Paul Hindemith Elementary training for musicians

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Elementary Training for Musicians

By PAUL HINDEMITH



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PREFACE

The music student entering a class in harmony is in general insufficiently prepared with respect to basic principles—governing Rhythm, Meter, Intervals, Scales, Notation—and their correct application. In all phases of his teaching, the harmony teacher has to face the fact that his students have no solid foundation to build upon. There is little doubt that, save in a few exceptional cases, the methods by which those basic principles are taught are deplorable. Most musicians pick up what they know of these things at random, along with their accumulating knowledge of more "practical" musical matters. Others do go through courses in Elementary Training, but in general these courses provide hardly more than a certain amount of casual information, and even if in some subsequent courses in Dictation a weak attempt is made to fill the gaps left open in the beginning, no real fundamental knowledge can be gained by so defective a method.

This book seeks to provide exercises which—if applied in the right way —must infallibly supply such fundamental theoretical knowledge. It is by no means the first comprehensive attempt to discuss elementary material. It does not even pretend to present this material in an original form. Its content has been set forth and explained countless times before, and there are some excellent books on the subject in various languages. But in order to understand the best works in this field and to make the proper use of them, one must already be a fairly advanced musician. Such a musician will find in them a remarkably good survey of the basic material, but a beginner will hardly be in a position to digest the overwhelming mass and variety of facts and procedures, or to select what is useful for him. Moreover, the exercises given in such books (when any are given) are insufficient.

There is, on the other hand, no lack of less comprehensive, more specialized works, full of exercises for the beginner. But here the difficulty is that those books that try to give general theoretical instruction are either antiquated, in opinion and approach, or insufficient for a professional's education; and in most cases their exercises seem to be made for the author's satisfaction and self-assertion rather than for the student's profit, or they are so dry that even the most docile user cannot see their relationship to living music.

There are numerous highly specialized text-books on Dictation, Sight-Singing and Sight-Reading, Ear-Training, Clef-Reading, and other subdivisions of our subject. But anyone who wished to collect his knowledge by picking it grain by grain out of comparatively elaborate books on comparatively minor subjects would have to spend years on that part of his musical education—which, after all, is but a preparation for more important things to come.

A musician brought up on the method of Solfège, as practised in countries under the influence of French or Italian musical culture, will probably deny that there could be any better method. And if one knows the comparitively high standard in sight-reading of melodic and rhythmic patterns (even higher in the rapid pronounciation of the solmisation syllables!) reached by students of this method, one is tempted to agree. But the disadvantages of this method show up later in the musician's course of study: it is extremely difficult to introduce students so trained to a higher conception of harmony and melody, and to bring them to a certain independence in their own creative work. They either cannot take the step out of their narrow concept of tonality (which by the uniform nomenclature for a tone *and* all its derivations is distorted almost to the point where reason turns into nonsense!), or they plunge more easily than others into what is assumed to be a new freedom: tonal disorder and incoherence.

There are still other methods which try to remedy the weakness of Solfège by expressing through all kinds of symbols (in writing, speech, and gesture) the meanings of the scale tones. These range from primitive information for amateurs to most consistently developed "functional" systems. The first category is negligible for the professional musician unless he wants to specialize in the teaching of amateurs—since it leads him no further than the first steps in the spatial and temporal conception of music. The second category erects in addition to (or instead of) our normal everyday elementary training other systems of theory, the assimilation of which takes more effort and time than the musician not specializing in theory can well afford.

No textbook, whatever the honest intentions of its author, and whatever the quality of its plan and contents, will remain uncriticized. I can easily foresee what the objections to the present book will be.

It will be said that the book is too comprehensive to be used by everyone. The student seeking only some superficial information does not want to digest too many uninteresting things. The highly specialized musician of today, knowing thoroughly the facts and procedures in his particular field of activity, cannot be expected to know everything. Helpful as it may be for a future conductor to have some experience in reading the various clefs, it would be a waste of time for a pianist to bother with such special problems. To sing the right tones at the right time may prove valuable for a singer, but when will a violinist ever be asked to do so? The violinist, in turn, must learn to be fluent in reading high notes, with many ledger lines, while such fluency can be of no value to a timpanist. Essential prerequisites for a player in an orchestra may be utterly unimportant for a virtuoso; increased knowledge of theoretical facts will not instantly improve a cellist's playing; practical experience in music is not necessarily a criterion for the quality of a composer's or theorist's ideas.

