Investigation of pianistic problems as perceived and solved by selected piano pedagogues

Alan Robert Thorson

The University of Montana
AN INVESTIGATION OF PIANISTIC PROBLEMS
AS PERCEIVED AND SOLVED BY SELECTED PIANO PEDAGOGUES

by

ALAN ROBERT THORSON
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Approved by:

[Signature]
Chairman, Board of Examiners

[Signature]
Dean, Graduate School

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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

The advantage of studying piano methods\(^1\) is limited by the fact that such a study cannot replace the teacher. Personal contact between teacher and pupil is the ideal learning situation, for only through personal contact can the teacher assist the student in his attempt to acquire technique, to develop his intellectual and emotional qualities, and to cultivate aesthetic sensibility and the power of criticism. Such a task presupposes a competent teacher possessing full knowledge of his subject, a perfect technique, a critical awareness of every detail of technical methods, and the ability to explain.\(^2\)

The question arises as to the validity of studying methods in the form of written accounts. The answer is that methods provide a variety of solutions to a given problem, solutions that have proved to be working solutions. Though the correct solving of technical problems cannot guarantee the success of a pianist, such a study will help the average pianist avoid some of the pitfalls he is likely to encounter on the road to successful pianism.

\(^1\)See definitions, p. 4.

I. THE PROBLEM

Statement of the problem. The purpose of this investigation was to select specific problems that confront the piano student and to discover what working solutions have been offered by great teachers of past and present.

Justification of the study. Though the actual solution to a pianistic problem must be chosen by the student to fit his physical, mental, and emotional needs, the investigator believes that it is wise to be familiar with a variety of solutions if more than one solution is possible. Only when one is familiar with the various approaches to piano playing can he discriminately choose, disregard, or combine those facets that suit his purpose.

Topic delimitation. A complete and detailed study of the art of piano playing is beyond the scope of this paper. In order to circumscribe the subject the investigator posed two questions: (1) what are the basic problems in piano playing? and (2) what piano pedagogues should be chosen to solve these problems?

Dr. William Newman has answered the first question by stating that the four principal problems of any applied music study are (1) musicianship, (2) technique, (3) practice, and (4) performance.3

To answer the second question it was necessary to formulate

criteria for selection. The investigator decided that the teacher had to satisfy these requirements.

1. A number of famous pianists or piano teachers must have studied with him.
2. His principles and techniques must have had some significance to future generations.
3. He must have extended the art of piano playing.
4. His method of approach must have been recorded.
5. These records must be available to the investigator.

The teachers who satisfied these requirements were Theodore Leschetizky, Tobias Matthay, and to a lesser extent, Ludwig Deppe. Since these teachers formulated their methods before 1900 or shortly thereafter, the investigator felt the need for the inclusion of more modern ideas. William Newman and Beryl Rubinstein were chosen because of their reputation as piano pedagogues and because of the clarity and soundness of their writings. Other famous teachers will be included at points where their ideas are exceptionally pertinent.

**Method of procedure.** A general historical survey of piano pedagogy has been included to give the reader a clear, brief history of the problem. The four principal categories of musicianship, technique, practice and performance, as perceived by the selected teachers, are each used as a chapter topic. The methods are finally compared in respect to points of agreement and disagreement, with value-judgments inserted by the investigator.
II. DEFINITIONS OF TERMS USED

Method. The term method was interpreted as the means by which a teacher aids the student in solving certain pianistic problems.

Any other terms that are not self-explanatory will be defined in context.
CHAPTER II
TRENDS IN PIANO PEDAGOGY AND PERFORMANCE

I. HISTORICAL CONCEPTUS

From an historical viewpoint keyboard performance has been influenced by two major factors: (1) the type of instrument employed, and (2) the various schools of composition.

When the clavichord was in use, the performer used only three fingers, and very little finger movement was necessary. The harpsichord, because of its mechanical make-up, required more precise muscular movements. With the advent of the pianoforte the amount of muscular energy necessary to depress the keys became dependent on the make of piano and the type of action employed.¹

The classic, romantic, impressionist and other composition schools also required the performer to extend his pianoforte technique in specific directions.

Probably the earliest methodical treatise on keyboard playing was written by C. P. E. Bach (1712-1788). Though much of his advice is now obsolete, many of his ideas are modern in conception. He was modern in advising the performer to assign the thumb to a black key when doing otherwise would cause a hazardous stretch. His approach was

consistently musical, as evidenced by (1) his insistence that the crux of good performance is the ability to make the ear conscious of the content of a composition by facility in varying tone, touch, and tempo, and in executing embellishments in correct time and with fitting volume; and (2) his manner of thinking of the keyboard in terms of song in order to assure the cultivation of a cantabile style of playing.\textsuperscript{2}

The Classic Period (1750-1827)

Muzio Clementi was the first pianist to be appreciated more for pedagogic principles than for performance practices. He numbered among his pupils John Field, John Cramer, and Kalkbrenner, each of whom profited from Clementi's instruction and utilized his ideas in his professional work. Clementi originated the practice of strengthening the weak fingers of the hand by keeping four of the fingers depressed in the keys while playing repeated notes with the remaining finger. His method (1) aimed for agility in finger execution, and (2) aimed for the attainment of perfect evenness of touch. He demanded that the upper part of the hand, the area from knuckles to wrist, be so flat that a coin could be placed there without falling off during performance. After he met and contested with Mozart, he shifted emphasis from mechanics to music. Nevertheless, his name is best known in connection with his collection of exercises, the \textit{Gradus ad Parnassum}, the performance of which requires skillful finger execution with the hand

never raised to excessive height nor brought to bear on the keys with any great power.  

Clementi's pupil, John Cramer (1771-1851) aimed at the cultivation of music rather than the display of the piano as a virtuoso instrument. However, he can still be considered a member of the Clementi school, which differed from the Mozart school in the make of piano preferred. Whereas Clementi and his pupils used the English piano, Mozart and his followers used the Viennese piano.  

Johann Hummel (1778-1837) was a pupil of Clementi and Mozart. He claimed that his method was derived from Mozart. This method, published in 1824, advocated a rational system of fingering, whereby a similarly shaped passage is fingered the same way at every occurrence. The one exception to this rule is that the thumb should never be assigned a black key. He recommended that the hand be placed so that the thumb and little finger form a line parallel to the keyboard. Czerny, Henselt, and Thalberg were a few of his pupils.  

Hummel's method formed part of the basis for the piano school of Carl Czerny (1791-1857), the other aspects being derived from Czerny's study with Clementi and Beethoven. Czerny's system, by means of numerous exercises, was designed to give the student the utmost velocity, smoothness and brilliance of execution. Liszt, Leschetizky, and Thalberg were numbered among his pupils.  

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3Grove, *op. cit.*, IV, p. 668.  
4Ibid., I, p. 753  
5Ibid., II, p. 681.  
The Romantic Period (1827-1900)

The advent of Romanticism, with its individual style of composition developed by Schumann, Chopin, and Liszt, brought new technical and musical demands on the pianist. Sonority superseded agility as the sine qua non of pianism.

