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## THE LISTENING HAND: PIANO EXERCISES FOR CONTEMPORARY MUSIC

*The Listening Hand*<sup>1</sup> is the title I gave to piano exercises designed to further an understanding of and help facilitate the performance of respective branches of contemporary music.

My thanks go to Giuseppina La Face, my colleague Oliver Kern and all others involved in the organization of the conference on *Musicians and Musicologists as Teachers: How to Construct Musical Comprehension for Students* for the opportunity to present my two volumes within the framework of such an event.

“Constructing musical comprehension” – whether for children, interested amateurs, students or for ourselves – demands constant reference to the musical material itself. However, a reliable foundation is essential for every construction. These exercises hopefully provide elements of knowledge, components of a foundation that can prove useful in developing a greater comprehension of and a greater love for music written within the past sixty to seventy years. During my own University years I had some, but very little exposure to contemporary piano music. To a limited extent I confronted myself to what was offered outside of the Music School, but without having an employable set of criteria for listening and comprehending. It took many years before I consciously realized how my knowledge and understanding of music composed within the framework of the major/minor tonal system – with Debussy as a very special exception – was wholly dependant on my knowledge and understanding of the systemization of the major and minor modes – scales, triads, arpeggios, alterations, modulations, transpositions. Solely because of the underlying system is it possible to recognize the ‘unusual’, the genius of imagination, of association, combination, of the dissection and the development of ideas.

It would go too far beyond the limits of this presentation to look into the complexities of the relationship between harmony and rhythmical models or patterns – but that will be one aspect of my third and final volume of these exercises which will be published soon.

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<sup>1</sup> C. VICKERS, *The Listening Hand*, Volumes I and II. © 2007 and 2008, Schott Music GmbH & Co. KG, Mainz, Germany. All examples printed with friendly permission by Schott Music. Extract from Vol. I.

### *1. Origin of the Exercises*

Before describing the principles of these exercises, it is perhaps of interest for the purpose of this context to briefly relate why I felt compelled to make an attempt to extract some phenomena of contemporary music from their compositional context and form exercises around them.

Two personal experiences were decisive. (1) During my years as a student, many of my peers and even more of the professors never tired of repeating how hard and harsh the sound quality was of those pianists who extensively played contemporary music. This was true, I could only agree – but no one asked ‘why’. All seemed in agreement that the music itself was responsible. (2) Very shortly after ending my formal studies I learned the first Piano Sonata by Pierre Boulez. I performed it fairly often – but very seldom without many wrong notes. Reflecting on the numerous mistakes, I came to realize that my hands had been trained to grasp intervals of thirds, sixths, octaves and fifths and not so intensely trained for the grasping of seconds, fourths, sevenths and ninths. A tight and fearful hand can produce extremely harsh sounds on a piano.

It became necessary for me to expand habits that had grown and served me for over two decades. My many years of teaching have been years of trying to encourage young people to expand without prejudice and without fear.

Musical awareness, musical comprehension is dependant on certain conditions. Actively training one’s musical memory while listening, is one condition. One of the most important conditions however, is the high velocity of an emotional reaction. Intellectual pleasure is also an emotion! Presuming that the ears can analytically and in micro fractions of seconds follow and recognize the paths that the sounds and the silences take, the emotional, spiritual, intellectual reactions to the chain of musical events which ideally culminate in the experience of a voyage, is perhaps what we call musical comprehension.

My exercises are based on the premise that knowledge can help incite recognition and recognition can lead to more rapid emotional-intellectual satisfaction.

It is impossible to execute many of these exercises without simultaneously thinking. I can only encourage and emphasize the advantages of trying to feel what the hands are doing, to listen to what they are doing and to reflect on what they are doing.

### *2. Messiaen’s Seven Modes*

For several years I collected passages from early modern to contemporary piano works that needed great attention before I could play them, realizing at the same time that I could not simply use the given notes and call the repetitions there of “exercises”.

So I began simply constructing scales using diverse interval patterns. After writing two or three, I very shamefully realized that such a systemization had already been accomplished and published in 1944 by Olivier Messiaen.

Volume I presents all seven Messiaen modes, including the only possible transpositions. Repeating and listening attentively to such intervals while finding the keys can heighten one's awareness of interval constellations. There are innumerable examples of passages in contemporary music that follow the pattern of the second mode (half tone - whole tone - half tone - whole tone, etc.). Having that pattern in the ear makes it possible to delight in a passage like this one:  $\frac{1}{2} - \frac{1}{2} - \frac{1}{2} - 1 - \frac{1}{2} - 1 - \frac{1}{2} - 1 - \frac{1}{2} - \frac{1}{2} - 1 - 1$ . One hears the irregularities with greater recognition (Mus. Ex. 1).

The image shows a musical score for a piano exercise. At the top left, there is a treble clef, a key signature of one flat (B-flat), and a tempo marking of 144. The score consists of a single staff with a series of chords and intervals. Above the staff, there are markings for dynamics: 'pppp' and 'sempre'. The notes are arranged in a sequence that follows the interval pattern mentioned in the text: half tone, half tone, half tone, whole tone, half tone, whole tone, half tone, whole tone, half tone, half tone, whole tone, whole tone.

Mus. Ex. 1. – NICOLAUS A. HUBER, *Beds and Brackets* (1990) für Klavier mit zu öffnenden Türen und Fenstern oder Tonband. © 1991 by Breitkopf & Härtel, Wiesbaden, Germany.

I went beyond the seven modes with three further scales – not divisible in octaves. For example: large third, whole tone, half tone, etc. The number of possible combinations is infinite.

The first volume of the exercises introduces the entire tonal material used in all three volumes – Messiaen modes in diverse forms.

Scales occupy the first 27 pages. It was with purpose that I had all the ledger lines printed, waiving the use of the signs 8----- or 15-----. It is particularly important for contemporary music to develop a capacity of hearing and thinking of notes as individuals rather than as a twin or a fortification one or two octaves higher or lower. There are not so many extra notes to learn to read.

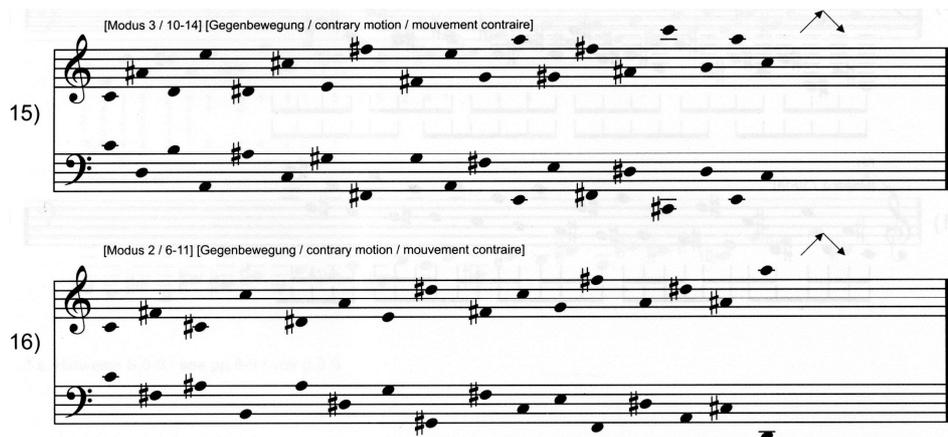


14) Now again the thumb leads – here mode 3 and intervals of ninths and sevenths. Any mode can be used. In my introduction I encourage the students to keep music paper beside them so as to notate any modes or intervals they wish to work on (Mus. Ex. 2*b*).



Mus. Ex. 2*b*. – *The Listening Hand*, vol. I, p. 40.

Nos. 15) and 16) are certainly the most difficult of all the exercises. Contrary motion demands extensive brain usage! (Mus. Ex. 3).



Mus. Ex. 3. – *The Listening Hand*, vol. I, p. 40.

The intervals are also to be practised in the solid form and not only broken.

The shifting of the intervals over several octaves is not unusual in contemporary piano works. The exercises continue with a technique we of course already experience with Brahms.

No. 11) Mode 5 - 4th transposition. I greatly simplified the chromatic notation by using sharps while ascending and flats descending. This section makes use of the entire keyboard (Mus. Ex. 4).

[Modus 5 abwärts / descending / descendante]

11)

Mus. Ex. 4. – *The Listening Hand*, vol. I, p. 49.

#### 4. Tone Complexes

The next aspect introduces tone complexes as opposed to ‘chords’ that were long dependant on major/minor harmonic structures. Terminology – new terminology – is not yet globalised. But even the terminology can entice the ears to go beyond major/minor listening.

The same modal material is always used. Here the usage of sharps and flats is completely irregular and illogical. It was more important to make this section readable.

This example (Mus. Ex. 5) shows Mode 1 tone complexes ascending by Mode 3.

[Modus 1 Tonkomplex - Modus 3 steigend / Mode 1 Tone complex - ascending mode 3 / Mode 1 complexe de sons - Mode 3 en montant]

7)

Mus. Ex. 5. – *The Listening Hand*, vol. I, p. 52.

The tone complexes are also permuted (as opposed to inverted), ascend chromatically or in any desired mode and divided in several ways (Mus. Ex. 6).