There is only one answer to these objections: they are unfounded. The exercises in this book are, in the first place, not written for the amateur's superficial information (although this kind of work will do him no harm, if he is interested). The words "for musicians" in the book's title define clearly its purpose. On the other hand, objections to all-round elementary training for musicians—such as is attempted in this book—can be voiced only by those who acquiesce in the present wide-spread deterioration in musical education.

Apparently the times are gone when no one was considered a good musician who did not possess, beyond his specialized instrumental or vocal achievements, a thorough knowledge of the subtle mechanism of music. Can the majority of to-day's great virtuosi stand a comparison of their theoretical knowledge with Liszt's, Rubinstein's, or Joachim's? Do not many of them bitterly complain that in their youth they were trained excessively in their special craft and not sufficiently in general musical subjects? Theoretical knowledge certainly will not directly improve a violinist's finger-technique; but is it not likely to broaden his musical horizon and influence his ability to interpret a composition? If our performers-players, singers, and conductors alike-had a better insight into the essentials of musical scores, we would not be faced with what seems to have become almost a rule in the superficially over-polished performances of today: either the rattling through of a piece without any reasonable articulation, without any deeper penetration into its character, tempo, expression, meaning, and effect-or the hyper-individualistic distortion of the ideas expressed in a composer's score.

As for singers, nobody denies that most of them are launched on their careers not because they show any extraordinary musical talents, but because they happen to have good voices. On account of this advantage a singer is usually excused from any but the most primitive musical know-ledge—knowledge such as could be acquired by any normal mind in a few weeks of intelligent effort. Rare indeed is the singer nowadays who can do what you would expect to be the most normal of all the activities of a singing musician: hit a tone at any interval, even if it is not part of a simple stepwise progression or an easily understandable broken-chord melody, and even if it is not directly supported by its accompaniment. Would a singer not profit by being led through a severe course of general musical training? It certainly would not hurt his voice to gain some

additional knowledge, which, although it will not immediately further his vocal aims, amounts after all to no more than that minimum of basic facts that a professional musician is supposed to know.

Admittedly, a composer can have wonderful ideas without a background of highly developed practical experience. But is it really imaginable that without such experience he should be able to present his ideas in their strongest form, and exploit them to the fullest extent? Owing to the general decline of such experience, the composer, once venerated as a super-musician, nowadays occupies almost the lowest ranks of musicianship as far as handicraft is concerned. How few are the composers of today whose achievements are based on their activities as players or singers-in bygone times considered the only sound and stable basis for creative work! All too often we see it happen that a fellow who is not good enough-physically or intellectually-for any instrumental or vocal work still finds a comfortable and uncontested place in the field of composition. The decision to become a composer is in many cases based on no better musical talent than that of listening to records and turning them at the right time (when a mechanical record-changer doesn't eliminate even this last remainder of musical "activity"). Is it strange then, that any tootling, key-pounding, or merely victrola- and radioactive high-school boy who has not written his first symphony before he is through his first year of harmony is already looked on with scorn by his classmates?

I should think that in this situation any method would be welcomed that aimed at keeping our noble guild of composers free of the nitwits and the ungifted. No composer-to-be or future theory teacher who after some practising is not able to do the exercises in the present book easily and thoroughly should be admitted to more advanced theoretical work. In a higher sense he ought to be regarded as unfit for any professional musical activity—which process of reckless weeding out could only be advantageous to our entire musical culture.

For those however, who by their natural musical gift and intelligence are eligible for any of the branches of musical activity, such a method will be the sound basis for their further musical development. They will find in the present book all a musician needs as a preparation for higher theoretical and practical studies, offered without detours and evasions. The book does not use solmisation syllables, since they are misleading. It avoids special names and fancy symbols, since they distract attention from the main object: the knowledge of all the basic conventions and facts of musical theory and their traditional representation in written form. This knowledge is presented through the most intensive kind of work: exercises. The great number of exercises compels the student to practise seriously. Thus it will be demonstrated that Elementary Theory cannot be learned by simply having superficial information handed out for one or two semesters, or without incessant exertion of the student's intellectual capacities. In his very first steps he must be converted from an attentive listener into a working musician. This can be accomplished only by making him articulate. The familiar type of theory class, in which one never hears a tone of music, sung or played, except for the chords pounded out on the piano by the teacher, must disappear! Such classes are as silly as is the usual splitting up of Elementary Training into separate courses of Instruction and Dictation, or of Harmony into "Written" and "Keyboard" courses. It certainly makes more demands upon a teacher to lead a class through an all-round course of theory or harmony, with its constant cross-references to the different sections of the student's activities, than to follow the comfortable, unimaginative path of a split-up course.