Friedrich Wieck (1785-1873) began his career as a student of theology and closed it as a successful teacher of pianoforte. His approach consisted of applying the greatest care, sense, and intelligence to the teaching of technique and expression. He was one of the first teachers to analyze principles of piano playing, principles he later expounded in a pamphlet, Clavier und Gesang. He advocated a firm touch, legato tone, loose and quiet fingers and a yielding wrist. Though Hans von Bulow was one of his most famous pupils, the realization of Wieck's ideals was found in his daughter, Clara Wieck Schumann, noted for her wonderful sonority of tone, exquisite gradation of touch and "quiet" brilliance. She achieved this tone through pure finger pressure and with the forearm kept perfectly horizontal.7

Ignace Moscheles (1794-1870) made Leipzig a center of piano teaching and performance. Considered the foremost pianist after Hummel and before Chopin, he possessed a noble, singing tone and a tremendous facility in bravura playing. In single note passages he advocated a level wrist and quiet hand, but in octave playing he insisted that the

wrist be kept rigid.\textsuperscript{8}

Franz Liszt (1810-1884) was a magnificent technician and interpreter but not a true pedagogue. Brilliant students flocked to him because of his reputation and generosity, but he did not have a piano method. Rather, he taught by inspiration. From the pedagogic standpoint his greatest contribution, along with Chopin and Schumann, was in his style of piano composition which widened the scope of piano technique.\textsuperscript{9}

Theodore Kullak (1812-1882), an important teacher of that era, adapted his teaching to the advancement and needs of the student, correcting faulty technique by means of slow, soft practice. For the development of mechanical facility, he devised numerous exercises, the most important of which are his valuable octave studies. He believed in holding the hand low and obtaining a singing tone by throwing the wrist upward and forward.\textsuperscript{10}

II. DECLINE AND REACTION

In emulation of Franz Liszt many of his followers acquired his brilliant technique at the expense of the interpretive aspects of piano playing. The habit of exerting unnecessary force to obtain sonority resulted, especially during the decade of the 1870's, in a school of "piano thumpers." In reaction to this, the more serious musicians

\textsuperscript{8}\textsuperscript{8}Wier, \textit{op. cit.}, p. 247.
\textsuperscript{9}\textsuperscript{9}Antrim, \textit{loc. cit.}
\textsuperscript{10}\textsuperscript{10}Wier, \textit{op. cit.}, pp. 247,8.
stressed the importance of muscular control, rather than force, in tone production. A lower piano seat was adopted, more attention was paid to the wrist, and the forearm was again held in a horizontal line. This reaction was made possible largely through the efforts of three astute teachers, Ludwig Deppe, Theodore Leschetizky, and Tobias Matthay.  

Ludwig Deppe (1828-1890) was the first teacher to point out the importance of a deliberate use of the arm and its weight. The thesis of his system was the acquirement of an absolutely even touch (vide Clementi) by the adoption of a very soft tone and a slow pace in practicing with minute attention paid to the details of muscular movement. Emil von Sauer and Sir Donald Tovey are two of the staunchest advocates of Deppe's system. In America William Mason carried forward Deppe's principle—that the finger must fall rather than strike the key.  

After a distinguished career as pianist, composer, and teacher at the St. Petersburg Conservatory, Theodore Leschetizky (1830-1915) went to Vienna and there developed his method of teaching pianoforte. With the possible exception of Liszt, he could boast the greatest array of gifted pupils in the world. This roster included Paderewski, Schnabel, and Gabrilowitsch. His system recognized three essentials of piano playing: (1) freedom of interpretation, (2) rhythmic integrity, and (3) tone as beautiful as that of a singer. He also advocated practicing

11Antrim, loc. cit.

away from the keyboard as a great musical-intelligence exercise. The essentials of his method have been recorded and published with his full approval by his assistant, Malwine Bree.¹³

Tobias Matthay (1858-1945) was probably the first teacher who scientifically analyzed all the muscular problems by reducing them to basic movements. During his successful tenure as professor of piano at the Royal Academy of Music in London, he took time out in 1900 to establish his own school based on the association of technique and psychology. His method develops an effortless piano technique, eliminating all stiffness and waste motion. His view on piano performance was that a person can express himself musically only through the physical act of key depression, which in turn consists solely of the act of touch in all its diversified aspects. He believed, as did Deppe, that the art of teaching did not only consist of pointing out certain faults but in explaining the cause of each fault and directing the means of its correction. His pupils included Myra Hess, Arthur Alexander and York Bowen.¹¹

III. RECENT TRENDS

During the past fifty years there have been many fine teachers in every country of the world. For reasons mentioned before, the two

teachers of this generation whose methods will be used as bases for
discussion in subsequent chapters are William Newman and Beryl
Rubinstein.

Dr. William Newman is professor of piano at the University of
North Carolina and author of two widely read books, The Pianist's
Problems and Understanding Music. Having the advantage of a fine
heritage of experience in this field, Dr. Newman has been able to
profit by the mistakes and accomplishments of his predecessors and to
combine those facets of piano pedagogy which he feels are the most im-
portant.

Beryl Rubinstein was the director and professor of piano at the
Cleveland Institute of Music as well as a concert pianist and composer.
As an author he has condensed his piano principles into a book entitled,
An Outline of Piano Pedagogy. His philosophy is that the ultimate goal
of piano playing is the creation of beauty, and it is the duty of the
teacher to see, even during the period of mastering the syntax of musical
language, that this goal is never forgotten. 15

15 Beryl Rubinstein, An Outline of Piano Pedagogy (New York:
Music is a communicative art requiring a medium of transmission from composer to audience. This medium of transmission is the performer or interpreter. Effective communication requires the balanced combination of musicianship and technique. Musicianship is the sum of those attributes that in combination make one an effective musical thinker. Technique, in its muscular-physical sense, is the sum of those traits which enable the performer to realize his musical ideas. The necessary balance is partly achieved by the understanding of the relation between these two elements—the understanding that mental conception directs and controls the physical-muscular energy. This fact, that one must have something to say before he can say it, is the first reason why musicianship is the more important element. The second reason is that it is the element most likely to be neglected by the pianist.

In order to acquire musicianship one must first discover what attributes constitute musicianship and to decide what factors, other than technical factors, are responsible for the failure of musical communication. These attributes are of two types: (1) those qualities that are intellectual in source, and (2) those qualities that are primarily musical in source.
I. FACTORS RESPONSIBLE FOR THE FAILURE OF MUSICAL COMMUNICATION

General Factors

These factors are subject to change and improvement through mental training and are not particularly dependent on musical talent.

Incorrect approach. Specialization is a dangerous characteristic of today's society, especially in the music profession. The pianist is likely to think only in terms of his particular instrument. Such an attitude is irrational, for a musician must express music. In order to express music and to become a communicative person, he must become aware of the related arts—literature, drama, ballet, painting, and architecture. He must also gain an understanding of related musical fields through the study of harmony, counterpoint, form and music history. The development of musicianship requires the pianist to investigate the musical rewards of accompanying and ensemble work.

Lack of originality. Individuality of interpretation is an important goal for the performer. Some pianists remain students for their entire lives, simulating the performance of others and never learning to think for themselves. Though the study of Rubinstein's musical interpretation may be a valuable way to gain background and develop musical taste, actual imitation is an obstacle to self-expression.

Improper balance. The sensitive pianist often puts too much emphasis on the role of emotion or temperament, forgetting that emotion
must be guided by rational, intelligent thought. The musician must be intelligent enough to know and understand what he is doing and how it can best be done within the limits of his capabilities.

Once a degree of originality is acquired, it is necessary to bring into proper perspective one's original interpretive ideas with the intentions of the composer. The student must study and assimilate the life, attitudes, and philosophy of each composer he studies and familiarize himself with a representative sample of the composer's works, his style of composition, and his historical position. Once the emotions and intentions of the composer are understood, they must be brought into proper focus with the student's own emotions and thoughts. Even when the composer's intentions are explicit, there is some room for individuality on the part of the performer.

Lack of dedication. Love of one's work, which is complete dedication to a task, is essential to the musician. The student must have the ambition and enthusiasm to strive for degrees of perfection. He must learn to work carefully and diligently to attain this goal without sacrificing the important and vital characteristic of spontaneity. Dedication presupposes and implies sincerity, that honesty of conviction that is essential to any art. Sincerity and dedication induce the acquisition of (1) self-discipline, the means of systematically realizing one's goals; (2) self-criticism, a requisite to perfection; and (3) concentration, the ability to bring one's complete attention to bear on the problem at hand.
Timidity. Many pianists approach the instrument as though they were afraid of it. Lack of forceful conviction is easily ascertained by the audience and often spoils an otherwise good performance.

