

## Assessing Music Expertise: The Berlin Gehoerbildung Scale

**Supplementary Material**

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**Table of Content**

<b>Bifactor model</b> .....	2
<i>Figure S1. Bifactor model with standardized parameter estimates</i> .....	3
<i>Table S1. Proportion of variance explained (R<sup>2</sup>) for each item in the bifactor model</i> .....	3
<b>Qnyx model files</b> .....	4
<b>Audio samples and compositions</b> .....	5
<i>Table S2. List of audio files and their corresponding items in BGS</i> .....	5
<i>Table S3. List of compositions in BGS</i> .....	5
<b>Additional instructions</b> .....	6
<i>Table S4.1. Additional Instruction for partial credits in Item 5.3 (English)</i> .....	6
<i>Table S4.2. Additional Instruction for partial credits in Item 5.3 (German)</i> .....	6
<b>The Berlin Gehoerbildung Scale task and solution PDF(English and German versions)</b> .....	7

### Bifactor Model

In addition to the two models presented in the main text, we also fitted the data to a bifactor model, according to which each item loads on both a general factor as well as on one of four orthogonal subscales. The rationale for fitting a bifactor model is that if the bifactor model showed that items predominantly load on the subscale-specific factors, with little or no variance accounted for by the general factor, then there would be no need to assume a general factor, and music expertise would consist of several independent dimensions. Results of the bifactor model showed, however, that items loaded predominantly on the general factor and the model fit was very similar to the one of the hierarchical model. The factor score estimates of the general factor music expertise of the bifactor model were highly correlated to those of the hierarchical model,  $r(57) = .98$ ,  $p < .0001$ . As a reference for future investigation of the Berlin Gehoerbildung Scale (BGS), we include details of the bifactor model here:

In the bifactor model, each item loads on the general factor as well as on a specific group factor representing one of the four subscales of the BGS. These subscale factors are orthogonal to the general factor, and to one another. The factor, Dictation, had only two indicators and we modeled it as a simple correlation. The model first converged on a solution with negative residual variances. As the residual variance of item 8 turned out to be problematic, item 8 was dropped from the factor “Chords and Cadences”. Therefore, “Chords and Cadences” only had 2 indicators and thus its specific ability factor was collapsed into a single covariance between items 7 and 9. The bifactor model and its standardized factor loadings are presented in Supplementary Figure 1. Variance Explained (R<sup>2</sup>) for each item by the latent structure is summarized in Supplementary Table 1. The model fit the data adequately, though the RMSEA was slightly above conventional thresholds,  $\chi^2 = 75.40$ ,  $df = 45$ ,  $CFI = .96$ ,  $SRMR = .05$ ,  $RMSEA = .11$ , 90% CI [.06, .15].

The bifactor model of music expertise provides an opportunity for direct comparison of the relative contribution of each item to both the general factor and the specific factors. The general factor and specific factors are both first-order factors in bifactor models, with each item loading onto the general factor and its group factor. Here, the bifactor model can determine whether items measuring subdimensions of music expertise define distinct group factors as well as measuring general music expertise. Note that in this model, specific music abilities are assumed to be independent from general music expertise. If the BGS is capable of assessing musicians' general music expertise and specific music abilities, one would expect similar loadings onto the general factor and to the specific factor. However, in our study, items in the bifactor model loaded strongly onto the general factor, and loadings onto the specific music abilities factors were weaker. These



differences suggest that the general factor is more important than the specific music abilities factors accounting for covariation among the items in the BGS. This could mean that the bifactor model does not accurately represent how the BGS measures music expertise and its specific music abilities.

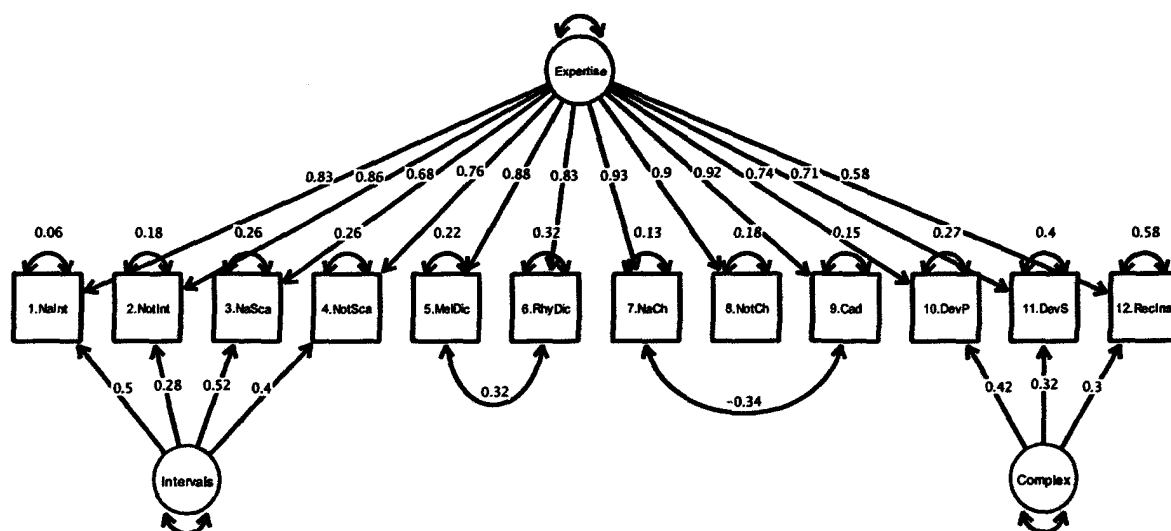


Figure S1. Bifactor model with standardized parameter estimates.

Table S1. Proportion of variance explained ( $R^2$ ) for each item in the bifactor model.