A lazy teacher will always present this excuse: How can a beginners' class be articulate if the students can neither sing nor play decently? The answer is that the teacher himself must make them sing and play-not like singers or advanced players, but so that they can open their mouths (willingly!) and produce tones just as any singer in a chorus does. It is quite common to find excellent instrumentalists (not to mention composers) who have gone through six or more years of practical and theoretical studies without ever having opened their mouths for the most natural of all musical utterances! What is true for singing is true for playing, too: every student can strike the keys of the piano enough to play primitive exercises, and if he is not constantly obliged to follow rules of fingering, hand position, and other technical directions, and if we give him time to practise those exercises, he may even develop a kind of unprejudiced, preliminary skill of playing, which can easily be used as a favorable preparation for future regular piano instruction. The same is true for all other instruments, on which, of course, many of the exercises can be played.

After these observations the aim of this book ought to be clear: it is *activity*. Activity for the teacher as well as for the student. Our point of departure is this advice to the teacher: Never teach anything without demonstrating it by writing and singing, or playing; check each exercise by a counter-exercise that uses other means of expression. And for the student: Don't believe any statement unless you see it demonstrated and proved; and don't start writing or singing or playing any exercise before you understand perfectly its theoretical purpose. To produce this kind of compelling activation demands some additional work from the teacher: the *statements* in this book are reduced to their shortest, most condensed form, which in most cases will be too difficult for the average student to understand. Hence the teacher is obliged to dilute and pre-

digest this material, he must find his own way to a more detailed demonstration. The *exercises*, on the other hand, are to be used in the form presented; but, even so, ample opportunity is given for further activities. Frequently enough the teacher will face the necessity of inventing additional exercises, and the student's imagination is constantly spurred by the recurring remark "Invent similar examples." Particularly eager students will find supplementary tests for their wits and their zeal in certain sections of exercises, marked "More difficult."

Each chapter of the book is divided into three sections, A. Action in Time; B. Action in Space; C. Coordinated Action. The first section contains exercises in Rhythm and Meter, both in their basic forms. Theories and exercises pertaining to the higher aspect of Rhythm--Musical Form-do not belong in this context of elementary training, but have their place in the curriculum of the advanced student, where they may be taught by the deductive method of Form Analysis, or the inductive method of Composition. (For similar reasons, no historical facts are given.) Action in Space comprises instruction about pitch, intervals, and scales, which in Coordinated Action is combined with the rhythmic and metric experiences of the first section. No information on chords, harmonic progression, or melodic structure is included, since this is likewise a part of more advanced theory courses. Interspersed in all three sections are complete courses in Notation and Dictation. Exercises for the latter, however, are given in the second part of the book, which during instruction in class is to be used by the teacher only, in order to preserve for the student the factor of unfamiliarity, essential to any kind of dictation.

The first two chapters contain exercises which without any effort can be done even by the most ungifted pupil. But from there on the material given can be mastered only by consistent practising, done in class and as homework. Even a talented student will notice that in order to overcome the progressively mounting difficulties he cannot depend on his musical instinct alone, but will be compelled to develop his ability to think logically, his acuteness, and his capacity for combining various elements. If teacher and student attack this task in the right spirit, as a well-coordinated team, the book's material will keep them busy for a year and a half or two years.

The question may arise how this material can be incorporated in a normal student's curriculum. My opinion is that nobody should be admitted to a harmony class unless he is able to do the exercises in at least the first two thirds of this book. The advantages are obvious: a student thoroughly trained in the basic principles of music is undoubtedly better prepared than other students for the understanding of harmonic technique and for rapid progress in mastering it. Such well-prepared students will not need other auxiliary courses (such as dictation and other *pontes asinorum*).