Misunderstanding. The student is often unable to differentiate between the essentials and the nonessentials. This is remedied by experience, formal analysis, critical listening habits and by gaining a clear picture of the whole. Too often so much attention is paid to details that the whole is blurred and the performance becomes an incoherent series of isolated fragments. Attention to detail is important, but it is more important to understand the relationship of one detail to another and the relationship of each detail to the entire composition. One must not allow the trees to become an obstacle in recognizing the forest.

Reading inability. The importance of facility in reading musical notation is apparent when one realizes that musical notation is to the musician what written words are to the student of literature. Reading presupposes a working knowledge of the keyboard, familiarity with the various clefs, keys, key signatures, note values, time signatures, note names, tempos, phrasing, shading, and a basic knowledge of various structural formulae as used by composers in different periods. Five factors must be remembered when reading music at sight.

1. The tonality in which a composition is written.
2. The meter in which a composition is written. Rhythm is more important than notes in sight-reading.
3. The tempo in which a composition is indicated to be played.
Musical Factors

Though none of the components of musicianship are completely musical or intellectual in nature, there are several factors that are derived more specifically from musical than from intellectual sources.

The ear. Certain characteristics have been exorbitantly magnified in importance largely because of the influence of Dr. Seashore and his tests of musical measurement. The ability to distinguish subtle changes in pitch, tone duration, rhythmic groupings, timbre, and musical memory may or may not be important, but alone they do not account for musicianship. Through intelligent practice a person not naturally endowed with perfect pitch can acquire good relative pitch, a greater awareness to tone duration, timbre, and rhythmic pulse, and improve his musical memory. Ear training, in the form of melodic and rhythmic dictation, sight-singing, and the study of interval relationships can improve these characteristics unless the student is physically handicapped.

Playing by ear. The ability to play by ear, depending on how it is used, can be either a blessing or a hindrance to the piano student.

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It can be a great aid to memorization as well as an immediate source of musical enjoyment. Though an inherent talent, it can be learned to some degree and improved if already possessed. The best way of learning to play by ear is to do it often, beginning with simple tunes. This should be accompanied by a thorough analysis of harmony and form, which is particularly helpful when the student's problem is his inability to transfer what he hears to the keyboard.

The pianist is confronted with another problem of musicianship that arises because of the nature of the instrument. Except for the organ, the piano is the most mechanical of all musical instruments, a complicated system of keys, hammers, levers, and strings. The pianist must overcome this problem of mechanics and make the instrument as much a part of himself as the vocal apparatus is a part of the singer.

These factors in combination are the essential components of musicianship. In addition to these tangible elements, there is the intangible element of musical intuition, that subtle musical insight that forms the basis for musical taste. Though subject to development through careful study, critical listening, and instruction with a competent teacher, it is an indefinable "divine spark" that is a gift of God.

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CHAPTER IV

TECHNIQUE

Technique was previously defined as the sum of those traits that allow one to realize his musical ideas. These traits are of two types: (1) those concerned with the art of finger dexterity; and (2) those concerned with the physical aspect of tone production. These two traits are inextricably connected, for it is impossible to have control without tone or tone without finger control.

Mechanical difficulty at the keyboard consists of going from one note or combination of notes to another note or combination of notes. This necessitates a complete coordination of all muscular movements. The acquisition of such fine muscular coordination in conjunction with mental coordination is essentially the acquisition of technique.

Since the ultimate goal of mechanical dexterity is the production of tone, the pianist must understand how tone is produced. The pianist is in possession of four physical tone producing mechanisms: (1) the finger moving from the knuckle; (2) the hand moving from the wrist; (3) the forearm moving from the elbow; and (4) the upper arm moving from the shoulder. Working on the leverage principle, the key acts as the direct object of force, the finger as the lever, the knuckle or joint as the fulcrum, and that section above the knuckle as the stationary base of that muscle that connects with and propels the lever. This act of propulsion requires muscle contraction, for completely relaxed
muscles are incapable of motion. The desired amount of contraction is that which is necessary to set weight into motion, such as in the act of walking. 

The purpose of this chapter is to describe, through the study of master methods, how such muscular coordination can be achieved and how tone is physically produced.

I. LUDWIG DEPPE: TONE THROUGH THE APPLICATION OF WEIGHT

Ludwig Deppe's system prescribed the development of an even touch, the acquirement of an extremely soft tone, attention to muscular control, and a slow tempo in practicing.

Mechanical preparation. Deppe insisted that the fingers be as curved as possible and that the hand be turned out so the knuckles of the third and fourth fingers are slightly higher than the knuckles of the first and second fingers, giving them a higher fall when lifted. In doing this Deppe did not allow the elbow to be thrown out, but maintained that the turn must be made from the wrist with the thumb slightly curved and free from the hand. He objected to high finger action as this tends to stiffen the wrist and produce an unmusical sound.

Tone through weight. Tone was Deppe's prime concern and he never allowed a student to play a note without critically listening to it and making it conscious or "bewisst." To obtain beautiful tone the

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student should not strike the key, but let the finger fall, by a de-
liberate use of the arm weight, from a perfectly loose wrist. At first
the tone will be almost inaudible, but will increase in volume with
practice.

Scales and chords. Though Deppe said that anyone could master
finger execution, he did propose certain principles for the playing of
scales and chords. In playing chords the hands should be spread over
the keyboard "as if asking for a blessing" and allowed to fall on the
chord keys without any resistance. Then, keeping the hands extended,
the wrist should be dropped and the hands taken up exactly over the
notes. Conversely, in playing scales, the hand should be gathered into
a "nutshell" and the playing done by the finger tips. In practicing
scales Deppe advocated beginning in the center of the keyboard and as-
cending three octaves with the right hand and descending three octaves
with the left hand. This should be done slowly at first and the hands
separate. As tempo is increased the two hands can be combined. 2

II. LESCHETIZKY: TONE THROUGH DEVELOPMENT OF THE PERFECT FINGER

Leschetizky felt that the key to tone production was through the
development of the perfect or hammer finger. In fact, no pupil of his
escaped certain technical exercises: finger exercises followed by scales,
arpeggios, trills, and double-notes, culminating in the first three

2Amy Fay, Music Study in Germany (Philadelphia: Theodore Presser
studies of Czerny's opus 740. Control of the keyboard demands control over each individual finger, which, in turn, requires the student to become finger conscious. Each finger should be exercised until it becomes a piece of "hard flexible rubber." Tone quality is dependent on the individual finger stroke and is consequently fostered by the correct study of exercises.3

Mechanical preparation. The fingers should be kept close to the keys and so curved that the tip joints fall vertically on the keys. This does not mean an attitude of striking the keys but a molded, sideways "taking-out" movement with key contact fingers.4 The hand should assume a vaulted form with the wrist somewhat lower than the knuckles and the thumb held away from the hand, its tip joint bent so the key can be struck from the edge. In the production of a single tone, the tip of the finger should slightly sweep the key, releasing it through a modified use of the arc or circular motion occurring at the end of the finger stroke. When the finger is released from the key, it should not change form, but remain curved. In forte passages the black keys are struck with an outstretched rather than curved finger.5


Finger exercises. Leschetizky advocated the same exercise Clementi used for gaining finger independence. Another exercise for the development of the perfect finger is to place the hand in a five-finger position and play all possible finger and thumb combinations, in triplets and without accent. In practicing these exercises the aim is evenness of tone, accomplished by an unequal exertion of pressure on the keys in conformity with the unequal length and muscular strength of the fingers. To avoid fatigue, the hands should be alternated and the wrists lowered and raised frequently during practice. In the study of actual compositions, exercises should be composed of the note patterns where the weakness occurs.