[Modus 2 lagenpermutiert / registrally permuted / permuté au niveau des registres]

5	5	5	5	5	5 4	5	5	5	5
4	3	4	4	4	4 3	4	4	4	4
3	2	3	3	3	3 2	3	3	3	3
2	1	1	2	2	2 1	2(1)	2	2(1)	2
1	1	2	1	1	1 1	1(2)	1	1(2)	1

11)

Mus. Ex. 6. – *The Listening Hand*, vol. I, p. 53.

14) One sees the tone complexes taken apart. We have groups of notes – all teaching the hands to hear and to listen (Mus. Ex. 7).

Musical score for Exercise 14, consisting of two staves (treble and bass clef). The score is divided into eight measures. The first two measures show complex rhythmic patterns with fingerings (1-5) and accents. The remaining measures show more complex rhythmic patterns with various fingerings and accents. A double-headed arrow is positioned above the final measure.

Mus. Ex. 7. – *The Listening Hand*, vol. I, p. 55.

16) Here we have the discovery of registers and hear relationships spread apart (Mus. Ex. 8).

Musical score for Exercise 16, consisting of two staves (treble and bass clef). The score is divided into eight measures. The first two measures show sparse notes with vertical lines above and below the staves representing registers. The remaining measures show more complex rhythmic patterns with various fingerings and accents. A double-headed arrow is positioned above the final measure.

Mus. Ex. 8. – *The Listening Hand*, vol. I, p. 56.

### 5. Volume II

Volume II uses precisely the same tone material but is geared towards refinement and expansion – with dynamics, the use of the pedals, diverse attacks, articulation and playing inside the instrument.

Shortly before this second volume was published, I read a newspaper article headlined *No blast, no chance*. The reporter commented further: “Pop music has relinquished all differences between loud and soft. The results are recordings on the verge of din.” Only a few years previously Karlheinz Stockhausen claimed that dynamics in music were totally weak and underdeveloped.

For centuries, growing dynamic differentiations have been a vital musical parameter. Tchaikovsky notated a sixfold *pianissimo*, later a sevenfold *pianissimo* was notated by Luigi Nono. During the period of serial composition, the attempt was made to extend the number of dynamic levels to twelve, corresponding to the number of tones.

The listing of dynamic levels that appear in *Structures* for two pianos by Pierre Boulez goes from *pppp* (a double *pianissimo*) to a double *fortissimo* (*ffff*). He has gradations of *mezzo piano*, *quasi piano* and *meno piano* – the same with *forte*.

Certainly sounds in extreme dynamics do not necessarily “possess” a measurably altered level of a dynamic, but are pointers. Some composers – for instance Dieter Schnebel and Nicolaus A. Huber use arrows pointing up or down in combination with a dynamic marking as a further indication of alteration.

How differentiated are our ears? As a pianist I of course ask what our ears demand from our hands. Extensive use of signs and markings help explain the music – they are there to simplify understanding.

There is great satisfaction in differentiation and room for differentiation in complexity. Today we experience in many situations a fear of complexity. There can also be joy in complexity. The history of civilization is a history of detail. The desire to avoid pathos in post second world-war compositions should not be underestimated. Extreme differentiations demand rapid shifts of focus.

Exercise 6) should incite an awareness of the problems and effects on the relationship between registers and dynamics (Mus. Ex. 9).

6) [Modus 7]

*pp* ————— *p* ————— *mp* ————— *mf*  
*ff* ————— *f* ————— *mf* ————— *mp*

Mus. Ex. 9. – *The Listening Hand*, vol. II, p. 6.

No. 9) To skip over dynamic levels, attentive listening while simultaneously feeling the hand is necessary (Mus. Ex. 10).

9) [Modus 5/6 - 10]

*mpp mf mpp pp mpp p mpp f mppmp mpp ff mpp mf*  
*mpp f mpp p mpp pp mpp p mppmp mpp mf mpp f*  
*mpp mff mpp mp mpp f mpp pp mppmf mpp pp mpp mp*  
*mpp ff mpp mf mpp p mppppp mppppp mpp p mpp f*

Mus. Ex. 10. – *The Listening Hand*, vol. II, p. 6.

My pedagogical experience has taught me that the use of the terms *mezzo pianissimo* and *mezzo fortissimo* also induces possible differentiations. I further hope to broaden the emotional experience of students by using comparisons such as ‘lazy forte’ or ‘joyous fortissimo’.

This page again explores registers. The student is encouraged to first decide on dynamics and then to improvise with dynamics (Mus. Ex. 11).

20)

*p ff p mf pp mf ff p mf p mf pp usw.*

Mus. Ex. 11. – *The Listening Hand*, vol. II, p. 9.