The book grew out of the demands of my classes in theory, and was written for the benefit of my students. Needless to say, then: all the examples have been tested thoroughly, and only those have been included that have proved their usefulness—this as an answer to the fears of the doubtful and the short-sighted.

New Haven, Conn. Yale University Spring. 1946 PAUL HINDEMITH

Part One

STATEMENTS AND EXERCISES

CHAPTER I

A. Action in Time

The most primitive form of temporal action in music is the use of tones of different length.

—— EXERCISE 1 ——

1. Tap with a pencil, or clap with your hands, or tap (standing in place or walking) with your feet, in moderate tempo a series of rhythmic strokes, at equal intervals of time:

| | | | | | | | | | | | | | | etc.

2. While tapping (or clapping), sing one long tone without changing its pitch:

3. Tap or clap the rhythm as before but sing the tone only on the strokes connected by brackets. All singing throughout this book is to be done on la la, unless other instructions are given.

(a)			1			1	1	ł		Γ	I	1			I	I	1	ł	١
(b)					I							I	1	I		Γ	1		
(c)						1		[1	Γ		1		Γ	٦	I	I
(d)				1	1			I	I					I	I	Γ		1	
(e)				ļ	Γ	7	I	Γ				1			I	Γ			
(f)	 Ī	1	Γ		I	-		1	Γ		I	Γ		I	Γ		ļ	Γ	
(g)	 Ī	ł					I	I	Γ		1				Γ				1
(h)				I		_	-	1			1	I		i	ł		1	Γ	

Invent similar examples.

- 5. Instead of singing the tone, play it on an instrument and tap the rhythm with one foot. If you use the piano:
 - (a) Play each exercise with the right hand and tap the rhythm;
 - (b) Play with the left hand; tap;
 - (c) Play with the right hand; tap the thythm with the left hand;
 - (d) Play with the left hand; tap with the right hand.
 - You will notice that there is a remarkable difference in difficulty between (c) and (d), and in similar cases throughout the book. Try each of these reversed-hands examples in very slow tempo at first, increasing the speed with each playing. More than any other exercises these will prove a touchstone for your independence of physical action and mental coordination.
- 6. Do all these examples in an accelerated tempo.

- DICTATION 1

NOTATION: The rhythms and the different lengths of tones in the preceding exercises can be represented by notes:

 $\circ =$ whole-note; corresponds with the tones whose duration was four claps or taps (metric beats),

or = *half-note*; duration of two beats: The dash is called a *stem*. Up-stems are attached to the right side of the note-head, down-stems to the left.

or $\int = quarter-note;$ one beat

1. Sing and tap as before:





NOTATION: (1) The omission of tones or rhythms is indicated by rests:

(2) The ending of each example is marked by a *double bar*:

— EXERCISE 3 —

1. Play and tap as before:

(a) •	٢	٢	٢	ſ	٢		٢	} 		٢		Ī	٢	٢	٢		٢	Ī	٢	
(b) k		٢	2			٢	F	٢	2		٢			F	٢	٢	٢	2		
(c) ද	•	٢	٢	٢	2	•	٢	٢	٢	2	Ī	٢		Ē	٢	•	٢	٢	٢	
(d)		Ē	٢		2		ſ	٢		٢	2		Ī	٢		2		٢	2	
(e) •	٢	ſ	ſ			•	٢			•			•	•	-	٢	0		٢	



2. Invent, sing, and play similar examples.

— DICTATION 3

B. Action in Space

The most primitive form of "spatial" action in music is expressed by singing or playing tones of different *pitch*.

—— EXERCISE 4 ——

- 1. Sing one steady tone of a few seconds' duration at a pitch comfortable for your voice; then sing a tone of a somewhat higher pitch; go back to the first tone; sing a tone somewhat lower; go back to the first tone.
- 2. The three tones may be marked m (middle), h (high), l (low). Now sing the following exercises:
 - (a) m m h m
 - (b) m l m l m
 - (c) m h m m l m
 - (d) m l·l m h h m
 - (e) h m l m h m
 - (f) l m l m h m l m h m
 - (g) h l m l h m h l m
 - (h) l h h l l h m

3. Invent similar exercises.

C. Coordinated Action

Our three symbols of note-values (\circ , \circ , \circ) may be placed upon, above, or below a line, marking the position of the middle, high, or low tone.