Scales. In playing scales the student must be careful not to jerk the arm forward when the thumb turns under, but allow the arm to follow the hand movement evenly and horizontally. The wrist should be held loosely and free of any vertical movement. Scales should be practiced slowly and hands separately, though dynamic shading should still be employed. At a faster tempo the fingers should be lifted quickly after each finger stroke to obtain the desired pearly quality of tone. In the chromatic scale the wrist must be held slightly higher than for the diatonic scale.

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6See page 6.
7Boyd, loc. cit.
8Bree, op. cit., pp. 4, 5.
9Ibid., p. 18.
Chords. The principle of chord playing is to press rather than strike the keys. The hand should be arched as far as natural stretch permits, the fingers curved, and the finger tips kept firm during the stroke. This is accomplished by an up or down wrist movement. In a slow succession of chords either wrist movement is possible, but in a rapid succession only the upward movement is applicable. Wrist movement must be increased in proportion to the volume desired. The chord should be prepared above the keyboard before the stroke is realized, and once the chord is pressed, the wrist should be relaxed immediately.

Since the melodic theme usually lies in the highest chord tone, the pianist must emphasize this tone. This can be done by stretching the finger assigned to this tone out on the key and pressing it down deepest in the key while the other fingers are easily rounded and descending vertically on the keys. When the chords follow each other at a comparatively slow pace, the fingers of the uplifted hand should be held easily and contracted into a fist to give the muscles a chance to rest before going to the next chord.\footnote{Ibid., pp. 33,36.}

Styles of Touch

Leschetizky perceived four styles of touch: (1) legato, (2) the lifted tone, (3) portato, and (4) staccato.\footnote{Ibid., pp. 28-31.}
**Legato.** The secret of legato playing is to lift the finger from its depressed state only when the next finger has struck its key. A greater degree of legato requires the player to let the finger lie a moment longer in its depressed state after the next key is struck. If the strength of the finger does not suffice in obtaining a full legato, it may be reinforced by wrist pressure. This is done by touching the key lightly and forcing the finger to press the key down deeply. To do this the wrist and finger joints must remain firm so that key contact is not lost. The same effect can be achieved by a rapid downstroke of the wrist. Immediately after striking the key, the wrist must return to its normal position while the fingers touch the keys lightly.

**The lifted tone.** The lifted tone is a touch variant that requires a loose wrist and firm finger joints. The curved finger touches the key lightly and noiselessly, presses it down with a swift stroke and is instantly lifted from the key by the hand that is flying back from the wrist.

**Portato.** This touch is realized by having the finger press the key down slowly, hold it firmly for a moment, and then lift it slowly by raising the hand and forearm.

**Staccato.** In playing staccato the keys are not pressed but struck down from above. Finger staccato is played by throwing the fingers upward with a firm but loose wrist. This allows the high, curved finger to strike the key swiftly and move back to position immediately. In a rapid tempo, this staccato becomes a non-legato, for the
finger does not have time to draw back fully before realizing the next stroke. In wrist staccato the curved finger is thrown upon the key, striking it precisely, and withdrawn instantly by the wrist. Increased tempo requires the wrist movement to become progressively smaller.

**Summation**

Leschetizky believed that the attainment of technique required tone production to be approached by control over the individual finger stroke, through a thorough muscular development and by proper study of exercises.

**III. MATTHAY: TONE PRODUCTION THROUGH THE ACT OF TOUCH**

Quality, quantity, and duration of tone, according to Matthy, are dependent upon (1) a knowledge of the piano; (2) an understanding of hand and body position; and (3) the muscular habit gained from correct use of the touch act.

**Instrumental Knowledge**

There are two specific characteristics of the piano that must be kept in mind: (1) once the hammer has hit the string, there is nothing that can be done to influence the tone; and (2) the resistance of the keys demands that the pianist become key conscious, able to judge the amount of key resistance instantly and in all situations.12

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Mechanical Preparation

The study of position is important as a means (1) of obtaining muscular facility in its easiest form; (2) of facilitating the isolation of each set of muscular impulses from its opposite set; (3) of learning to rest properly on the keys by leaving the hand and fingers free from contrary exertion; (4) of learning to time the culmination and cessation of energy that is applied to move the key; (5) of acquiring the ability to use the fingers and hand independently of any downward-acting arm force; and (6) of preparing for the act of touch.\(^\text{13}\)

The first step in achieving these goals is to acquire a proper hand position. The nail phalanx of the thumb should be in a straight line with its key, the hand being level and the knuckles even or slightly elevated. The wrist should approximate the level of the knuckles though some slight variance is permissible. The forearm should be level with the wrist and the whole arm from shoulder to wrist opened out into an obtuse angle. Ultimately, the entire leverage system should become one "living" lever. The amount of finger curvature is dependent on the strength of the fingers. A very strong-fingered performer is able to employ flat fingers even in passages requiring considerable volume. The limit of flat finger work varies with the muscular development of the pianist.\(^\text{11}\)

\(^{13}\)Ibid., pp. 62,77.

\(^{11}\)Ibid., pp. 22,23,106,107.
The Act of Touch

The act of touch, the most important aspect of tone production, is a subject emphasized in Matthy's writings. He has reduced this act to the basic principles of (1) touch species, (2) touch movements, (3) touch initiators, (4) touch resting concepts, and (5) touch finger attitudes.\textsuperscript{15}

**Touch species.** The three species of touch formation approximate the previously mentioned playing mechanisms. The first species is the finger exerted against the key in combination with a relaxed wrist and self-supported arm. The second species is the hand exerted behind the fingers, coupled with a floating arm. The third species involves arm weight, coupled with hand and finger exertion.

**Touch types.** The four types of touch are: (1) the hand, (2) the finger, (3) the arm, and (4) the rotary touch. In the finger touch only the finger moves. It may be done through any of the three species. The hand or wrist touch, in which only the hand moves during key descent, may be done through either second or third species. The arm touch, in which the arm is allowed to fall of its own weight, can only be employed through third species. The need for the rotary touch arises from the fact that the inner side of the hand is stronger than the outer side.

Consequently the two sides cannot be alternately exerted with the same degree of force unless the forearm muscles are alternately relaxed and exerted. This relaxation and exertion must be directed from the finger that has played toward the finger that is about to play, the preceding finger acting as a pivot. These muscular movements constitute the invisible aspects of the touch act. During this act there should be no wrist displacement but a mere partial revolvement by the wrist on its own axis. The choice of touch is determined by the speed of the passage though the rotary touch is involved in all playing.

**Touch initiators.** The act of touch may be started by either a willing muscular exertion or by a willing release of weight. First and second species are necessarily muscularly initiated. Third species may be initiated in either manner. If initiated muscularily, the hand and finger exertion must be willed or determined but the arm release allowed to occur in answer to the reaction felt at the wrist. In weight-initiated third species the arm release is willed and the fingers and hands allowed to act in response to the weight felt to be set free.

**Touch finger attitudes.** The two finger attitudes are the thrusting and clinging attitudes. The thrusting attitude requires curved fingers and a contracted upper arm. The clinging finger approach requires a relaxed upper arm. The fingers are flat and the key is depressed by the fleshy underside.

**Touch resting concepts.** The remaining muscular acts are the acts of resting and added-impetus. The act of resting the hand on the key-
board is a continuous act and tells the performer of the key's place and resistance. There are two kinds of resting: (1) surface-level resting, during which the maximum weight is brought to bear on the key without its being depressed; and (2) the depressed level, in which just enough weight is applied to depress the key slightly. Resting is the continuous element of touch and incapable of creating tone. It is interspersed with the discontinuous element, added-impetus, which lasts only during the moment of key deflection and determines the sound.