Items	Bifactor Model
1. NaInt	0.94
2. NotInt	0.82
3. NaSca	0.74
4. NotSca	0.74
5. MeDic	0.78
6. RhyDic	0.68
7. NaCh	0.87
8. NotCh	0.82
9. Cad	0.85
10. DevP	0.73
11. DevS	0.60
12. Reclns	0.42

**Onyx model files**

The specified unidimensional, hierarchical, and bifactor models are available at <https://osf.io/wgk28>. All models are in .xml format and can be opened using the Structural Equation Modeling software Onyx (von Oertzen, Brandmaier, & Tsang, 2015). Onyx can be downloaded at <http://onyx.brandmaier.de>.

One can compute latent scores for both the first-level and second-level factors using the feature “Estimation” in Onyx given the raw item scores of a person.

## Audio Samples and Compositions

See Table S2 for names of the audio samples and their corresponding items in the BGS. Nine audio samples were original excerpts or edited excerpts from classical music pieces (see Table S3 for the list of compositions). Audio samples are password-protected at <https://mpibox.mpib-berlin.mpg.de/d/16459d54415746a7a8f4/?p=%2F&mode=list>. Requests for password can be made to Ziyong Lin, at the Center for Lifespan Psychology, Max Planck Institute for Human Development ([ziyong@mpib-berlin.mpg.de](mailto:ziyong@mpib-berlin.mpg.de)).

Table S2. List of audio files and their corresponding items in BGS.

Items	Audio File Names	Items	Audio File Names
1.1	01_Naming_Intervals_1.wav	4.3	04_Notating_Scales_3.aif
1.2	01_Naming_Intervals_2.wav	5.1	05_Melodic_Dictation_1.wav
1.3	01_Naming_Intervals_3.wav	5.2	05_Melodic_Dictation_2.wav
1.4	01_Naming_Intervals_4.wav	5.3	05_Melodic_Dictation_3.wav
1.5	01_Naming_Intervals_5.wav	6.1	06_Rhythmic_Dictation_1.wav
1.6	01_Naming_Intervals_6.wav	6.2	06_Rhythmic_Dictation_2.wav
1.7	01_Naming_Intervals_7.wav	7.1	07_Naming_Chords_1.wav
1.8	01_Naming_Intervals_8.wav	7.2	07_Naming_Chords_2.wav
1.9	01_Naming_Intervals_9.wav	7.3	07_Naming_Chords_3.wav
1.10	01_Naming_Intervals_10.wav	7.4	07_Naming_Chords_4.wav
2.1	02_Notating_Intervals_1.wav	7.5	07_Naming_Chords_5.wav
2.2	02_Notating_Intervals_2.wav	7.6	07_Naming_Chords_6.wav
2.3	01_Notating_Intervals_3.wav	7.7	07_Naming_Chords_7.wav
2.4	01_Notating_Intervals_4.wav	7.8	07_Naming_Chords_8.wav
2.5	01_Notating_Intervals_5.wav	8.1	08_Notating_Chords_1.wav
2.6	01_Notating_Intervals_6.wav	8.2	08_Notating_Chords_2.wav
2.7	01_Notating_Intervals_7.wav	8.3	08_Notating_Chords_3.wav
2.8	01_Notating_Intervals_8.wav	8.4	08_Notating_Chords_4.wav
2.9	01_Notating_Intervals_9.wav	8.5	08_Notating_Chords_5.wav
2.10	01_Notating_Intervals_10.wav	9.1	09_Cadences_1.wav
3.1	03_Naming_Scales_1.aif	9.2	09_Cadences_2.wav
3.2	03_Naming_Scales_2.aif	10	10_Identifying_Deviations_piano.aiff
3.3	03_Naming_Scales_3.aif	11	11_identifying_Deviations_sq.wav
4.1	04_Notating_Scales_1.aif	12.1	12_Recognizing_Instruments_1.wav
4.2	04_Notating_Scales_2.aif	12.2	12_Recognizing_Instruments_2.aiff

Table S3. List of compositions in BGS.

Items	Composition
5.1	Accent from the Lamentations of Jeremiah
5.2	André Werner, 19 Tone Series
5.3	Johann Sebastian Bach, Trio Sonata No. 1 in E flat major, BWV 525
6.1	Johann Sebastian Bach, Trio Sonata No. 3 in D minor, BWV 527
6.2	Arnold Schönberg, String Quartet No. 2, Op. 10
10	Domenico Scarlatti, Sonata in F minor, K. 19
11	Dmitri Shostakovich, String Quartet No. 13, Op. 138
12.1	Maurice Ravel, Piano Concerto in G major, M. 83
12.2	Arnold Schönberg, Serenade, Op. 24

**Additional Instructions***Table S4.1. Additional Instruction for partial credits in Item 5.3 (English).*

Voices	Bar	Points
<u>Upper Voice</u>	Pickup – Bar 1, 1st to 9th quarters correct	≤ 10
	Bar 1, 10th to 12th quarters correct	≤ 10
	Bar 2, 1st to 6th quarters correct	≤ 10
	Bar 3, 7th quarter to the end correct	≤ 10
<u>Lower Voice</u>	Bar 1, 4th to 10th quarters correct	≤ 10
	Bar 1, 11th to Bar 2 6th quarters correct	≤ 10
	Bar 2, 7th quarter to the end correct	≤ 10

*Table S4.2. Additional Instruction for partial credits in Item 5.3 (German).*

Stimme	Takt	Punkte
<u>Oberstimme</u>	Auftakt - T.1, 9. 8tel richtig	≤ 10
	T.1, 10. - 12. 8tel richtig	≤ 10
	T.2, 1. - 6. 8tel richtig	≤ 10
	T.2, 7. 8tel bis Schluß richtig	≤ 10
<u>Unterstimme</u>	T.1, 4. - 10. 8tel richtig	≤ 10
	T.1, 11. 8tel - T.2, 6. 8tel richtig	≤ 10
	T.2, 7. 8tel - Schluß richtig	≤ 10



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**Date:** \_\_\_\_\_

**ID:** \_\_\_\_\_

# 1

Note the name and direction of the intervals you hear:

- |          |           |
|----------|-----------|
| 1) _____ | 6) _____  |
| 2) _____ | 7) _____  |
| 3) _____ | 8) _____  |
| 4) _____ | 9) _____  |
| 5) _____ | 10) _____ |

# 2

Complete the intervals you hear (Initial/lower tone is given):

The image shows two musical staves, each with five measures. The first staff is in G major (one sharp) and the second is in D major (two sharps). Each measure contains a single note in the bass clef, and the rest of the staff is blank for completion.