Example no. 12 is a game of serial dynamics. I did receive feedback that it enhanced the pleasure of learning Messiaen’s *Modes de valeurs et d’intensités* for a young student (Mus. Ex. 12).

Unabhängig vom Register: 1 Ton – 1 Lautstärke Tauschen Sie die Lautstärken aus.	Independent of register: 1 tone – 1 dynamic Interchange the dynamics.	Indépendamment du registre : 1 note – 1 intensité de son Alternez les nuances d’intensité.
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[Modus 2]

*p mf pp f ff mp mpp mff*

23)

*p ff mf pp f f mp ff pp mf ff f mp mpppp mff mp ff mpp f*

Mus. Ex. 12. – *The Listening Hand*, vol. II, p. 11.

A technique we know from Schumann’s *Papillons* is extensively used in contemporary piano compositions. How keys are released is just as important as how keys are attacked. Actually I consider it to be even more important since the release sets the conditions for the following attacks (Mus. Ex. 13).

Loslassen als Umkehrung vom Anschlag      Release as the inversion of the attack      Le relâchement des touches en tant que renversement de la frappe

24)

Mus. Ex. 13. – *The Listening Hand*, vol. II, p. 34.

The same as with example 13 must be applied to the pedal. No. 1) is a very basic exercise that is of limited value since it is divorced from the ear, however I know that for some students it is necessary (Mus. Ex. 14).

1)

*sfz f sfz f sfz f sfz f p p p p p p p p*

*f mp f mp p pp p pp p pp f f f f pp pp pp pp*

Mus. Ex. 14. – *The Listening Hand*, vol. II, p. 12.

Still using the modal material, Volume II introduces several techniques of attacks and releases: silently pressed keys, re-grasping, half-key pressure, blocked keys, clusters with the hands, the side of the hands, forearms with and without hands and fingers, rolling the clusters and accentuating certain notes within the clusters (Mus. Ex. 15).

6)

*sfz sfz* usw.

usw.

7)

usw.

Mus. Ex. 15. – *The Listening Hand*, vol. II, p. 38.

Messiaen and Boulez used up to 12 different signs for articulations. Were it not for the enormous stimulation that one's own sense of tonal colour experiences, I would almost be inclined to speak of exaggerated differentiation.

Schoenberg's markings are considerably easier to comprehend, but difficult enough to realize. Using Schoenberg's articulations the scales, intervals, registers and tone complexes from Volume I can be repeated.

The final group of exercises in Volume II go from the keys to the strings: muting the sound, tapping, brushing, plucking and rubbing the string and finally using simple preparations to further educate the ears – wax paper, writing paper, aluminium foil, plastic folders – all produce different sound results (Mus. Ex. 16).

<p><b>Geniessen!</b> Benutzen Sie weitere Tongruppen – gespreizte Lage – und improvisieren Sie mit allen acht Techniken (Flageolette, dämpfen, senkrecht schlagen, wischen, zupfen, Gegenstände auf den Saiten bewegen, Saiten reiben/kratzen und Präparationen).</p>	<p><b>Enjoy!</b> Use further note groups – spread registers – and improvise with all eight techniques (harmonics, muting, tapping, brushing, rubbing/scratching, plucking, moving objects on the strings and preparations).</p>	<p><b>Appréciez !</b> Utilisez d'autres groupes de notes – position écartée – et improvisez en appliquant les huit techniques (flageolets, étouffer, frapper verticalement, effleurer, pincer, froter/gratter, déplacer des objets sur les cordes et préparations).</p>
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The image shows a musical score for piano exercises, labeled 'Mus. Ex. 16'. It consists of two systems of music, each with a treble and bass clef staff. The first system starts with a treble clef staff containing notes and rests, with markings like 'pizz.' and 'x' above. The bass clef staff has notes and rests, with a 'pizz.' marking above. The second system features more complex markings, including 'Gliss.' with a wavy line, 'präparieren' with a squiggly line, and 'usw.' at the end. There are also various 'x' and 'pizz.' markings throughout.

Mus. Ex. 16. – *The Listening Hand*, vol. II, p. 51.

The third volume of my exercises will not only introduce rhythmical questions but will also afford numerous examples of piano literature that demonstrate the phenomena I have attempted to extract. The lack of constant repetitions of metrical patterns, for example, still makes it difficult, also for many musicians, to hear and enjoy a great deal of contemporary music. A personal experience of learning to hear and learning to listen can be unforgettable.

It is plenty of work but playing children also work very hard – they simply lack the consciousness of their doings.

As far as we know, the human mind is the most complex thing in the universe. Art – composition and the execution thereof – is a form of thinking.

It is a great privilege to live a life as a musician and to follow the windings of unique minds. Every attempt we undertake to open these insights for young people are worth our efforts.