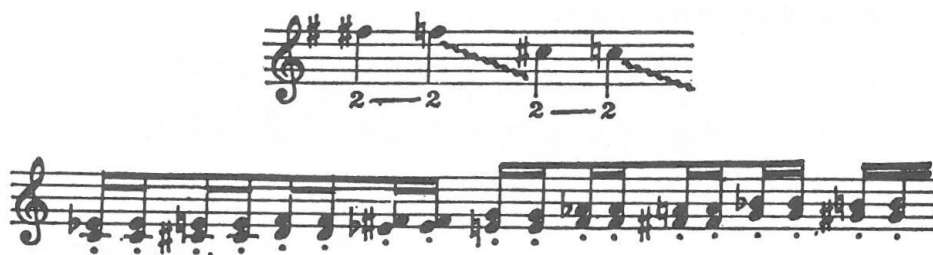
Primeira pauta – tonalidade sol maior ou mi menor. Apresenta quatro semínimas com indicação de número por baixo de cada nota: fá sustenido na quinta linha (número 2), fá natural na quinta linha (número 2) com glissando para dó sustenido no terceiro espaço (número 2) e dó natural no terceiro espaço com glissando.

Segunda pauta – sem indicação de tonalidade. Composta por semicolcheias em duas vozes em staccato.

A voz interior é composta pelas seguintes notas em semicolcheias: dó na primeira linha inferior, dó na primeira linha inferior, dó sustenido na primeira linha inferior, ré no primeiro espaço inferior, ré no primeiro espaço inferior, mi bemol na primeira linha, mi bemol na primeira linha, mi natural na primeira linha, mi natural na primeira linha, fá no primeiro espaço, fá no primeiro espaço, fá sustenido no primeiro espaço, fá sustenido no primeiro espaço, sol na segunda linha, sol na segunda linha, sol sustenido na segunda linha, sol sustenido na segunda linha.

A voz superior é composta pelas seguintes notas em semicolcheias: mi bemol na primeira linha, mi bemol na primeira linha, mi natural na primeira linha, mi natural na primeira linha, fá no primeiro espaço, fá no primeiro espaço, fá sustenido no primeiro espaço, fá sustenido no primeiro espaço, sol na segunda

linha, sol na segunda linha, lá bemol no segundo espaço, lá bemol no segundo espaço, lá natural no segundo espaço, lá natural no segundo espaço, si bemol na terceira linha, si bemol na terceira linha, si natural na terceira linha e si natural na terceira linha.



[79]

This exercise is meant to strengthen the third on the spot, and acquire an accurate consonance of the two notes.

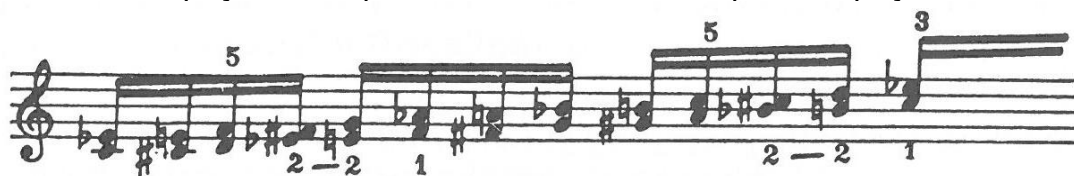
And finally simply a chromatic scale in thirds:

Nota de revisor: a seguir apresenta-se a imagem de uma pauta na clave de sol, sem indicação de compasso e de tonalidade, correspondente ao Ex. 29 K.

É composta por duas vezes e as notas são todas semicolcheias. Algumas notas têm indicação numérica que será, de seguida, indicada.

Voz inferior: dó na primeira linha inferior, dó sustenido na primeira linha inferior, ré no primeiro espaço inferior, mi bemol na primeira linha (número 2), mi natural na primeira linha (número 2), fá no primeiro espaço (número 1), fá sustenido no primeiro espaço, sol na segunda linha, sol sustenido na segunda linha, lá no segundo espaço, si bemol na terceira linha (número 2), si natural na terceira linha (número 2) e dó no terceiro espaço (número 1)

Voz superior: mi bemol na primeira linha, mi natural na primeira linha, fá no primeiro espaço (número 5), fá sustenido no primeiro espaço, sol na primeira linha, lá bemol no segundo espaço, lá natural no segundo espaço, si bemol na terceira linha, si natural na terceira linha, dó no terceiro espaço; dó sustenido no terceiro espaço, ré na quarta linha, mi bemol no quarto espaço.