**Tone Quality**

Tone quality is physically determined by the way in which a touch species is initiated and by the amount of finger curvature. Muscular initiation and thrusting finger attitudes produce brilliant tones. Weight initiation and clinging finger attitudes produce beautiful, singing tones. Since first and second species are initiated muscually, the resultant tone is brilliant. The same is true for muscually initiated third species. To produce a rich tone one must employ weight-initiated third species in combination with a flat finger attitude.

**Tone Quantity**

Tone quantity is determined by the species of touch employed. First species produces agility over the keyboard, but the resultant tone is soft. Second species reduces agility but increases the tonal range, and third species allows for full tonal range but is not applicable in fast passages.
The quantity of tone is also determined by the key, which obeys the natural law that the more swiftly it is depressed, the louder the sound; and conversely, the more gradually it is depressed, the softer the sound. For an extremely soft tone it is possible to begin the act of tone production, not from the surface of the key, but from a point in key descent about half-way down. By doing this, the hammer head is comparatively close to the string before the energy or added-impetus is applied.

**Tone Duration**

Tone duration is based on the type of resting act employed. Staccato requires the use of surface-level resting and legato requires the depressed level of resting. Natural legato is obtained by forcing the fingers to connect each sound precisely to the next one by means of the light weight left resting upon them by the arm, the resting being transferred from finger to finger. The weight required to keep the key depressed must be very slight. In staccato the surface-level resting is employed and the fingers allowed to rebound with the key. In both these forms the added-impetus is required to produce the actual sound. This means the pianist must be careful to stop the energy the moment the sound is realized. Consequently, it is evident that each of the three aspects of tone production—quality, quantity, and duration—is dependent on the form and application of added-impetus.

Technically the act of touch does not begin until the key is depressed, but it must be preceded by the mental attitude that the
muscular components are falling of their own weight. Even more important is that the tone must be perceived by the mind before it can be realized by the muscles.

Exercises

In order to acquire correct muscular coordination, Matthay devised a series of twenty-one sets of exercises with detailed instructions concerning their purpose and execution. These exercises are of three types: (1) those to be practiced away from the keyboard; (2) those to be practiced at the keyboard; and (3) those that can be practiced either at the keyboard or away from it.\(^{16}\)

Summation

Piano playing is accomplished by the union of two acts: (1) the mental conception which has its basis in musicianship; and (2) execution which has its basis in instrumental knowledge and muscular habit gained from an understanding and proper use of the various features that make up the act of touch. These ideas and their inter-relationship form the basis for Matthay's approach to technique.

IV. NEWMAN: TECHNIQUE AS A MEANS OF ACHIEVING AN END

Technique, in its narrow physical sense, is only a means of achieving an end, which in this case is the recreation of music. The

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problem the piano student must carefully consider is whether or not he is taking the right means of achieving this end. Dr. Newman believes the basic requirements for the attainment of mechanical dexterity are a good hand, an intelligent approach to technical problems and hard work.

**Mechanical Preparation**

The ideal position is that which gives the performer the most freedom and adaptability. It is a position half-way between a rigid and a slumped position that can only be obtained by sitting on the front half of the piano bench. The position of bench is important, for too low a bench raises the wrist, thus constraining finger action, and too high a bench does the same thing by lowering the wrist. He recommends a distance of approximately $10\frac{1}{2}''$ from the top of the bench to the surface of the keys. Finger and wrist positions vary with the passage.17

**Playing Mechanisms**

Dr. Newman recognizes the four physical playing mechanisms and their application as a leverage system.18 For utmost efficiency, the student should choose the least powerful mechanism that will do the job well. If the mechanism is used separately, then each is limited in use in the following way: (1) only the finger can play legato; (2) only the

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18See page 20.
hand can play staccato; and (3) only the forearm and upper arm can play chords and octaves.\textsuperscript{19}

The finger. The finger should be worked by the finger muscles that connect its first phalanx to the underside of the hand and not by the forearm muscles and their connecting hand. The use of such forearm muscles binds the wrist and is not conducive to speed or control. Nor should the finger be tightly rounded, for this constrains hand action and lessens the hand stretch. The finger stroke should be both forward and downward. Whereas the tightly rounded finger, following the circular arc it describes, tends to strike the key at an inward tangent, a flat finger can accomplish a direct stroke. The ideal curvature is that natural position in which the hand rests while the arms are limply hanging at one's side.\textsuperscript{20}

The chief function of the finger is the playing of legato though in combination with other mechanisms it can play anything from legato to those crisp staccatos that are too fast for the hand and wrist to manage. A true legato consists of making two or more successive tones with one impulse, such as the violinist does. Since this is impossible on a keyboard instrument, it must be simulated. All styles of touch are simulated by controlling and regulating the time interval between the release of one key and the depression of the next key.\textsuperscript{21}

\textsuperscript{19}Newman, \textit{op. cit.}, p. 51.
\textsuperscript{20}Arnold Schultz, cited by William Newman, \textit{op. cit.}, p. 54.
The hand. The chief duty of the hand is to play staccato, but in conjunction with other mechanisms it can also become a means of legato playing. The important point in staccato playing is the release. To obtain a series of staccato tones, the hand must start from above the key, drop on firm finger tips and rebound from the wrist. For the production of a single staccato, when it is impossible to begin from above, the hand must draw back sharply from the wrist at the moment of key deflection, appearing as if it strikes the note by drawing back.22

The forearm and upper arm. The purpose of the forearm is to execute forte chords and octaves and to supply the rotation movements necessary in tremolos. However, the value of such rotation movements lessens as the volume increases and the intervals shorten. The upper arm is never used alone but in conjunction with and for the purpose of aiding the other playing mechanisms.23

Exercises

Exercises should be used for a purpose and not simply as a general principle. One of the first things a student must consider is his physical inadequacies. Exercises should then be chosen to overcome these specific weaknesses. Practicing Czerny only helps in playing Czerny better and is not of much value in playing Debussy. By adopting this thesis Dr. Newman refutes the possibility of transfer of training

23Tbid., p. 64.
that was once a hallmark of many teachers. The five basic exercises that are actually found in music are trills, scales, octaves, double-notes and arpeggios. Unless another particularly valuable finger drill is utilized to overcome a specific weakness, it is better to create exercises from the context of the music.  

**Fingering**

Fingering should satisfy two requirements: (1) simplicity, and (2) consistency. These aid concentration and memorizing and avoid confusion. Fingering is often such an individual problem that Dr. Newman advises the student to work out his own fingering based on these two principles.  

**Tone Production**

Dr. Newman believes that the art of tone production should not be approached through the act of touch, but through the musical senses, principally through critical listening. The concept of touch is irrelevant to the problem, for the style of striking the key, whether by finger or pencil, cannot affect the tone quality. An illusion of touch can be produced by (1) controlling the relative volume of tone; (2) controlling the degree of legato; (3) varying the use of the pedals; (4) allowing for any accompanying noise element; and (5) controlling key

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24 Ibid., pp. 33-35.
25 Ibid., pp. 74-81.
descent. The latter is only possible in slow passages. As the pianist gains in mastery over mechanical skills, the problem of tone production becomes less a matter of technique and more a problem of musicianship.26

**Summation**

Dr. Newman's approach is to define technique as the mastery of mechanical skills and to divorce the problem of tone production from technique, placing it almost exclusively within the realm of musicianship, as governed by the auditory senses.

V. BERYL RUBINSTEIN

Mr. Rubinstein's definition of technique embraces both finger dexterity and musicianship. Mechanism is the term he has used to describe technique as previously defined in this chapter.

**Mechanical Preparation**

Hand position is important, since in order to strike a key, the hand must be held in one position or another. The natural hand position is the reasonable one, though it must be modified by preventing the natural tendency for the outside of the hand to slope down toward the keyboard. The entire hand must be parallel to the keyboard to secure that evenness of touch that is essential to artistic piano playing. Evenness of touch is more possible if the white keys are struck nearly on a line with the black keys.