1	2	3	4	5
6	7	8	9	10

## Intervals and Scales

### 3

Name the scales you hear and their directions (ascending/descending):

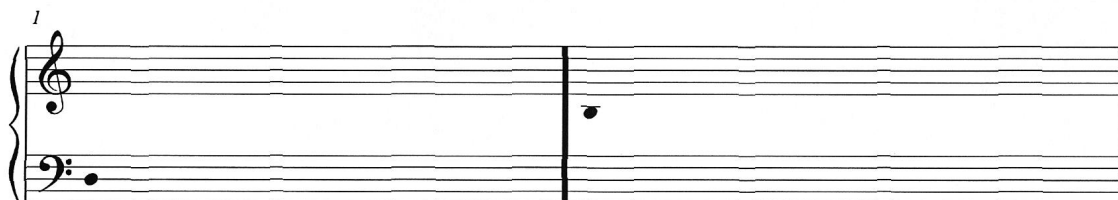
1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

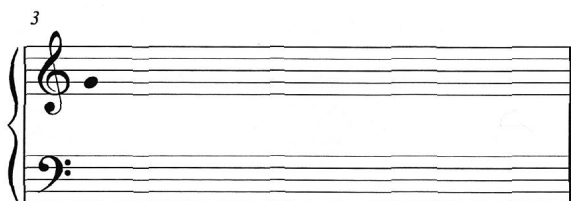
### 4

Write and name the scales you hear (Initial tone is given):



1) \_\_\_\_\_

2) \_\_\_\_\_



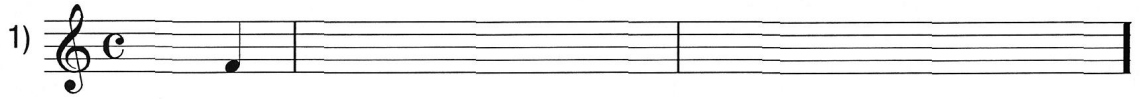
3) \_\_\_\_\_

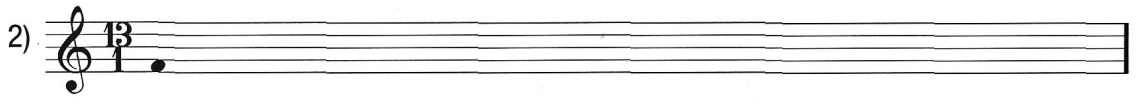


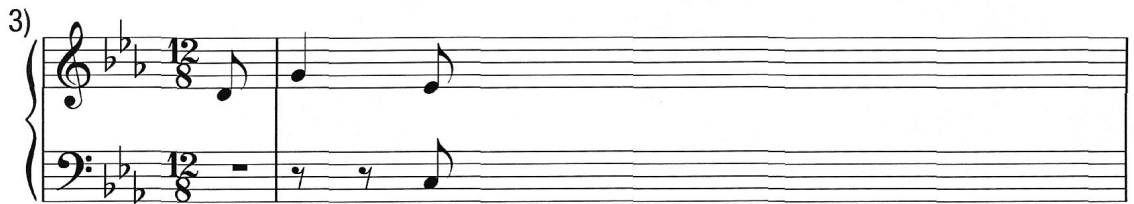
## Dictation

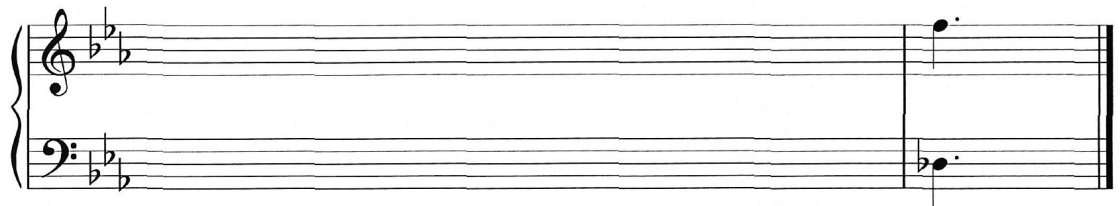
# 5

Write out the excerpts you hear:

1) 

2) 

3) 







Chords and Cadences

7

Name the chord you hear and indicate the corresponding position:

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_
- 6) \_\_\_\_\_
- 7) \_\_\_\_\_
- 8) \_\_\_\_\_

8

Write and name the chord you hear above the given bass note:

The musical notation for task 8 consists of a grand staff with five measures. The bass clef is on the left, and the treble clef is on the right. The time signature is common time (C). The notes in the bass clef are: 1) C4, 2) D4, 3) E4, 4) F4, 5) G4. The treble clef staves are empty. Below the staff, there are five numbered lines for writing the chord names: 1) \_\_\_\_\_, 2) \_\_\_\_\_, 3) \_\_\_\_\_, 4) \_\_\_\_\_, 5) \_\_\_\_\_.

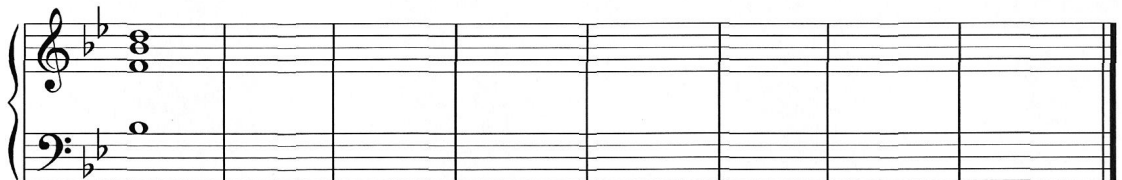
Chords and Cadences

9

1) Write the cadence/modulation you hear and specify the functions/degrees:



2) Write the succession of chords you hear and specify the functions/degrees:



## Complex Listening

# 10

You will hear a music sample.