(This exercise, as all the others, to be played two or three octaves up and down, at first not too fast, then presto possibile). If the octave exercise were played according to this system, examples (d) and (e) would look like this: (play chromatically, also as triads, and chords of the seventh; see Liszt's Exercises in Twelve Books).

Nota de revisor: a seguir apresenta-se a imagem de duas pautas na clave de sol, sem indicação de compasso e de tonalidade, correspondentes ao Ex. 29 L, M. É composta por duas vezes e algumas notas têm indicação numérica que será, de seguida, indicada.

Primeira pauta:

Voz inferior: dó na primeira linha inferior (número 1), pausa de colcheia, pausa de semínima, dó no terceiro espaço (número 1), pausa de colcheia e pausa de semínima.

Voz superior: uma colcheia e duas semicolcheias (dó no terceiro espaço (número 5), ré na quarta linha (número 5), mi no quarto espaço (número 5); quatro semicolcheias (fá na quinta linha (número 5), sol no primeiro espaço superior (número 5), lá na primeira linha superior (número 5), si no segundo espaço superior (número 5); uma colcheia e duas semicolcheias (dó na segunda linha superior, ré no terceiro espaço superior, mi na terceira linha superior) e uma semicolcheia (fá no quarto espaço superior).

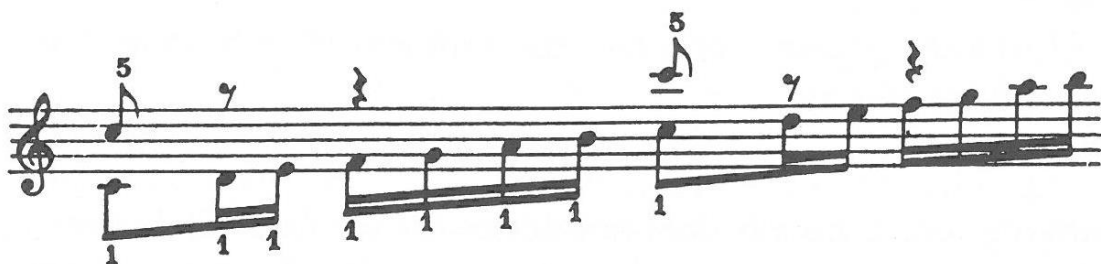
Segunda pauta:

Voz superior: dó no terceiro espaço (número 5), pausa de colcheia, pausa de semínima, dó na segunda linha superior (número 5), pausa de colcheia e pausa de semínima.

Voz inferior: uma colcheia e duas semicolcheias (dó na primeira linha inferior (número 1), ré no primeiro espaço inferior (número 1), mi na primeira linha (número 1); quatro semicolcheias (fá no primeiro espaço (número 1), sol na primeira linha (número 1), lá no segundo espaço (número 1), si na terceira linha (número 1); uma colcheia e duas semicolcheias (dó no terceiro espaço (número 1), ré na quarta linha, mi no quarto espaço) e quatro semicolcheias (fá na quinta linha, sol no primeiro espaço superior, lá na primeira linha superior e si no segundo espaço superior).



Ex. 29l



Ex. 29m

The purpose of stopping on the first octave is that the hand playing subsequently only one note of the octave should retain the octave stretch and not close "accidentally".

I should like to point out that I could perhaps give these exercises with greater reason under the heading of technique, but I deliberately placed them here since technical exercises are exercises for producing tone. And with this I want to stress once more that work on tone is work on technique and work on technique is work on tone.

13. There is a fault which is closely linked to the one mentioned in the previous paragraph. It is a carelessness very widespread among pupils with small hands, who when playing chords or octaves drop the fingers not engaged on the chord in question (or the second, third and fourth fingers when playing an octave) on the keys which happen to be under them. If, when so doing, the pupil plays *f* or *ff*, these fingers which in a "piano" come into only slight contact with the keys, now actually hit the keys and produce sounds. In class we term these dear little fingers "sympathetic".

It is obvious that in order to correct this fault the pupil must first of all be made to listen carefully to the resulting cacophony, and then should be simply advised to hold the unoccupied fingers higher, to see that they do not accidentally touch a key, and to hold the wrist lower (which can be difficult for small hands, but is none the less essential) so that the fingers can "look upwards" and not "downwards".

It is interesting to note how with a real virtuoso, for instance Gilels, the unoccupied fingers always remain at a proper distance from the keys without ever touching them. This is what gives the pianist that precision and purity of sound so irresistible for the listener.

Attention please: here, too, the problem of technique is also a problem of tone.