The fingers should be naturally curved with the knuckles slightly elevated. Employing flat fingers hampers facility and clarity of finger work. The thumb should be held in a slightly oblique position and must be able to depress its key without any accompanying wrist motion. This position is the one most often used, but it must be modified in accordance with the combination of notes to be played.  

Touch

The physical basis of tone production. Tone, as the medium of musical expression, is more a product of mental conception than of physical action. The physical action is the natural result of the mental conception and follows it automatically. Beautiful tone is physically produced through a balance of three elements: weight, pressure, and muscular energy. Weight is the continuous, though inert, flow of power from shoulder to finger tips. Muscular energy exerts the pressure and controls the weight distribution. Quantity of tone is controlled by the amount of weight released. Quality of tone is determined by mental control of the muscular energy, which in turn balances weight and pressure. Through experience the student learns how his muscles react to certain mental stimuli, thereby learning how to employ certain muscular movements to produce certain tone qualities.


28Ibid., pp. 22-24.
The physical means of phrasing. Phrasing is the causing of certain tones to be connected and others detached. This refers to tone duration and not to tone quality.

Legato touch implies the connection of one tone to another by causing the first tone to sound until the next tone begins. The smoothness of sound demands smoothness of hand motion with the fingers in close proximity to the keys. Arm weight is a prime essential in obtaining a rich legato tone.

Since staccato touch is the opposite of legato, the manner of physical motion is also opposite. It is achieved by quickly releasing the key. Finger staccato is applicable only in single note passages too fast for the wrist to manage. In wrist staccato the hand is elevated from the wrist and the arm kept comparatively quiet. As soon as the finger strikes the key, the hand must spring upward. The only necessary motion required is a vertical motion, though these up and down pulsations merge into a single continuous action. In all cases the wrist must be relaxed or the reason for wrist staccato is nullified.

Portato touch is produced by lifting both hand and arm between each two successive strokes, separating the tones gently. These three touches may be combined to form numerous hybrid touches, the most notable being non-legato, which is used in rapid passages where extreme legato is not desired.29

29Ibid., pp. 25-30.
Summation

Mr. Rubinstein's approach was to clarify certain misconceptions about common problems in piano playing. Though accepting the physical role in tone production through touch, he believed emphatically that the source of tone was in the emotional aspect of musicianship.

VI. OTHER VIEWS ON FINGER DEXTERITY AND TONE

Mechanics

Isidor Philipp. This great French pedagogue believes that exercises are only useful when the mind is concentrating and realizing the purpose of each exercise.30

Robert Casadesus. Correct hand position is the first step in learning to feel at home at the keyboard. Mr. Casadesus advises using the hand position of Chopin, whereby the hands are so placed that the fingers fall naturally on the first five notes of the E major scale. This basic position should be maintained without any stiffness or tenseness. After elementary finger exercises are mastered, the student may progress to one of the methods combining finger work with musical continuity. Either Czerny or Stamaty is advisable. More advanced students should explore the exercises of Philipp and Brahms.31

Touch and Tone

Isidor Philipp. Tone, which is the pianist's highest asset, demands attention to orchestral color and depends on (1) freedom and relaxation of the wrist; (2) the shape of the fingers; (3) the texture of the skin; and (4) the sensitivity of the ear. The so-called singing tone is obtained by kneading the key with the fleshy part of the finger.\(^{32}\)

Jan Smeterlin. Mr. Smeterlin's views on touch and tone are interesting because they are antithetical to those held by Dr. Newman and many contemporary piano pedagogues. He believes that "touch does indeed exist and can hardly be called an illusion." He bases this statement on the fact that five different pianists will produce five different qualities of tone, each capable of being recognized by the ear. This is a logical deduction, especially considering his unique definition of touch. "Touch is the physical tone so individualized as to express personal concepts of music." Mr. Smeterlin recognizes numerous types of touch, including the common ones of legato and staccato. These touches are controlled by five factors: (1) the mental grasp of the music; (2) the dynamic approach; (3) the position of the fingers; (4) timing; and (5) method of pedaling. These in combination determine tone. Mr. Smeterlin believes that it is more necessary to experiment with qualities of tone than to spend valuable time working

\(^{32}\)Philipp, loc. cit.
at finger exercises.\textsuperscript{33}

VII. SUMMATION

These are some of the concepts of technique that have been advanced by great teachers of past and present. These teachers agree in many respects and differ in others. A comparative study will be included in Chapter VII.

CHAPTER V

PRACTICE

Intelligent practice is the means by which the piano student achieves his goals. It is a principal means of cultivating musicianship and the only means of acquiring technique. Consequently, practice procedure should be a matter of urgent concern to every conscientious piano student.

I. PRACTICE PROCEDURE

The student should never practice without a purpose in mind. The three principal objectives of practice are: (1) to obtain command over musical expression; (2) to train the hand and mind as a single unit; and (3) to accomplish the maximum in the minimum amount of time. Secondary goals include: (1) to acquire endurance; (2) to secure correct muscular habits; and (3) to master specific musical problems determined by the music being practiced.

Intelligent practice presupposes several basic decisions on the part of the student: (1) the amount of time to spend in practice; (2) the matter of time distribution; and (3) the actual practice procedure.

Consistency is more important than the amount of time spent. One hour a day is of more benefit than three hours, three times a week. Certainly four hours should be considered the maximum amount of daily practice. The length of the individual practice session will depend
on the concentration span of the individual. Once either mental or physical fatigue sets in, the student should rest a few moments before continuing.

The amount of time spend on exercises or compositions can best be determined by the student and teacher in keeping with the student's particular needs. Scales and exercises should be distributed throughout the practice session and not practiced at one time. The student should keep in mind that it is not always necessary to go through an entire composition every day. It is useless to spend valuable time on sections that have already been mastered.

All great teachers agree that the intellectual aspect of practicing is more important than the actual physical training. Leschetizky even recommended that the student spend as much time studying away from the piano as he does at the piano. Philipp stated, "One practices first with the mind, the fingers follow." This truism is often forgotten by students who waste time repeating difficult passages without thinking. Practice consists of analytical and intelligent repetition of passages, or sections that present themselves as obstacles in attaining one's goals.

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4 Newman, loc. cit.
Intelligent practice means slow practice and frequent practice with the hands separately. This allows for the attention that must be paid to every detail of the composer's printed directions: notes, tempo, rhythm, phrasing, fingering, dynamic shading, touch, tone production, key resistance, harmonic content and form. These rudiments allow no compromise in exactitude.

Much time can be saved if the student listens critically to everything he plays and does not allow one tone to sound without considering its musical and rhythmic purpose.\textsuperscript{5}

The student must possess an inquisitive mind and experiment. Too often the first choice in fingering, interpretation, etc., is adhered to without any attempt made to discover if there is another way of doing it that would be easier or more effective.

II. MEMORIZING

That the composition will eventually be memorized should be kept in mind by the student, even when memorization is not the specific aim of the practice session. Many students have their pieces memorized by the time speed and technical fluency have been attained. Others, not so naturally gifted, will have to spend some time on memory work. Memorizing is important because: (1) it is the best means of taking the music off the printed page and making it a part of

one's self; (2) it forces one's attention to detail; (3) in rapid playing it is often necessary for the student's eyes to be directed at the keyboard; and (4) it eliminates note reading and page turning.  

There are four ways of memorizing: (1) auditory, (2) visual, (3) muscular, and (4) analytical.  

**Auditory memory.** This type of memory requires the ability to hear exactly what is happening and what is going to happen in proper sequence. Auditory memory is the most difficult to analyze and consequently should not be depended upon by itself. Naturally, those who play by ear find this the easiest.  

**Visual memory.** Visual memory implies the ability to visualize the printed page. As an inherent talent it is difficult to acquire.  

**Muscular memory.** Often called finger or tactile memory, this is the easiest type of memory to acquire, for the fingers can memorize while the mind is free to wander. Consequently, during performance, when faculties are most alert, this memory is least dependable.  

**Analytical memory.** Whereas muscular memory is subconscious memory, analytical memory is conscious memory and forces the performer to be aware of all musical details. Since it depends on thought, it is the safest type of memory. The most advantageous method is a combination of these four in conjunction with patience and diligent study.

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6Newman, op. cit., p. 111.

Little has been said about the important role of the teacher.\textsuperscript{8} What is his purpose? What should be his qualifications?

Dr. Newman believes that the most important mission of the teacher is to guide the student toward the day when the student can become his own teacher and a complete musical personality in his own right.\textsuperscript{9} The student must learn to make his own decisions.

All the teachers mentioned, with the exception of Deppe, were exceptionally fine pianists, and they agree that while the concert artist is usually a poor teacher, the teacher must be a perceptive artist. Mr. Rubinstein went so far as to say that it is impossible for a person to teach another something that he cannot do himself. Teaching by words alone can never be completely satisfactory.\textsuperscript{10}

The teacher must be able to analyze (1) the pupil's mental attitude; (2) what the pupil is actually doing; (3) what is wrong, if anything, with what he is doing; and (4) why is he committing a fault.

Teaching does not consist merely of pointing out such faults, but in clarifying the cause of these faults and directing the means of correction. Matthay illustrates this by saying that if a pupil fails to play a cantabile passage beautifully, it is useless to tell him to

\textsuperscript{8}See page 1.

\textsuperscript{9}Newman, \textit{op. cit.}, p. 72.

sing it or put more expression in it. The only way to help is for the teacher to tell him in concrete terms how to correct it physically; in this instance, by employing arm weight and flat fingers. This presupposes a complete understanding of the pianist's problems by the teacher. The teacher must also possess a knowledge of psychology and its application, for each student must be treated according to his own needs and personality.11

Perhaps this brief discussion has been irrelevant, for the act of teaching is theoretically impossible. The teacher can only (1) help the student learn; (2) provide an atmosphere conducive to learning; (3) direct the student to think for himself; and (4) by exhibiting enthusiasm for music and work, instill this enthusiasm in the student.

The purpose of music is to communicate the musical ideas of the composer to the people. The fulfillment of this purpose requires the communicative act, performance. The pianist who never performs is no musician. The fact that without performance there is no music requires the student to consider this problem. Performance is also justified because: (1) it marks periodic goals to which the student can work; (2) it affords an opportunity to view the student's work in perspective; and (3) it provides performance experience.¹

This chapter will treat two particular problems of performance: (1) interpretation, and (2) stage-fright. There are four other problems, the solutions to which are self-evident: (1) inadequate preparation; (2) performance of too difficult a composition; and (3) performance of a composition of greater length than the individual concentration span can handle; and (4) faulty practice habits.

More serious reasons for poor performance include: (1) defective musicianship; (2) unusual physical clumsiness; and (3) an emotional maladjustment.²

²Ibid.
I. INTERPRETATION

"Interpretation is the performer's individual way of stating exactly what the composer had to say." Good or bad, interpretation is the inevitable result of obedience to the laws of musicianship, technique, and practice. If the framework of musicianship and the foundation of technique are solid, and the method of construction through practice carefully planned and realized, the whole structure will be sound. Presupposing some native talent and experience, interpretation is a simple product of the natural law of cause and effect.

Command over interpretation implies command over technical resources. Though most technical problems were discussed in Chapter IV, the investigator arbitrarily selected the elements of tempo and rhythm, phrasing and shading, and pedaling to be discussed under the general topic of interpretation.

Tempo and Rhythm

The student often confuses the terms rhythm, meter, and tempo. Since music is a time art, it implies a progression and consequently a rhythmic pulse, which is but an extension of time. Rhythm is the "finding and asserting of this inner-pulse or heart-beat in each composition." Rhythm is achieved freely within the framework of the meter signature. Time or meter is the mechanical beat indicated by the meter

\[^3\text{Isidor Philipp, "Points on Piano Study," Etude, LXX (April, 1952), p. 10.}\]
signature. Tempo is the speed at which a composition moves.\(^4\)

**Tempo.** The problem of tempo usually resolves itself once all mechanical difficulties are overcome. However, a composition is conceived in a certain tempo and any excessive variance from that tempo during performance is a violation of the composer's intentions and alters the perspective of the composition. Changes in tempo within a composition must be evenly and delicately graded.\(^5\)

**Rhythm.** Rhythm is one of the most important elements of music. Leschetizky could tolerate any mistake made by a pupil except lack of rhythmic integrity and stability. Whenever a student played a piece unrhythmically, he was immediately ushered out of the room.\(^6\) Rhythmic indications should be strictly observed and maintained; not left to inspiration but carefully prepared according to a reasoned plan.

Rubato, though it implies *rhythmic* freedom, demands a strong sense of pulse. Rubato should never be thought of as a "time-spike" on one note but as a broad curve over several notes. According to Matthay, there are two types of rubato: (1) leaning rubato and (2) inverted rubato.\(^7\) In leaning rubato certain tones are emphasized by


giving them more than their expected time value, subsequently making up for lost time by accelerating the remaining tones of the phrase to enable an accurate return to the pulse. This pulse return should occur at the most important point of the phrase, usually near the end. Inverted rubato works on the opposite principle, whereby certain tones are emphasized by giving them less than their expected time value. When rubato is used, it must be accompanied by a variance in tone inflection.

Sensitive musicians often make two mistakes in their use of rubato: (1) overuse, and (2) exaggerated sentiment. Rubato should be used to depict agitation, a veiled impression, or some other indefinite emotion. Decision and definiteness are best expressed without it.

Deppe was opposed to any exaggerated use of rubato, believing that a simple statement is often all that is required. Anything else may detract rather than add to the effect. 8

Phrasing and Shading

Rubinstein considered phrasing and shading to be the most important vehicles of musical expression. Phrasing was defined, under the discussion on touch, as the causing of some tones to be connected and others detached. Styles of phrasing associated with a particular epoch (polyphonic) or composer (Mozart) are governed by the emotions motivating them (e.g. a lyric phrase neither begins sharply nor ends abruptly). 9

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Phrasing also implies a knowledge of phrase climax points. If a phrase contains an unusual feature, this feature is the climax point. Otherwise, the climax occurs normally on the last strong beat before the final note.\(^{10}\)

Shading is the subtle varying of dynamic expression, consequent on the natural law that the less tension applied, the less the intensity. This generally follows the melodic curve within the phrase.

**Pedaling**

The correct use of the pedal is a neglected study by many piano students. Its purpose is to provide shading. The damper pedal should never be used as a substitute for finger duration or a crutch to hide a technical deficiency. Nor should the soft pedal be used to conceal the fact that the performer does not have the muscular control required to play softly. Accuracy in pedal duration depends on accuracy in listening. All master teachers agree that the ear is the regulator for correct pedaling. Its proper use cannot be learned through printed directions, but through careful listening and stimulation of one's imagination.

Each register of the piano requires a different use of the pedal. The higher registers will allow a frequent and prolonged use of the pedal, but the lower register requires less pedal for purposes of clarity. A crescendo allows for more pedal than a diminuendo, and a descending

\(^{10}\)Newman, *op. cit.*, p. 95.
passage more than an ascending one.\textsuperscript{11}

Other than the various hybrid pedals (i.e. half pedaling), the master teachers recognize two types of pedaling. In the first kind, the pedal is pressed and released simultaneously with the corresponding action of the fingers. The second type is syncopated pedaling, in which the pedal is depressed immediately after the sounding of the tone and released at the sounding of the next one. Though used by Liszt, syncopated pedaling was a novel idea in the nineteenth century. Deppe was the first teacher to advocate its use. Since that time, most teachers recommend it.

\section*{II. STAGE-FRIGHT}

The typical performer will generally be nervous about public performance. Excitement is a healthy sign and conducive to good playing, but fear is detrimental and must be controlled. The first step in overcoming the problem is to understand what stage-fright is. "Stage-fright is not a sudden fear arising from facing an audience, but the state of mind induced by the anticipation of facing the audience."\textsuperscript{12} Since it is a mental problem, it can be cured mentally. The following suggestions will help the student understand and overcome the problem.\textsuperscript{13}

Acknowledge the fact that stage-fright does exist and can be remedied.

\textsuperscript{11}Philipp, loc. cit.

\textsuperscript{12}George MacNabb, "Get Rid of Your Stage-fright," \textit{Etude} LXIX (September, 1951), p. 11.

\textsuperscript{13}Ibid.
Be certain that the music is adequately prepared and rehearsed, eliminating any need for feeling insecure.

Get plenty of rest and keep in the best possible physical condition.

Force the mind to think positively of success rather than failure.

Realize the audience is there to listen to the music and not to watch the performer. This helps to rid one's self of self-consciousness.

During performance think only about the music. If this is done, there is no time to think of anything else.

Perform in public as often as possible.
Summary and Conclusions

I. Summary

Review of Definitions

Music. For the purposes of this study, music is defined as the communication of the musical ideas of the composer to the audience.

Musicianship. Musicianship is the sum of those attributes, which in combination, make one an effective musical thinker. These attributes are of two types: (1) those which have their source in intelligent and rational thought; and (2) those which have their source in native musical talent.

The acquired attributes that have their source in rational thought include: (1) the study of all phases of music and the related arts; (2) the cultivation of critical listening habits; (3) the ability to balance individuality of expression with the composer’s intentions; (4) the ability to balance emotion and reason; (5) dedication to music; (6) the ability to differentiate between what is and what is not important; and (7) facility in reading musical notation.

Those attributes derived from musical talent include: (1) the ability to distinguish subtle changes in pitch, tone duration, timbre, and rhythm; (2) the ability to play by ear; and (3) the intangible basis of musical intuition.
Technique. Technique is the sum of those traits that allow one to realize his musical ideas—the acquisition of muscular and mental coordination. The two broad areas of technical study are finger dexterity and the physical basis of tone production. These involve a knowledge and understanding of (1) position, (2) exercises, (3) use of the physical components of the leverage system, and (4) the various aspects of the act of touch.

Practice. Intelligent practice is the means by which musicianship and technique are acquired. Practice involves systematic and analytical repetition of any group of notes that presents itself as an obstacle in attaining one's goals. Memorizing is a necessary art and must also be practiced. The best means is through a combination of the four basic types of memory: (1) auditory, (2) visual, (3) muscular, and (4) analytical.

Performance. Performance is the communicative act of music. The investigator found the two principal problems of performance to be interpretation and stage-fright. Interpretation is the individual's way of expressing the ideas of the composer; and the study of it includes the study of rhythm, tempo, phrasing, shading and pedaling. Stage-fright is the nervous reaction in anticipation of facing an audience. It is a problem that can be remedied by an understanding of its nature.

Points of Agreement

The investigator believes that the master teachers would agree
on the following points.

Piano playing requires two acts: (1) mental conception, and (2) physical execution. Of these two, the intellectual is the more important act. By means of these acts, separately or in combination, the student is generally able to solve the four basic problems of musicianship, technique, practice, and performance.

Piano playing is only one phase of music study and should not be studied to the exclusion of the other phases of music or to the exclusion of the related arts.

Evenness of touch is essential to artistic piano playing.

The acquisition of a reasonable hand position is the first step in familiarizing one's self with the keyboard.

The muscular components, together with the instrument act as a leverage system.

Anyone can master mechanical dexterity through correct muscular habits, practice, and perseverance.

Once the hammer hits the string, there is nothing the hand can do to influence the sound.

Some sort of compensation is required to make up for the uneven length and muscular strength of the fingers.

Relaxation, meaning the happy medium between complete relaxation and complete contraction, is essential to ease in piano playing.

The pianist must understand the limits and capabilities of the instrument.

Exercises are valuable only to overcome specific weaknesses and when their purpose is thoroughly understood.

Tone has three characteristics: quantity, quality, and duration. The source of tone is in the mind.

Critical listening is the most important acquired faculty of the piano student.

The ear is the only regulator for correct pedaling.

Interpretation requires a balance between the performer's original ideas and the composer's intentions.

Performance is a necessary goal of piano study.
Slow and separate hand practice is necessary in order to attend to all the details of printed directions.

The teacher must be a fine pianist, a perceptive artist, and a master of psychology.

Points of Disagreement

The success of the methods of Deppe, Leschetizky, Matthay, Newman, and Rubinstein is due to the fact that they are well organized and consistent and because those teachers were able reduce large problems to their simple components. The points of disagreement usually occur within this process of reduction and in use of terminology and are consequently more apparent than real.

Touch and tone. Leschetizky taught that tone is physically dependent on the individual finger stroke. Matthay believed that tone depends on a knowledge of the instrument and is physically produced by an understanding and proper use of the various aspects of the touch act. Rubinstein said that tone, having its source in emotion, is physically produced by a balance of weight, pressure, and muscular energy. Newman maintains that there is no such thing as touch in relation to tone. For the accomplished pianist tone is completely governed by the musical senses. Only an illusion of touch is possible.

The investigator believes that the technical argument of whether touch is real or an illusion is irrelevant. Even if touch is only an illusion, this illusion is reality to the mind. Dr. Newman says that it makes no difference whether the key is struck by a finger or by a pencil. This is true, though the comment needs clarifying. If the key
is struck by a pencil, that pencil is still held by the hand, and consequently becomes but an extension of the arm lever, replacing the finger as the object in contact with the key. The point of difference between Newman and Matthay on this point is one of terminology and emphasis. Matthay believes the terms touch and playing are synonymous. Whereas Newman would say that tone is governed by the auditory senses, the muscular movements following automatically, Matthay insists that these muscular actions and inactions as prescribed by the mind must be learned. Perhaps Matthay's detailed study of the muscular movements involved in the act of touch is too complicated to be practical; and perhaps this thoroughness defeats his purpose by allowing one to forget ultimate goals. But the investigator does believe Matthay's basic philosophy is sound.

Muscular control. Matthay believed that complete control of key descent, even in rapid passages, is possible. Dr. Newman disagrees with this tenet. The investigator is inclined to agree with Dr. Newman, though in this case it may be a means of rationalizing the investigator's own inability.

Finger curvature. Matthay believed the amount of finger curvature varies with the quality of tone desired and the muscular strength of the fingers. Leschetizky and Deppe favored tightly rounded fingers, as a rule. Rubinstein advocated curved fingers, saying that the employment of flat fingers hampers facility and clarity of finger work. Newman believes that a tightly rounded finger strikes the key at an inward tangent, whereas a flatter finger can accomplish a more direct stroke. The
investigator believes the individual should choose the natural finger curvature that produces the desired effect.

Rotary movements. Matthey insisted that invisible forearm rotary movements are involved in all piano playing. Dr. Newman thinks that such movements are only involved in special effects such as the tremolo or broken chords, and then the value of such movements decreases with increased volume and shortened intervals. The investigator has found that, with himself, if too much conscious attention is paid to such movements, the wrist tends to become tense.

II. CONCLUSION

The investigator has concluded that there is no one way to play the piano. It is a highly individual art, and most rules or principles must be modified accordingly. The pianist must experiment with various ways of doing things, and though he can profit by the advice of authorities, he must eventually discover the way that is best for him.
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