Compare the following score to the sample you hear and annotate possible deviations and errors in the score.

*Allegro*

*Klavier*

*mp*

The musical score is written for piano in 2/4 time. It consists of two systems, each with four measures. The first system begins with a piano (*mp*) dynamic marking. The melody in the right hand starts with a quarter note G4, followed by eighth notes A4 and B4, and then a quarter note C5. The bass line in the left hand consists of a whole note chord (G2, B1, D2). The second system begins with a measure number '5' above the staff. The melody continues with a quarter note D5, followed by eighth notes E5 and F5, and then a quarter note G5. The bass line continues with a whole note chord (G2, B1, D2). The score ends with a double bar line.



## Complex Listening

# 11

You will hear another music sample.

Compare what you hear with the score you see here and annotate possible deviations/errors.

**Adagio**  $\text{♩} = 64$

Violino I  
Violino II  
Viola  
Violoncello

**1**

*p espr.*  
*p espr.*  
*p espr.*

**2**

*p espr.*

**Complex Listening**

**12**

1) Which orchestral instruments can be heard in succession as the soloist?

- |          |          |
|----------|----------|
| 1) _____ | 5) _____ |
| 2) _____ | 6) _____ |
| 3) _____ | 7) _____ |
| 4) _____ | 8) _____ |

2) Name the instruments you hear:

- |          |          |
|----------|----------|
| 1) _____ | 5) _____ |
| 2) _____ | 6) _____ |
| 3) _____ | 7) _____ |
| 4) _____ | 8) _____ |





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# 1

**Test procedure: Play each sample once – wait 10 seconds**

[20 points; 2 points per interval (1.5 points per interval, 0.5 points for direction)]

Note the name and direction of the intervals you hear:

- |                           |                             |
|---------------------------|-----------------------------|
| 1) Major ninth ascending  | 6) Tritone parallel         |
| 2) Major sixth parallel   | 7) Minor seventh parallel   |
| 3) Twelfth ascending      | 8) Major third descending   |
| 4) Minor third parallel   | 9) Minor sixth parallel     |
| 5) Minor sixth descending | 10) Major seventh ascending |

# 2

**Test procedure: Play each sample once – wait 10 seconds**

[20 points; 2 points per interval  
(1.5 points per interval, 0.5 points for correct position)]

Complete the intervals you hear (Initial/lower tone is given):

The musical notation shows 10 exercises for interval completion. Each exercise is numbered 1 through 10. Exercises 1-5 are in the treble clef, and exercises 6-10 are in the bass clef. The first note of each interval is given, and the second note is missing, indicated by a blank space on the staff.



### 3

**Test procedure:** Play each sample for 1<sup>st</sup> time – wait 10 seconds,  
2<sup>nd</sup> time – wait 10 seconds

[18 points; 6 points per scale (5 points for name, 1 point for direction)]

Name the scales you hear and their directions (ascending/descending):

- 1) Phrygian ascending
- 2) Major [Ionian] descending
- 3) Whole tone scale ascending

### 4

**Test procedure:** Play each sample for 1<sup>st</sup> time – wait 20 seconds,  
2<sup>nd</sup> time – wait 20 seconds

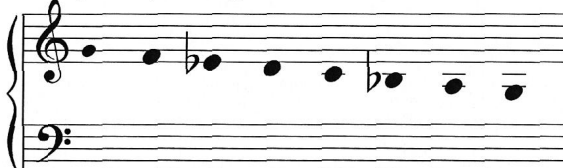
[18 points; 6 points per scale (4 points for scale, 2 points for name)]

Write and name the scales you hear (Initial tone is given):

1 *[harmonic minor]* *[lydian]*



3 *[minor (aeolian)]*







## Dictation

# 6

**Test procedure: Announcement: "1 measure count-in"**

Play each sample for 1<sup>st</sup> time – wait 20 seconds,

2<sup>nd</sup> time – wait 30 seconds

[40 points;

Bar 1: 4<sup>th</sup> – 6<sup>th</sup> eighth: 1 point;

Bar 2 and 3: each correct eighth: 2 points;

Bar 4: 1<sup>st</sup> – 4<sup>th</sup> eighth correct: 2 points;

Bar 4: 5<sup>th</sup> and 6<sup>th</sup> eighth correct: 2 points each]

1) Write the rhythm you hear on the note g:

*(J.S. Bach Trio Sonata III, 2<sup>nd</sup> movement, measure 1–4)*

**Test procedure: Announcement: "1 measure count-in"**

Play each sample for 1<sup>st</sup> time – wait 20 seconds,

2<sup>nd</sup> time – wait 30 seconds

[50 points; each quarter 3 points /

+5 points for completely correct notation]

2) Write the rhythm you hear at the given pitches:

*(Schönberg String Quartet II, 4<sup>th</sup> movement, measure 36–39, voice)*

# 7

**Test procedure: Play each sample once – wait 10 seconds**

[24 points; ≤ 3 points per chord]

Name the chord you hear and indicate the corresponding position:

- |                        |                                     |
|------------------------|-------------------------------------|
| 1) Minor chord         | 5) Six-four chord                   |
| 2) Minor seventh chord | 6) Major sixth chord                |
| 3) Augmented chord     | 7) Major chord with a major seventh |
| 4) Four-two chord      | 8) Four-three chord                 |

# 8

**Test procedure: Play each sample for 1<sup>st</sup> time – wait 10 seconds,  
2<sup>nd</sup> time – wait 10 seconds**

[25 points; ≤ 4 points per chord/1 point for name]

Write and name the chord you hear above the given bass note:

1) Minor ninth

2) Four-two chord

3) Minor Sixth

4) Diminished seventh chord

5) Added sixth chord

# 9

**Test procedure:** Play sample for 1<sup>st</sup> time – wait 10 seconds,

2<sup>nd</sup> time – wait 40 seconds,

3<sup>rd</sup> time – wait 30 seconds

[45 points;

Bar 1, 2<sup>nd</sup> – 4<sup>th</sup> quarter ≤ 2 points per chord / 1 point for function;

Bar 2 and 3 ≤ 4 points per chord / 1 point for function]

1) Write the cadence/modulation you hear and specify the functions/degrees:

(Modulation a minor – f minor (with Neapolitan))

$\bullet = 48$

t s D t t sn D<sup>v</sup> t t sn D<sub>3</sub><sup>7</sup> t

i iv V i i S<sub>3</sub> (f minor) VII<sup>7</sup> i i II<sup>6</sup> V<sub>3</sub><sup>6</sup> i

bII<sup>6</sup>  
= IV<sup>6</sup>

**Test procedure:** Play sample for 1<sup>st</sup> time – wait 10 seconds,

2<sup>nd</sup> time – wait 40 seconds,

3<sup>rd</sup> time – wait 30 seconds

[36 points; ≤ 4 points per chord / 1 point for function]

2) Write the succession of chords you hear and specify the functions/degrees:

$\bullet = 60$

T D D<sup>v</sup> (Tp) Tp S<sub>5</sub><sup>6</sup> D<sub>5</sub><sup>6</sup> D<sub>4</sub><sup>6</sup> D 7 4 2 3

I V #V<sup>7</sup> vi 8 7 IV<sub>5</sub><sup>6</sup> II<sub>5</sub><sup>6</sup> V<sub>4</sub><sup>6</sup> V 8 7 4 2 3



## Complex Listening

# 10

**Test procedure:** Play sample for 1<sup>st</sup> time – wait 10 seconds,  
2<sup>nd</sup> time – wait 40 seconds,  
3<sup>rd</sup> time – wait 30 seconds  
[80 points; 16 points per error]

You will hear a music sample. Compare the following score to the sample you hear and annotate possible deviations and errors in the score.

Scarlatti K19  
(with errors)

*Allegro*

*Klavier*

*mp*



# 11

Test procedure: Play sample for 1<sup>st</sup> time – wait 15 seconds

2<sup>nd</sup> time – wait 30 seconds,

3<sup>rd</sup> time – wait 20 seconds

[81 points; ≤ 27 points per error]

You will hear another music sample. Compare what you hear with the score you see here and annotate possible deviations/errors.

**Adagio**  $\text{♩} = 64$

Violino I  
Violino II  
Viola  
Violoncello

**1**

*p espr.*  
*p espr.*  
*p espr.*

**2**

**12**

**Test procedure: Play sample for 1<sup>st</sup> time – wait 10 seconds,  
2<sup>nd</sup> time – wait 30 seconds**

[48 points; 12 points per instrument / 4 points per correct position]

**1) Which orchestral instruments can be heard in succession as the soloist?  
(Ravel: Piano Concerto G, II)**

- |             |          |
|-------------|----------|
| 1) Flute    | 5) _____ |
| 2) Oboe     | 6) _____ |
| 3) Clarinet | 7) _____ |
| 4) _____    | 8) _____ |

**Test procedure: Play sample for 1<sup>st</sup> time – wait 15 seconds,  
2<sup>nd</sup> time – wait 30 seconds,  
3<sup>rd</sup> time – wait 30 seconds**

[80 points; 10 points per instrument/  
in 5): 5 points if “singing, voice”; 10 points if “Baritone”]

**2) Name the instruments you hear:  
(Schoenberg: Serenade op. 24 IV)**

- |                  |             |
|------------------|-------------|
| 1) Clarinet      | 5) Baritone |
| 2) Bass clarinet | 6) Violin   |
| 3) Mandolin      | 7) Viola    |
| 4) Guitar        | 8) Cello    |

**Total points: \_\_\_\_\_/763**





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**Datum:** \_\_\_\_\_

**ID:** \_\_\_\_\_

# 1

Notieren Sie Bezeichnung und Richtung des gehörten Intervalls:

- |          |           |
|----------|-----------|
| 1) _____ | 6) _____  |
| 2) _____ | 7) _____  |
| 3) _____ | 8) _____  |
| 4) _____ | 9) _____  |
| 5) _____ | 10) _____ |

# 2

Ergänzen Sie das gehörte Intervall schriftlich (Anfangs-/unterer Ton ist gegeben):

1 2 3 4 5

6 7 8 9 10

**3**

Benennen Sie die gehörten Skalen und ihre Richtung (aufwärts/abwärts):

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

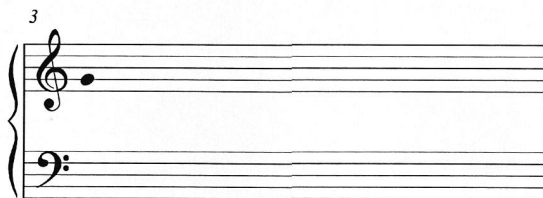
**4**

Notieren und benennen Sie die gehörten Skalen (Anfangston ist gegeben):



1) \_\_\_\_\_

2) \_\_\_\_\_



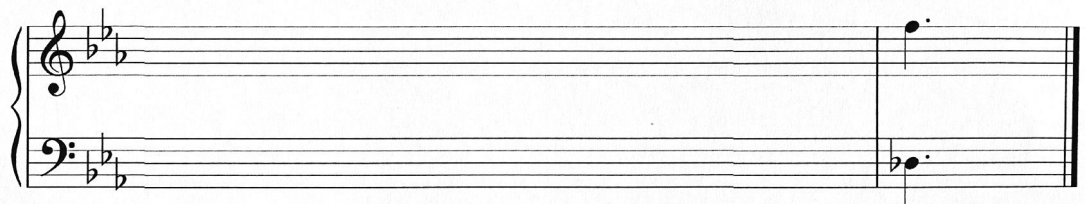
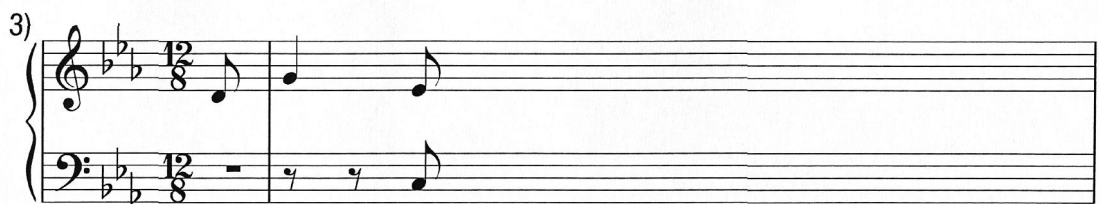
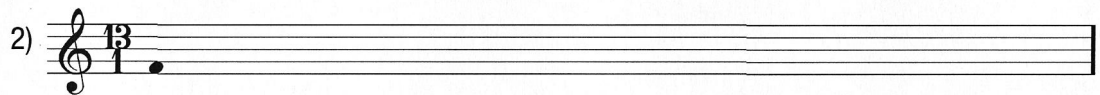
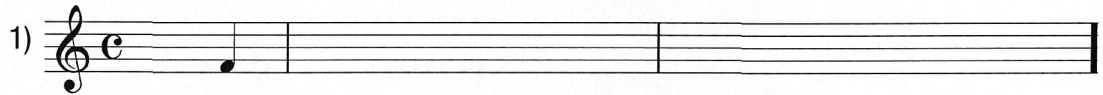
3) \_\_\_\_\_



## Diktate

### 5

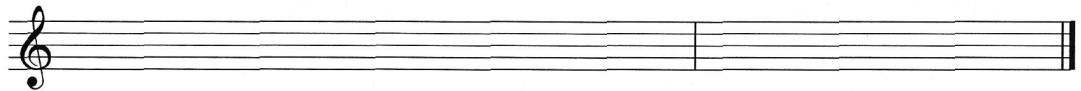
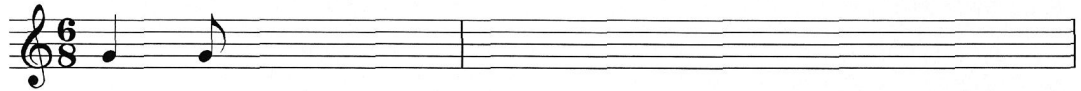
Notieren Sie die gehörten Musikbeispiele:



## Diktate

### 6

1) Notieren Sie den gehörten Rhythmus auf dem Ton g:



2) Notieren Sie den gehörten Rhythmus auf den vorgegebenen Tonhöhen:



## Akkorde und Kadenzen

### 7

Benennen Sie den gehörten Akkord unter Angabe der zugehörigen Stellung:

1) \_\_\_\_\_ 5) \_\_\_\_\_

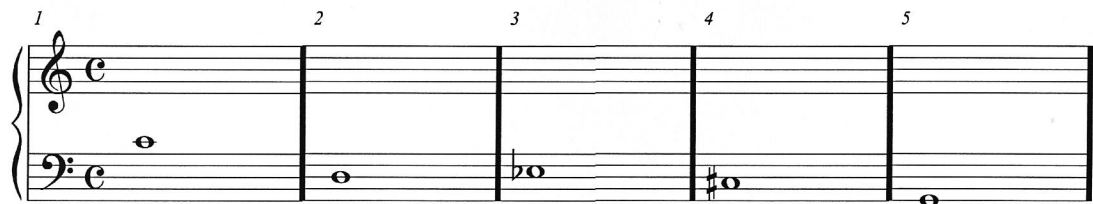
2) \_\_\_\_\_ 6) \_\_\_\_\_

3) \_\_\_\_\_ 7) \_\_\_\_\_

4) \_\_\_\_\_ 8) \_\_\_\_\_

### 8

Notieren und benennen Sie jeweils den gehörten Akkord über der gegebenen Bassnote:



The image shows a musical staff with a treble clef and a common time signature (C). The staff is divided into five measures, numbered 1 to 5 above the staff. Each measure contains a single bass note in the bass clef. Measure 1: C4. Measure 2: D4. Measure 3: E4. Measure 4: F#4. Measure 5: G4.

1) \_\_\_\_\_ 2) \_\_\_\_\_ 3) \_\_\_\_\_ 4) \_\_\_\_\_ 5) \_\_\_\_\_

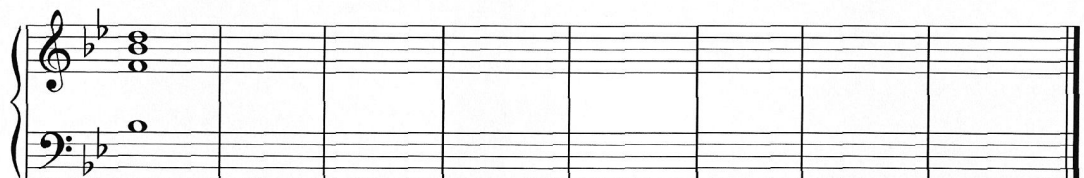
## Akkorde und Kadenzen

### 9

1) Notieren Sie die gehörte Kadenz/Modulation und geben Sie die Funktionen/Stufen an:



2) Notieren Sie die gehörte Akkordfolge und geben Sie die Funktionen/Stufen an:





## Komplexe Wahrnehmung

# 10

Sie hören ein Musikbeispiel.

Vergleichen Sie den Notentext mit dem gehörten Beispiel und notieren Sie mögliche Abweichungen/Fehler in der Partitur:

*Allegro*

*Klavier* *mp*

The musical score is for a piano piece in 2/4 time, marked 'Allegro' and 'mp'. It consists of two systems of four measures each. The first system starts with a treble clef, a key signature of two flats (B-flat major), and a 2/4 time signature. The right hand has a melody starting with a quarter note G4, followed by eighth notes A4-B4, and then a series of sixteenth notes. The left hand has a simple accompaniment of chords and single notes. The second system starts with a measure number '5' and continues the melody and accompaniment.



## Komplexe Wahrnehmung

# 11

Sie hören ein weiteres Musikbeispiel.

Vergleichen Sie das Gehörte mit der Ihnen vorliegenden Partitur und notieren Sie mögliche Abweichungen/Fehler:

Adagio  $\text{♩} = 64$

Violino I

Violino II

Viola *p espr.*

Violoncello

1

*p espr.*

*p espr.*

*p espr.*

2

**Komplexe Wahrnehmung**

12

1) Welche Orchesterinstrumente setzen nacheinander solistisch ein?

1) \_\_\_\_\_ 5) \_\_\_\_\_

2) \_\_\_\_\_ 6) \_\_\_\_\_

3) \_\_\_\_\_ 7) \_\_\_\_\_

4) \_\_\_\_\_ 8) \_\_\_\_\_

2) Benennen Sie die gehörten Instrumente:

1) \_\_\_\_\_ 5) \_\_\_\_\_

2) \_\_\_\_\_ 6) \_\_\_\_\_

3) \_\_\_\_\_ 7) \_\_\_\_\_

4) \_\_\_\_\_ 8) \_\_\_\_\_





© Hieronymus Bosch (um 1450 – 1516)  
Das Feld hat Augen, der Wald hat Ohren



# 1

**Testablauf:** jedes Beispiel einmal abspielen – 10 Sekunden warten

[20 Punkte; 2 Punkte pro Intervall (1,5 Punkte für Intervall, 0,5 Punkte für Richtung)]

Notieren Sie Bezeichnung und Richtung des gehörten Intervalls:

- |                         |                            |
|-------------------------|----------------------------|
| 1) große None aufwärts  | 6) Tritonus parallel       |
| 2) große Sexte parallel | 7) kleine Septime parallel |
| 3) Duodezime aufwärts   | 8) große Terz abwärts      |
| 4) kleine Terz parallel | 9) kleine Sexte parallel   |
| 5) kleine Sexte abwärts | 10) große Septime aufwärts |

# 2

**Testablauf:** jedes Beispiel einmal abspielen – 10 Sekunden warten

[20 Punkte; 2 Punkte pro Intervall

(1,5 Punkte für Intervall, 0,5 Punkte für richtige Position)]

Ergänzen Sie das gehörte Intervall schriftlich (Anfangs-/unterer Ton ist gegeben):

10 musical examples for interval completion. Each example shows a starting note on a staff with a blank space for the second note. Examples 1-5 are on a treble clef staff, and examples 6-10 are on a bass clef staff.

- 1) Treble clef, G4, blank space
- 2) Treble clef, G4, blank space
- 3) Treble clef, G4, blank space
- 4) Treble clef, G4, blank space
- 5) Treble clef, G4, blank space
- 6) Bass clef, G3, blank space
- 7) Bass clef, G3, blank space
- 8) Bass clef, G3, blank space
- 9) Bass clef, G3, blank space
- 10) Bass clef, G3, blank space



### 3

**Testablauf:** jeweils Beispiel erstes Mal abspielen – 10 Sekunden warten,  
zweites Mal abspielen – 10 Sekunden warten  
[18 Punkte; 6 Punkte pro Skala (5 Punkte für Name, 1 Punkt für Richtung)]

Benennen Sie die gehörten Skalen und ihre Richtung (aufwärts/abwärts):

- 1) phrygisch aufwärts
- 2) Dur [ionisch] abwärts
- 3) Ganztonskala aufwärts

### 4

**Testablauf:** jeweils Beispiel erstes Mal abspielen – 20 Sekunden warten,  
zweites Mal abspielen – 20 Sekunden warten  
[18 Punkte; 4 Punkte für Skala (2 Punkte für Name)]

Notieren und benennen Sie die gehörten Skalen (Anfangston ist gegeben):

1 *[moll harmonisch]* *[lydisch]*

3 *[moll (äolisch)]*


## Diktate

### 5

**Testablauf:** Beispiel erstes Mal abspielen – 10 Sekunden warten,  
zweites Mal abspielen – 30 Sekunden warten,  
drittes Mal abspielen – 20 Sekunden warten  
[40 Punkte; ≤ 5 Punkte pro Viertel]

Notieren Sie die gehörten Musikbeispiele:

♩ = 60  
(Accent aus den Klageliedern des Jeremias)

1) 

**Testablauf:** Beispiel erstes Mal abspielen – 10 Sekunden warten,  
zweites Mal abspielen – 30 Sekunden warten,  
drittes Mal abspielen – 20 Sekunden warten  
[48 Punkte; 3 Punkte pro Intervall / +12 Punkte für vollständig richtiges Notat]

(aus: A. Werner 19-Tonreihe)

2) 

**Testablauf:** Beispiel erstes Mal abspielen – 15 Sekunden warten,  
zweites Mal abspielen – 60 Sekunden warten,  
drittes Mal abspielen – 30 Sekunden warten,  
viertes Mal abspielen – 30 Sekunden warten  
[90 Punkte; 40 Punkte für einen vollständig richtigen Takt]  
(siehe Appendix für genaueren Auswertungsschlüssel)

3) ♩ = 40  
(J. S. Bach Triosonate 1 2. Satz T. 13-14, 2. & 3. Stimme)





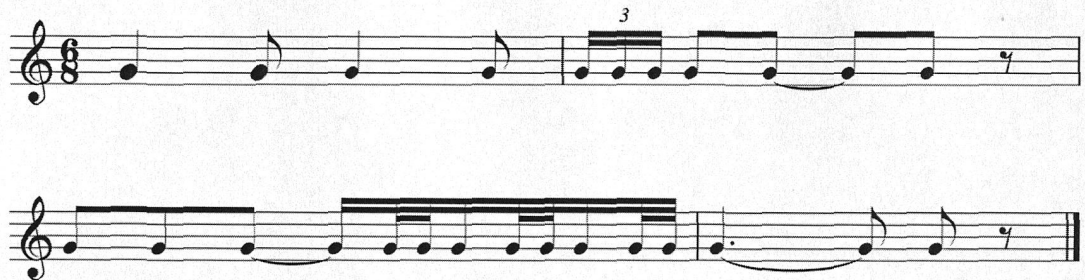
## Diktate

# 6

**Testablauf:** Ansage: „1 Takt Vorzählung“,  
 Beispiel erstes Mal abspielen – 20 Sekunden warten,  
 zweites Mal abspielen – 30 Sekunden warten  
 [40 Punkte;  
 Takt 1: 4.–6. Achtel richtig: 1 Punkt;  
 Takt 2 und Takt 3: pro Achtel richtig: 2 Punkte;  
 Takt 4: 1.–4. Achtel richtig: 2 Punkte;  
 Takt 4: 5. und 6. Achtel richtig: je 2 Punkte]

1) Notieren Sie den gehörten Rhythmus auf dem Ton g:

*(J. S. Bach Triosonate III, 2. Satz T. 1–4)*



**Testablauf:** Ansage: „1 Takt Vorzählung“,  
 Beispiel erstes Mal abspielen – 20 Sekunden warten,  
 zweites Mal abspielen – 30 Sekunden warten  
 [50 Punkte; pro Viertel 3 Punkte / +5 Punkte für vollständig richtiges Notat]

2) Notieren Sie den gehörten Rhythmus auf den vorgegebenen Tonhöhen:

*(Schönberg, Streichquartett II, 4. Satz T. 36–39, Stimme)*



## Akkorde und Kadenzen

### 7

**Testablauf:** jedes Beispiel einmal abspielen – 10 Sekunden warten

[24 Punkte; ≤ 3 Punkte pro Akkord]

Benennen Sie den gehörten Akkord unter Angabe der zugehörigen Stellung:

- |                       |                                 |
|-----------------------|---------------------------------|
| 1) Mollakkord         | 5) Quartsextakkord              |
| 2) Mollseptakkord     | 6) Dursextakkord                |
| 3) übermäßiger Akkord | 7) Durakkord mit großer Septime |
| 4) Sekundakkord       | 8) Terzquartakkord              |

### 8

**Testablauf:** jeweils Beispiel erstes Mal abspielen – 10 Sekunden warten,  
zweites Mal abspielen – 10 Sekunden warten

[25 Punkte; ≤ 4 Punkte pro Akkord / 1 Punkt für den Namen]

Notieren und benennen Sie jeweils den gehörten Akkord über der gegebenen Bassnote:

1) Mollnonakkord      2) Sekundakkord      3) Mollsextakkord      4) verminderter Septakkord      5) Sixte ajoutée





Komplexe Wahrnehmung

10

**Testablauf:** Beispiel erstes Mal abspielen – 10 Sekunden warten,  
zweites Mal abspielen – 40 Sekunden warten,  
drittes Mal abspielen – 30 Sekunden warten  
[80 Punkte; 16 Punkte pro Fehler]

Sie hören ein Musikbeispiel.

Vergleichen Sie den Notentext mit dem gehörten Beispiel und notieren Sie mögliche Abweichungen/Fehler in der Partitur:

Scarlatti K19  
*(mit Fehlern)*

Allegro

Klavier *mp*



## Komplexe Wahrnehmung

# 11

**Testablauf:** Beispiel erstes Mal abspielen – 15 Sekunden warten,  
zweites Mal abspielen – 30 Sekunden warten,  
drittes Mal abspielen – 20 Sekunden warten  
[81 Punkte; ≤ 27 Punkte pro Fehler]

Sie hören ein weiteres Musikbeispiel.

Vergleichen Sie das Gehörte mit der Ihnen vorliegenden Partitur und notieren Sie mögliche Abweichungen/Fehler:

**Adagio**  $\text{♩} = 66$

Violino I

Violino II

Viola *p espr.*

Violoncello

1

*p espr.*

*p espr.*

*p espr.*

2

*p espr.*

**Komplexe Wahrnehmung****12****Testablauf: Beispiel erstes Mal abspielen – 10 Sekunden warten,  
zweites Mal abspielen – 30 Sekunden warten**

[48 Punkte; 12 Punkte pro Instrument / 4 Punkte pro richtige Position]

**1) Welche Orchesterinstrumente setzen nacheinander solistisch ein?**

(Ravel: Klavierkonzert G, II)

- |               |          |
|---------------|----------|
| 1) Flöte      | 5) _____ |
| 2) Oboe       | 6) _____ |
| 3) Klarinette | 7) _____ |
| 4) _____      | 8) _____ |

**Testablauf: Beispiel erstes Mal abspielen – 15 Sekunden warten,  
zweites Mal abspielen – 30 Sekunden warten,  
drittes Mal abspielen – 30 Sekunden warten**

[80 Punkte; 10 Punkte pro Instrument/

bei 5): 5 Punkte wenn „Gesang, Stimme“; 10 Punkte wenn „Bariton“]

**2) Benennen Sie die gehörten Instrumente:**

(Schönberg: Serenade op. 24 IV)

- |                   |                |
|-------------------|----------------|
| 1) Klarinette     | 5) Bariton     |
| 2) Bassklarinette | 6) Violine     |
| 3) Mandoline      | 7) Viola       |
| 4) Gitarre        | 8) Violoncello |

**Gesamtpunkte: \_\_\_\_\_/763**