14. I have already said that a pianist cannot have a beautiful singing tone if his ear does not detect the whole available range of tone continuity which the piano provides, down to the very last moment of its extinction (*f<ppp...*). But one should not forget the amazing brilliance, the sparkle of such pianists, as for instance Horowitz, who make a very sparing use of the pedal, often use a non legato and in general know how to show off the percussive "hammer" quality of the piano to its best advantage (this of course has nothing in common with "dryness" or "banging").

The inference is clear: one must develop one's technique to produce both qualities, particularly since they are essentially needed in piano literature.

[81]

I repeat: both the average pianist and the great pianist, if they only know how to work, will acquire their own individual tone quality which corresponds to their psychological, technical and physical make-up, and will never be a warehouse of "universal" tone or of every kind of technical perfection. There are, luckily, no such phenomena. In the case of performers, too, one may only speak of universality in the sense in which it is spoken of generally, i.e. in connection with the history of music as a whole. We have to accept that the highest achievements of the performer's art (for instance the playing of Mozart or Bach, of Anton Rubinstein or Rachmaninov, Paganini or Liszt) come and go, and go for ever. But there is no need to grieve over this. Others are born who take their place. In this respect the life of Art follows Nature very closely.

I am repeating well-worn truths, but I do so deliberately. Because to forget them is to leave room for the mistaken opinions and false demands which one encounters daily.

I could quote much additional material concerning work on tone quality, material which comes to light during work with my pupils. I am almost sure that I have forgotten to say something very important and perhaps was wrong to dwell on things of secondary importance. But for fear of boring my hypothetical reader - and myself - I shall draw the line. Besides, it is not my intention to turn these notes into a textbook of piano playing.

And I should like to end these pages on tone with the words I sometimes say to my pupils: tone must be clothed in silence; it must be enshrined in silence like a jewel in a velvet case.

Notas de rodapé

Nota 1 It would be more accurate to say: working at "time tone", since rhythm and force are inseparable. [Voltar Nota 1](#)

Nota 2 Pre-revolution weight = 20 kg roughly. [Voltar Nota 2](#)

Nota 3 Richard Strauss conceived some of his operas while playing cards. [Voltar Nota 3](#)

Nota 4 The symbols F (force), m (mass), v (velocity), h (height) I have borrowed from physics and mechanics. They are a great help for understanding and using the physical possibilities of the piano, considered as a mechanism. [Voltar Nota 4](#)

Nota 5 I will not go into the purely mechanical reasons for this phenomenon. Any good piano tuner can explain this just as well, and perhaps even better. [Voltar Nota 5](#)

Nota 6 Russian Symbolist poet 1880-1921, ED. [Voltar Nota 6](#)

Nota 7 Of course, everything in its proper place. The piano is also adapted for all sorts of toccata effects and even "xylophone" effects, just as much as for a moving cantilena. [Voltar Nota 7](#)

Nota 8 One very knowledgeable person once called my playing "stereoscopic" and this gave me very sincere satisfaction; so my efforts had, apparently, not been in vain. [Voltar Nota 8](#)

Nota 9 I should like to call it "inter-instrumental"; forgive the clumsy word. [Voltar Nota 9](#)

Nota 10 Of course, only under the baton of a great conductor. The PERSIMFANS for instance has never been a solo instrument.

PERSIMFANS (PERvyi SIMFonicheskii ANSambL First Symphonic Ensemble) functioned in Moscow from 1922 to 1932 and achieved international fame. It was an experiment in musical "collectivism" - an orchestra without conductor, ED. [Voltar Nota 10](#)

Nota 11 From the *Ode to God* by Derzhavin (1743-1816), a poem translated into most European languages, ED. [Voltar Nota 11](#)

Nota 12 Although it is much more accurate to say: you must be able to sing on the piano in order to play a melodic cantabile piece. The same applies to polyphony. [Voltar Nota 12](#)

Nota 13 *La souplesse avant tout*, as Chopin and Liszt used to say and as all knowledgeable people still say to this very day. [Voltar Nota 13](#)

Nota 14 That excellent French expression: *jeu perlé*. [Voltar Nota 14](#)

Nota 15 Russian painter 1865-1911, ED [Voltar Nota 15](#)

Nota 16 Compare the excellent indications of Hans von Bülow to the Adagio in Beethoven's Sonata op. 106 (where the right hand has demi-semiquavers), or

the second movement of op. 111 (fourth variation with demi-semiquavers).

[Voltar Nota 16](#)

Nota 17 A typical example of this triple-level are the Choral Preludes of Bach in E flat major and C major for organ, arranged by Busoni. [Voltar Nota 17](#)

Nota 18 Richter plays this extremely clearly and expressively, not only because of his tremendous musical talent but also because of his tremendous, powerful hands. In such places small hands must always try to "cheat". [Voltar Nota 18](#)