NOTATION: The rest equivalent to \mathbf{O} (whole-rest) is written hanging down from the line; the half-rest sticks up from the line; the quarter-rest can be placed above, on, or below the line.

— EXERCISE 5 —

1. Sing the notes; tap the beats:



- 2. Play the upper notes in the preceding exercises, tapping the lower ones. (On the piano, play with one hand and tap with the other; then change.)
- 3. Invent similar exercises.

---- DICTATION 4

CHAPTER II

A. Action in Time

The rhythmic values of \mathbf{o} , \mathbf{o} and \mathbf{o} , and the equivalent rests may be organized in regular groups of two or four beats.

NOTATION: (1) Such groups are divided by *bar-lines*: The space

between two bar-lines is called a measure.

(2) The constant number of beats between two bar-lines is indicated at the beginning of each example by the numerator of a common fraction (*time-signature*). The denominator shows what unit is to be counted as one beat

 $\left(\begin{array}{c} -\frac{1}{4} \mathbf{O}\right):\frac{2}{4}, \frac{4}{4}$. $\frac{4}{4}$ -time may also be marked **C**

(3) The rest for a complete measure is always -, whatever the time-signature may be, and it is always placed in the middle of the measure.

A note filling a complete measure is also placed in the middle of the measure except when shorter notes are written above or below it, to be sounded simultaneously with it. In such cases the long note is placed at the beginning of the measure.

— EXERCISE 6 —

1. Play (any tone) and tap. (In playing the piano follow the instructions given in Ex. 1, par. 5, p. 4.)

$$(\mathbf{d}) \mathbf{C} = \{\mathbf{a} \mid \mathbf{a} \mid$$

2. Invent similar examples, write them down, and play them.

3. Play and count aloud (instead of tapping):

$$(a) \begin{array}{c} 2 \\ 4 \\ 1 \\ 2 \\ 1 \\$$

4. Invent similar examples, write them down, and play them.

— DICTATION 5

5. Sing. Instead of counting aloud, count mentally.



6. Invent similar examples.

—— DICTATION 6

B. Action in Space

The middle, high, and low tones used in the preceding chapter are now to be used as tones of fixed pitch, having a fixed pitch-relationship to one another.

The middle tone is the tone a, which is to be found by using a tuning fork that produces this tone. In examples to be sung, women's and children's voices sing this tone; men's voices sing the tone a in the register comfortable for them (one octave lower).

NOTATION: (1) The one line used before is insufficient for higher purposes. We replace it by the *staff*, consisting of 5 lines:

$$4_{2_1}^{5_{2_1}}$$
 with four spaces: $4_{2_1}^{3_{2_1}}$

(2) The tones are represented by the note-values (\circ) placed upon the

lines or in the spaces:

(3) The stems of notes are drawn upwards for notes below the third line:

; downwards for notes above the third line:

The stems of notes on the third line may be drawn in either direction, but are more often drawn downwards.

(4) The name and meaning of the notes are determined by *clefs*.

(5) This tone g is the lower neighbor of the tone a, produced by the tuning

fork:
$$\frac{b}{a}$$
 The highest of our three tones is b: $\frac{b}{b}$

In examples to be sung, the procedure is always as follows:

- (a) strike the tuning fork;
- (b) taking its tone, *a*, as a starting-point, try to hear in your imagination the first tone of the example;
- (c) sing this tone first; then the other tones of the example.

NOTATION: A *hold* or *fermata* over a note or a rest shows that the regular counting of rhythmic beats is suspended and the tone or pause is of indefinite length—in most cases longer than the value indicated by the note or rest.

Check the b on the piano. (Is it necessary to mention that the piano a and the tone of the fork must be identical in pitch?)

Check the g on the piano.

4. Sing:



NOTATION: Sectional endings of a piece are marked:

The distance *a*-*b* and *g*-*a* is called a *whole-tone* (don't confuse with the whole-*note* !).

—— EXERCISE 8 ——

1. Try to sing one whole-tone lower than g. Check on the piano.

NOTATION: This tone is called *f* and is written: