

# Northwestern | QUALTRICS

## **Consent form**

### **Letter of Information**

#### **Title of Research Study:**

Musical Ambiguous Figure Perception: Effects of Category Knowledge and Auditory Attention

**Principal Investigator:** Richard Ashley

**Student Investigator:** Sarah Gates

**Supported By:** Northwestern University, Bienen School of Music

#### **Key Information about this research study:**

The following is a short summary of this study to help you decide whether to be a part of this study.

Information that is more detailed is explained later on in this form.

- The purpose of this study is to examine the ease of forming and changing an interpretation of a musical excerpt.
- You will be asked to form two interpretations of a musical excerpt and rate the ease of forming and alternating interpretations
- We expect that you will be in this research study for 25-30 minutes
- There are no risks associated with being in this study beyond those associated with everyday life and with potential loss of confidentiality.
- There are no benefits associated with being in this study.

### **Why am I being asked to take part in this research study?**

We are asking you to take part in this research study because you are English speaking and are either a current graduate student, have graduate-level training in, or currently work within the field of music theory.

### **How many people will be in this study?**

We expect about 40 people will be in this research study.

### **What should I know about participating in a research study?**

- Whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.

- Your decision will not be held against you.
- You can ask all the questions you want before you decide.
- You do not have to answer any question you do not want to answer.

### **if I say, “Yes, I want to be in this research”?**

In this survey, you will be presented with two musical excerpts (audio recording only). You will be prompted to form two different scale degree interpretations of a particular voice (i.e., soprano, bass), and an interpretation of a progression of Galant schemata (e.g., Meyer, Grand Cadence, etc.). Following this, you will be asked to rate the ease of forming the given interpretation on a Likert scale, and the ease in changing one interpretation to the other and back again on subsequent listenings. The survey will end with a short section which will collect some biographical data (e.g., years of music theory and aural skills training), familiarity with the excerpts, and analytical listening habits.

### **Will being in this study help me in any way?**

We cannot promise any benefits to you or others from your taking part in this research. However, possible benefits include those to the scholarly community, particularly in the fields of music theory and music cognition.

### **Is there any way being in this study could be bad for me?**

A possible risk for any research is that confidentiality could be compromised – that is, that people outside the study might get hold of confidential study information. We will do everything we can to minimize this risk, as

described in more detail later in this form.

### **What happens if I do not want to be in this research, or I change my mind later?**

Participation in research is voluntary. You can decide to participate or not to participate. If you do not want to be in this study or withdraw from the study at any point, your decision will not affect your relationship with Northwestern University.

You can leave the research at any time and it will not be held against you.

If you decide to withdraw from this study, any data already collected from you will be destroyed.

### **How will the researchers protect my information?**

Only the study team will have access to the data, stored securely on Qualtrics. During the analysis phase, the data will be downloaded to password protected computers accessible only by study personnel. The data will be de-identified as names and signatures collected during the consent process will be stored separately from survey responses.

### **Who will have access to the information collected during this research study?**

Efforts will be made to limit the use and disclosure of your personal information, including research study records, to people who have a need to review this information. We cannot promise complete secrecy.

There are reasons why information about you may be used or seen by other people beyond the research

team during or after this study.

Examples include:

- University officials, government officials, study funders, auditors, and the Institutional Review Board may need access to the study information to make sure the study is done in a safe and appropriate manner.

### **How might the information collected in this study be shared in the future?**

We will keep the information we collect about you during this research study for study recordkeeping for a period of three years.

De-identified data from this study may be shared with the research community, with journals in which study results are published, and with databases and data repositories used for research. We will remove or code any personal information that could directly identify you before the study data are shared. Despite these measures, we cannot guarantee the anonymity of your personal data.

### **Will I be paid or given anything for taking part in this study?**

There is no payment or reimbursement for participating in this study.

### **Who can I talk to?**

If you have questions, concerns, or complaints, you can contact the Principal Investigator Richard Ashley ([richard.ashley@northwestern.edu](mailto:richard.ashley@northwestern.edu)), or the Student Investigator Sarah Gates ([sarahgates2015@u.northwestern.edu](mailto:sarahgates2015@u.northwestern.edu)).

This research has been reviewed and approved by an Institutional Review Board (“IRB”) – an IRB is a

committee that protects the rights of people who participate in research studies. You may contact the IRB by phone at 1-(312) 503-9338 or by email at [irb@northwestern.edu](mailto:irb@northwestern.edu) if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

<br>yup

- ☐ I have read the above information, and would like to proceed to the consent document.
- ☐ I do not want to participate in this study (exit survey)

**Consent Document**

**Title of Research Study:**

Musical Ambiguous Figure Perception: Effects of Category Knowledge and Auditory Attention

**STU#:** 00217214

**Principal Investigator:** Richard Ashley

**Supported By:** This research is supported by Northwestern University, Bienen School of Music.

1. I confirm that I have read and understand the Letter of Information version dated May 16th, 2022, for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

Initial here:

×

SIGN  
HERE

clear

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without any adverse consequences

Initial here:

×

**SIGN  
HERE**

---

clear

3. I understand that research data collected during the study may be looked at by designated individuals from Northwestern University where it is relevant to my taking part in this study. I give permission for these individuals to access my information and research data

Initial here:

×

**SIGN  
HERE**



clear

4. I understand that this project has been reviewed by, and received approval by the Northwestern University Institutional Review Board.

Initial here:

SIGN  
HERE

×

clear

5. I understand who will have access to personal data provided, how the data will be stored and what will happen to the data at the end of the project.

Initial here:

SIGN  
HERE

×

clear

6. I understand how this research will be written up and published.

Initial here:

SIGN  
HERE

×

clear

7. I understand how to ask a question, raise a concern or make a complaint.

Initial here:

SIGN  
HERE

×

clear

8. I understand the results of this study may be used for teaching, publications, or for presentation at scientific meetings.

Initial here:

SIGN  
HERE

×

clear

9. I agree for research data collected in this study to be given to researchers, including those working outside of the EU, to be used in other research studies. I understand that any data that leave the research group will be fully anonymised so that I cannot be identified.

Initial here:

×

**SIGN  
HERE**

---

clear

Signature of Participant:

×

**SIGN HERE**

---

clear

Date: 10/31/2022

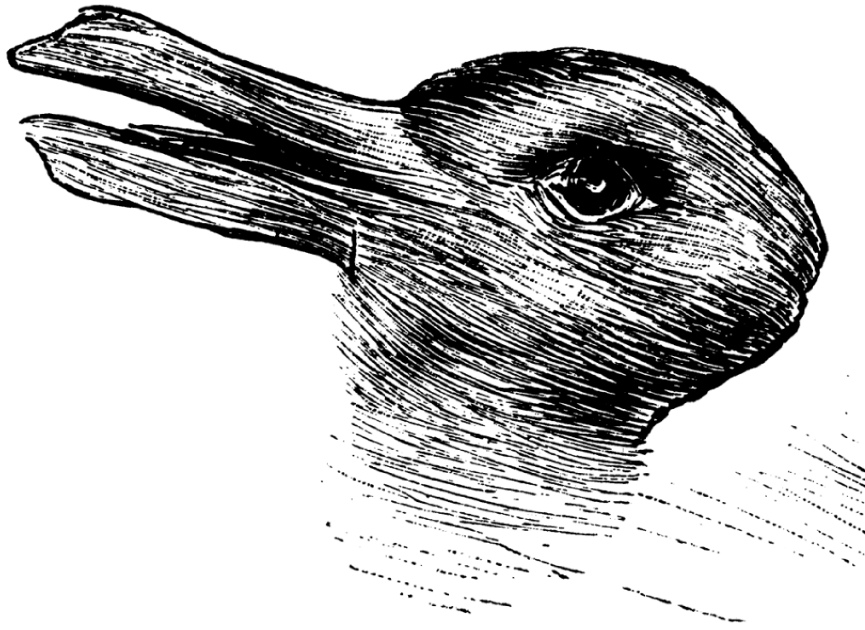
Printed name of Participant:

## **Intro**

### **Welcome!**

In this survey, you will rate the ease of interpretability of two musical excerpts using Likert scales. For each excerpt, you will be asked to rate the ease of interpretability of a given interpretation for bass and soprano lines (provided in scale degrees), and for orderings of Galant Schemata.

Here is an example for the task at hand. Examine the picture below:



Now, given the interpretation provided, rate the ease of seeing this interpretation in the picture.

Interpretation A:

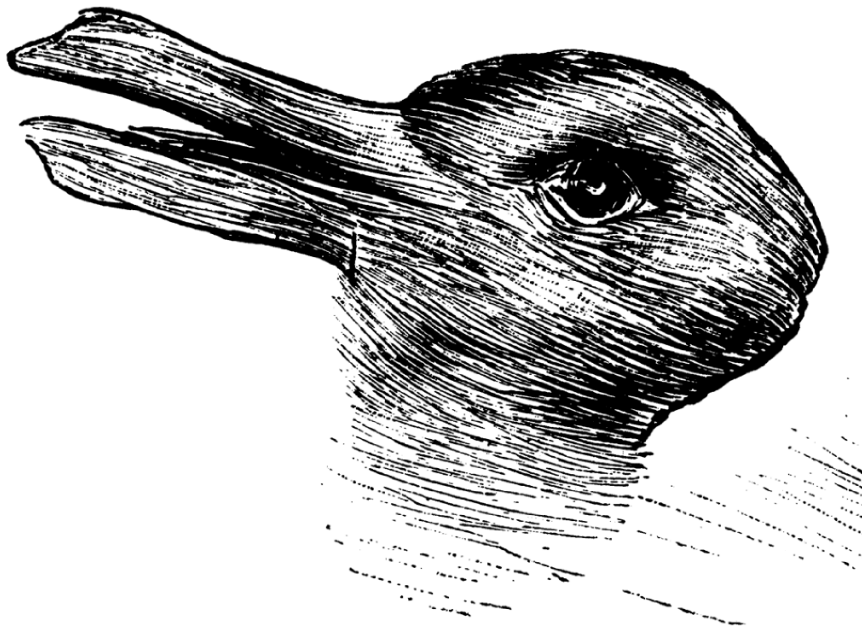
RABBIT

Please rate the following:

Ease of Seeing this Interpretation



Re-examine the picture, and provide an ease of interpretation rating for the second interpretation below:



Interpretation B:

DUCK

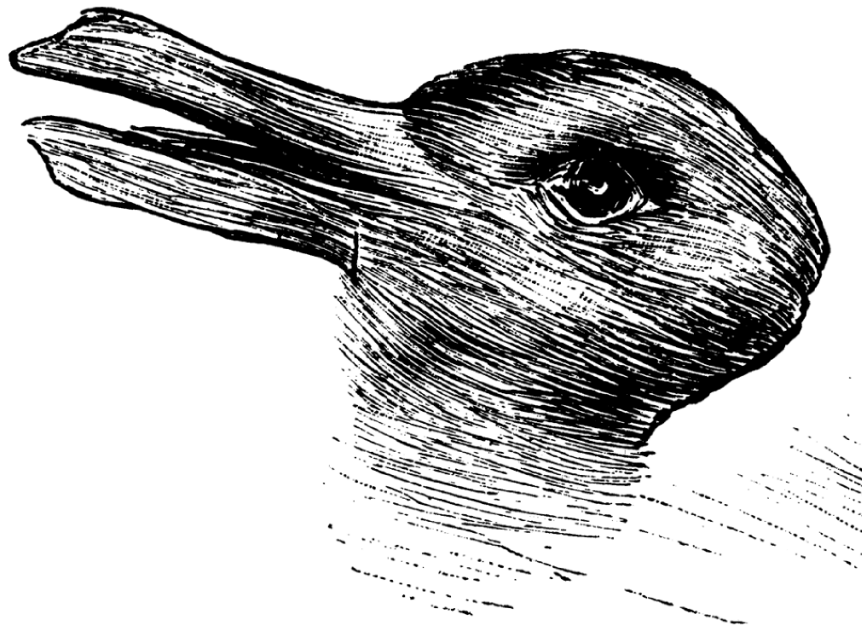
Please rate the following:

Ease of Seeing this Interpretation



Lastly, view the image continually, and alternate between the interpretations provided. Rate the ease of change:





Interpretation A:

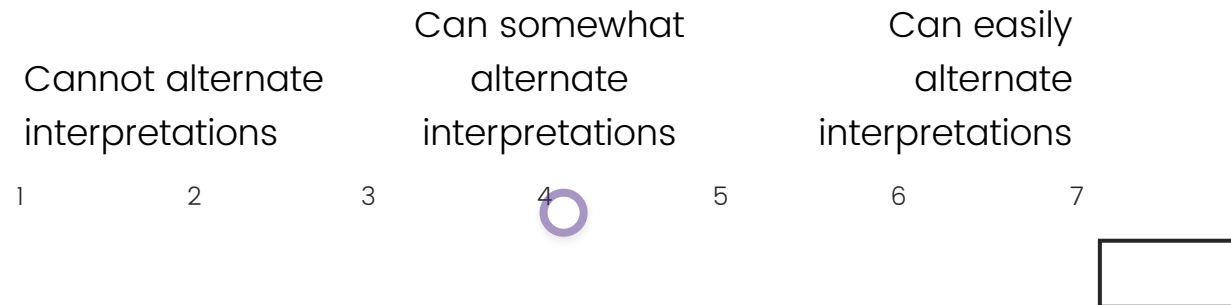
RABBIT

Interpretation B:

# DUCK

Please rate the ease of change between the two interpretations:

Ease of Change



In this survey, you will complete the same task, except you will provide ease of interpretation and ease of change ratings for both bass and soprano lines (in scale degrees), and for orderings of Galant Schemata. Here is an example of the task at hand.

First, listen to the following excerpt:

0:00 / 0:09

Listen to the excerpt again, and attend to the bassline. Rate the ease of hearing the interpretation provided below:

0:00 / 0:09

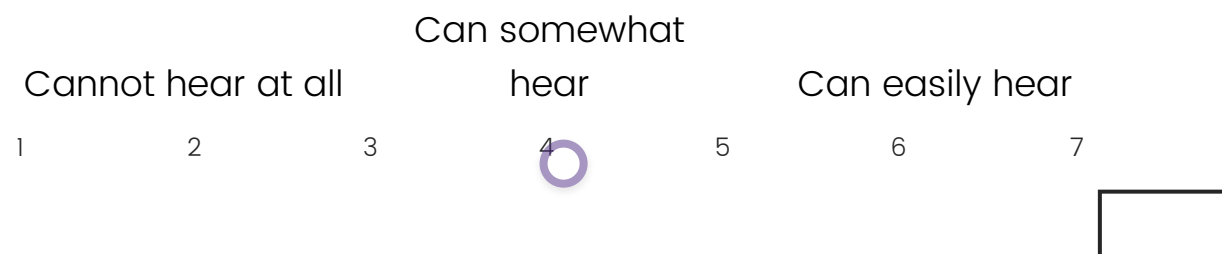
Interpretation A:

$\hat{1} \text{ \% } - \hat{7} \text{ \% } - \# \hat{4} \text{ \% } - \hat{5}$

\*note that the % sign indicates a repeated scale degree

Please rate the following:

Ease of Hearing this Interpretation:



Listen to the excerpt again and attend to the bassline. Rate the ease of hearing the interpretation provided below:

0:00 / 0:09

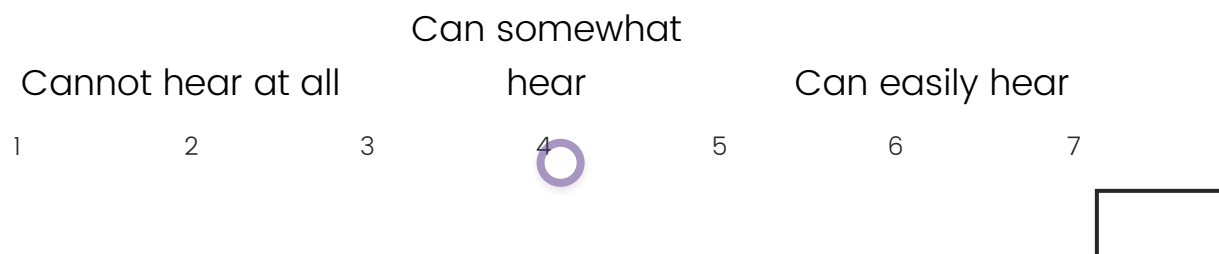
Interpretation B:

$\hat{4} \text{ \%} - \hat{3} \text{ \%} - \hat{7} \text{ \%} - \hat{1}$

\*note that the % sign indicates a repeated scale degree

Please rate the following:

Ease of Hearing this Interpretation:



Listen to the excerpt, and attempt to alternate between the  
bassline interpretations provided on each successive listening:

0:00 / 0:09

Interpretation A:

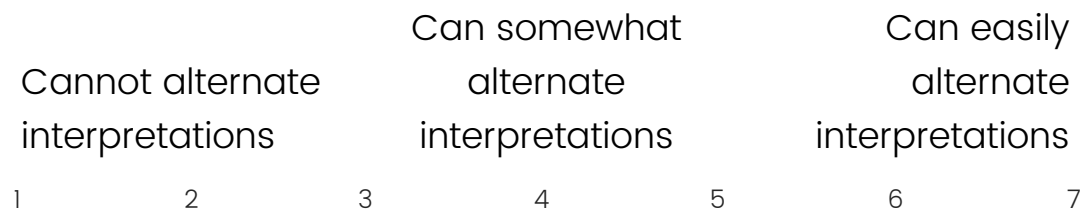
$$\hat{1} \% - \hat{7} \% - \# \hat{4} \% - \hat{5}$$

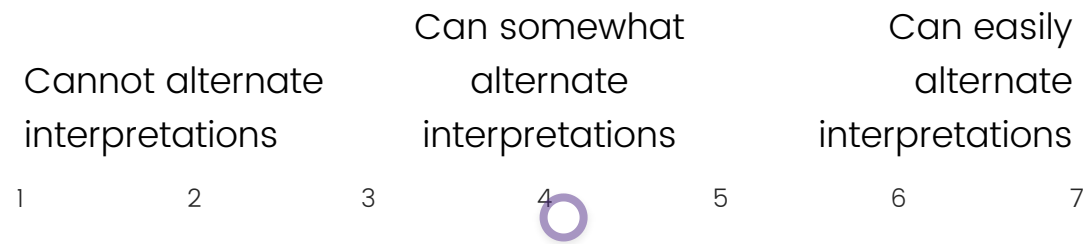
Interpretation B:

$$\hat{4} \% - \hat{3} \% - \hat{7} \% - \hat{1}$$

Please rate the ease of change between the two interpretations:

Ease of Change





You will now complete the same procedure for two related excerpts for bassline, soprano line, and Galant Schemata interpretations.

## **Excerpt: Exposition**

Please listen to the following excerpt:

0:00 / 0:16

## **Bassline Interpretations**

# Bassline Interpretations

## Exposition: Bassline (Order 1)

Listen to the excerpt and attend to the bassline. Rate the ease of hearing the interpretation provided below:

0:00 / 0:16

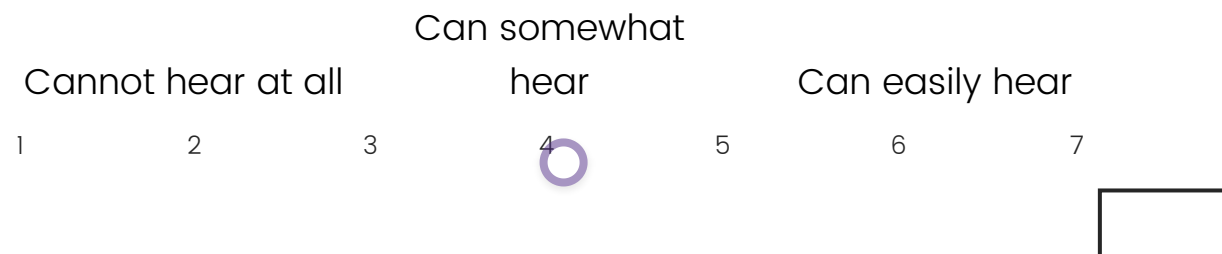
Interpretation A:

[PAC – Tonic Pedal]  $\rightarrow \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{1}$   $\underbrace{\hat{4} - \# \hat{4} - \hat{5}}_{\%}$

Please rate the following:

Ease of Hearing this Interpretation





Listen to the excerpt again and attend to the bassline. Rate the ease of hearing the interpretation provided below:

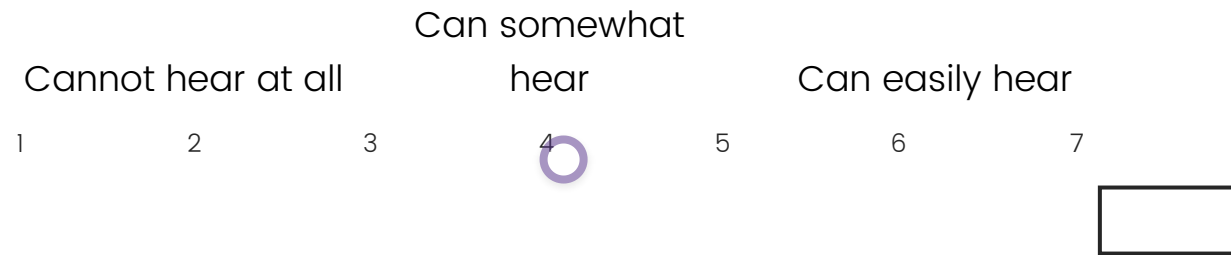
0:00 / 0:16

Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \hat{1}$   
 $\hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \hat{\#4} - \hat{5}$   $\frac{\%}{\rule{1.5cm}{0.4pt}}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the bassline interpretations provided on each successive listening.

0:00 / 0:16

Interpretation A:

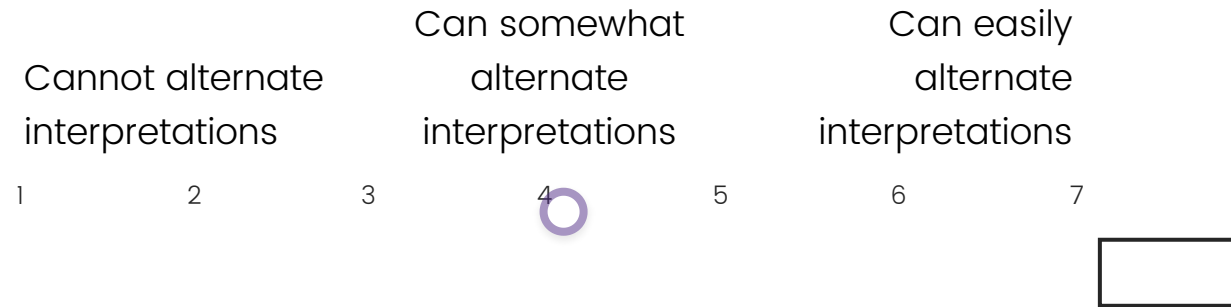
[PAC – Tonic Pedal]  $\rightarrow \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{1}$   $\underbrace{\hat{4} - \# \hat{4} - \hat{5}}_{\%}$

Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \hat{1} \left| \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \hat{\#4} - \hat{5} \right| \%$

Please rate the ease of change between these two interpretations:

Ease of change



## Exposition: Bassline (Order 2)

Listen to the excerpt and attend to the bassline. Rate the ease of hearing the interpretation provided below:

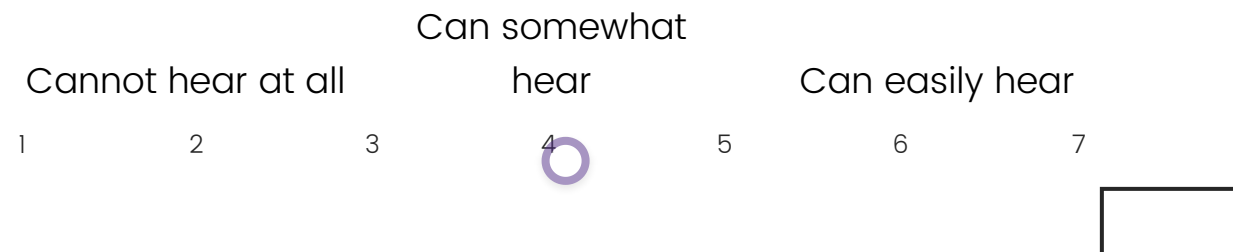
0:00 / 0:16

Interpretation A:

[PAC – Tonic Pedal]  $\rightarrow$   $\hat{1}$   
 $\hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \hat{\#4} - \hat{5}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt again and attend to the bassline. Rate the ease of hearing the interpretation provided below:

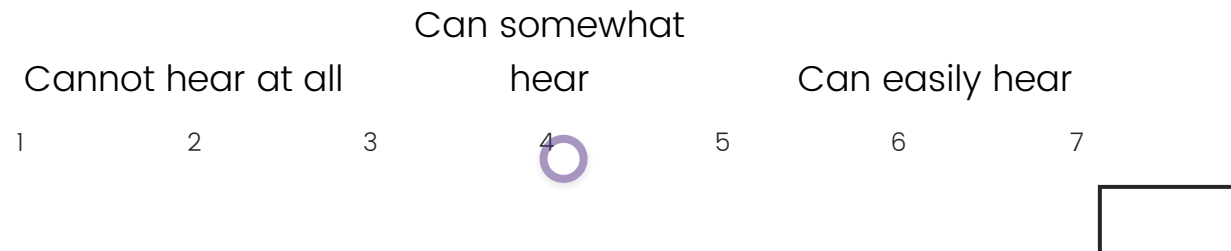
0:00 / 0:16

Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{1}$   $\underbrace{\hat{4} - \# \hat{4} - \hat{5}}_{\%}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the bassline interpretations provided on each successive listening.

Interpretation A:

$$[\text{PAC} - \text{Tonic Pedal}] \rightarrow \hat{1} \quad \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \overbrace{\hat{\#4} - \hat{5}}^{\%}$$

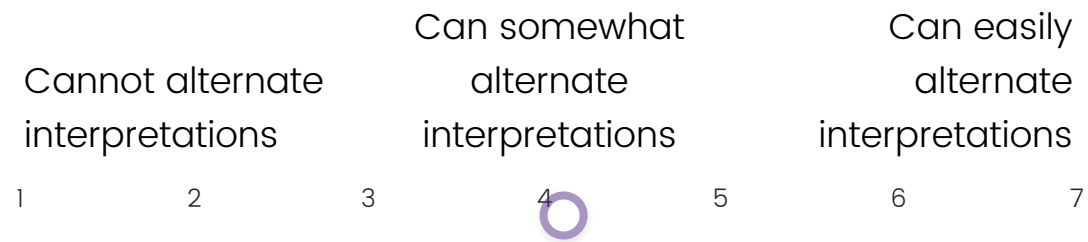
Interpretation B:

$$[\text{PAC} - \text{Tonic Pedal}] \rightarrow \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{1} \quad \overbrace{\hat{4} - \hat{\#4} - \hat{5}}^{\%}$$

Please rate the ease of change between these two interpretations:

Ease of change

Cannot alternate interpretations		Can somewhat alternate interpretations			Can easily alternate interpretations	
1	2	3	4	5	6	7



## Soprano Interpretations

### Soprano Line Interpretations

### Exposition: Soprano (Order 1)

Listen to the excerpt and attend to the soprano line. Rate the ease of hearing the interpretation provided below:

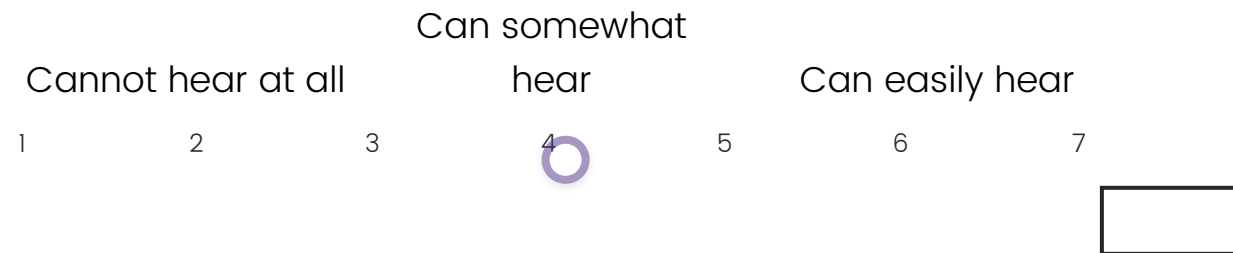
0:00 / 0:16

Interpretation A:

[PAC – Tonic Pedal]  $\rightarrow \hat{3} - \hat{2} - \hat{1} - \hat{7} - \hat{6}$   $\underbrace{\quad}_{\hat{2} - \hat{1} - 7} \%$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt again and attend to the soprano line. Rate the ease of hearing the interpretation provided below:

0:00 / 0:16

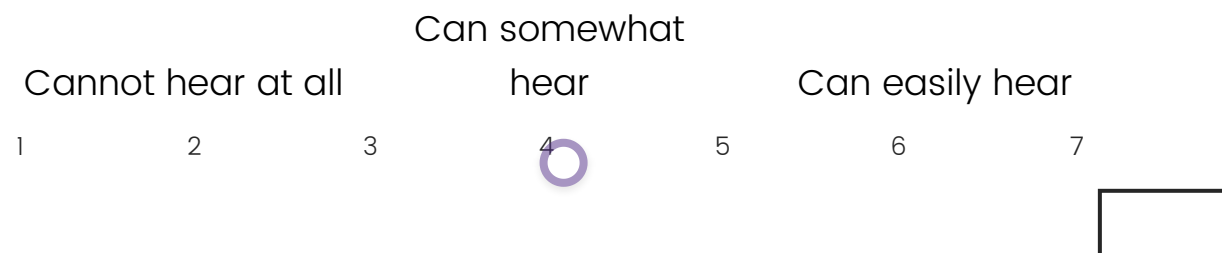


Interpretation B:

[PAC – Tonic Pedal] →  $\hat{3}$   
 $\hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{7}$   $\frac{\%}{\hat{1} - \hat{7}}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the soprano line interpretations provided on each successive listening.

Interpretation A:

$$[\text{PAC} - \text{Tonic Pedal}] \rightarrow \hat{3} - \hat{2} - \hat{1} - \hat{7} - \hat{6} \quad \underbrace{\quad \quad \quad}_{\hat{2} - \hat{1} - 7} \quad \%$$

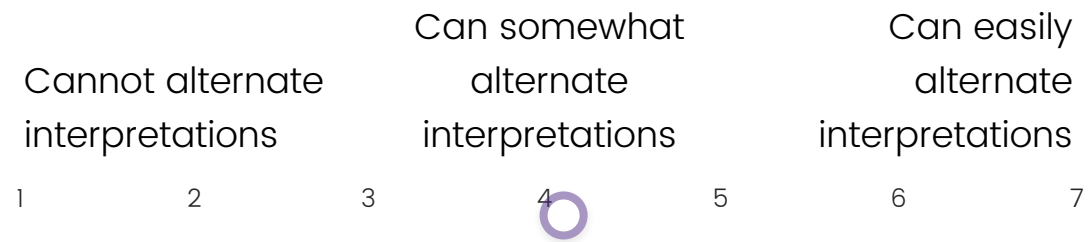
Interpretation B:

$$[\text{PAC} - \text{Tonic Pedal}] \rightarrow \hat{3} \quad \underbrace{\quad \quad \quad}_{\hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{7}} \quad \%$$

Please rate the ease of change between these two interpretations:

Ease of change

Cannot alternate interpretations		Can somewhat alternate interpretations		Can easily alternate interpretations	
1	2	3	4	5	6
					7



## Exposition: Soprano (Order 2)

Listen to the excerpt and attend to the soprano line. Rate the ease of hearing the interpretation provided below:

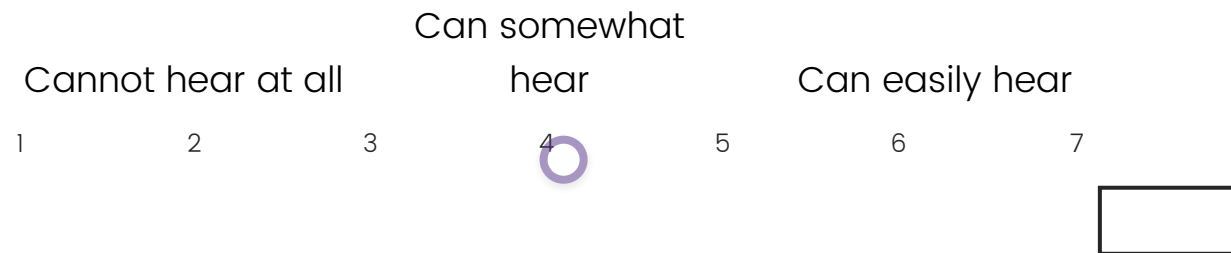
0:00 / 0:16

Interpretation A:

[PAC – Tonic Pedal] →  $\hat{3}$   
 $\hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{7}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt again and attend to the soprano line. Rate the ease of hearing the interpretation provided below:

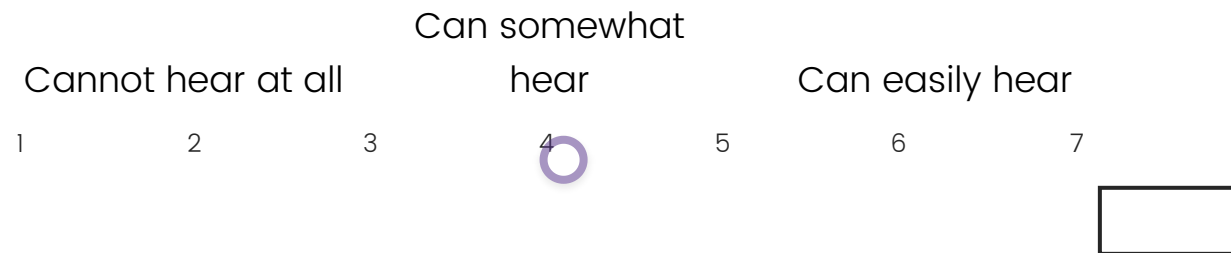
0:00 / 0:16

Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \hat{3} - \hat{2} - \hat{1} - \hat{7} - \hat{6}$   $\underbrace{\hat{2} - \hat{1} - 7}_{\%}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the soprano line interpretations provided on each successive listening.

Interpretation A:

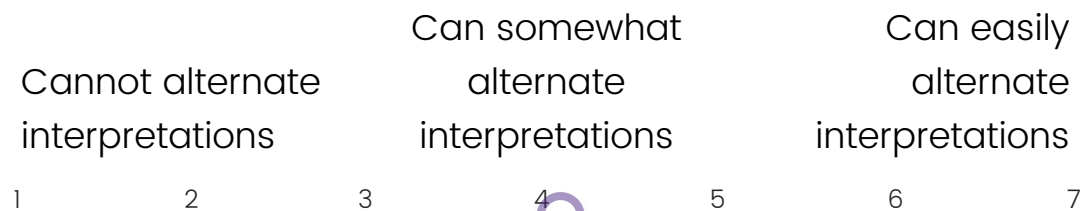
$$[\text{PAC} - \text{Tonic Pedal}] \rightarrow \hat{3} \left[ \begin{array}{c} \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{7} \end{array} \right] \%$$

Interpretation B:

$$[\text{PAC} - \text{Tonic Pedal}] \rightarrow \hat{3} - \hat{2} - \hat{1} - \hat{7} - \hat{6} \left[ \begin{array}{c} \hat{2} - \hat{1} - \hat{7} \end{array} \right] \%$$

Please rate the ease of change between these two interpretations:

Ease of change



# Galant Schemata Interpretations

## Galant Schemata Interpretations

### Exposition: Schema (Order 1)

Listen to the excerpt and rate the ease of hearing the schemata interpretation provided below:

0:00 / 0:16

Interpretation A:

**PAC – Tonic Pedal – Step-Descent Romanesca – Converging**

Please rate the following:

Ease of Hearing this Interpretation

Cannot hear at all      Can somewhat hear      Can easily hear

1      2      3      4      5      6      7

☐

Listen to the excerpt again and rate the ease of hearing the schemata interpretation provided below:

0:00 / 0:16

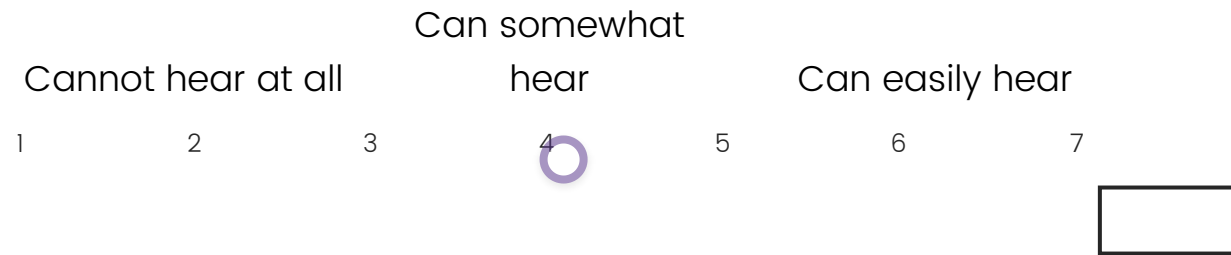
Interpretation B:

**PAC – Tonic Pedal – Modulating Prinner – Converging**

Please rate the following:



Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the schemata interpretations provided on each successive listening.

0:00 / 0:00

Interpretation A:

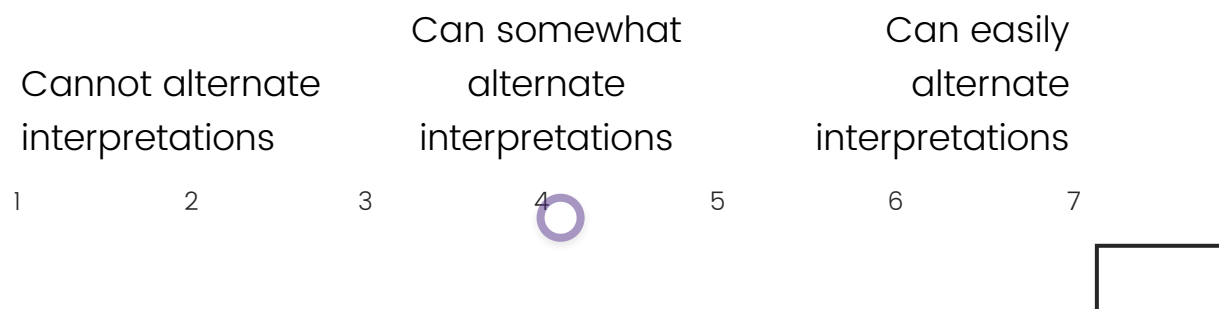
**PAC – Tonic Pedal – Step-Descent Romanesca – Converging**

Interpretation B:

# PAC – Tonic Pedal – Modulating Prinner – Converging

Please rate the ease of change between these two interpretations:

Ease of change



## Exposition: Schema (Order 2)

Listen to the excerpt and rate the ease of hearing the schemata interpretation provided below:

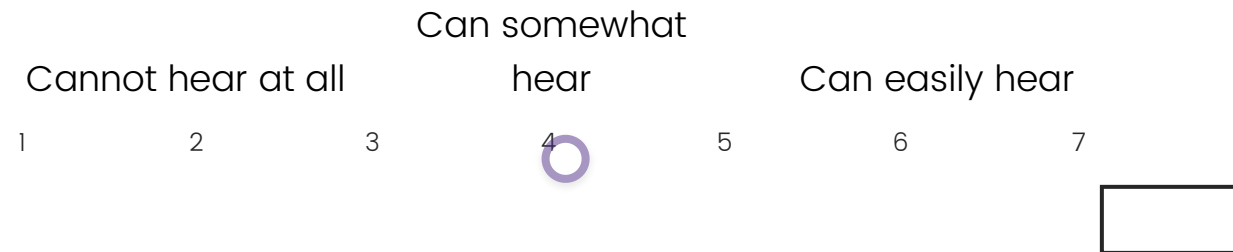
0:00 / 0:00

Interpretation A:

## PAC – Tonic Pedal – Modulating Prinner – Converging

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt again and rate the ease of hearing the interpretation provided below:

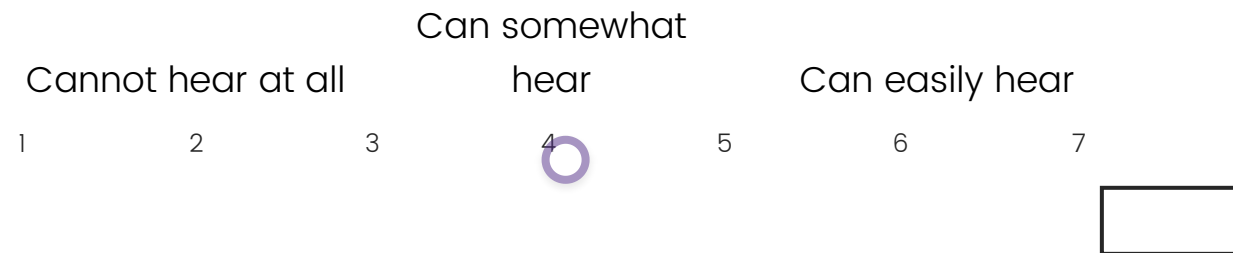
0:00 / 0:00

Interpretation B:

## PAC – Tonic Pedal – Step-Descent Romanesca – Converging

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the schemata interpretations provided on each successive listening.

0:00 / 0:00

Interpretation A:

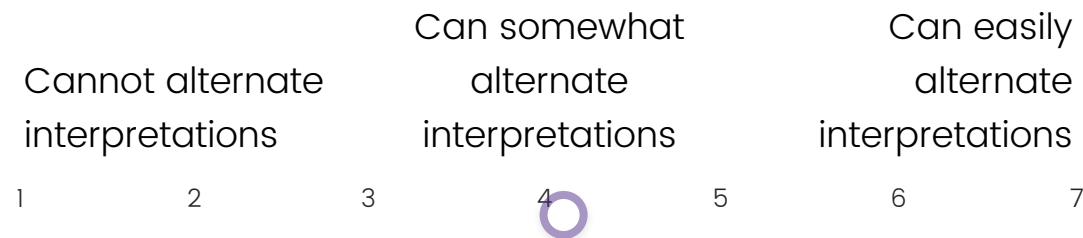
PAC – Tonic Pedal – Modulating Prinner – Converging

Interpretation B:

PAC – Tonic Pedal – Step-Descent Romanesca – Converging

Please rate the ease of change between these two interpretations:

Ease of change



**Excerpt 2: Recap**

Please listen to the following excerpt:

0:00 / 0:00

## Recap: Bassline (Order 1)

Listen to the excerpt and attend to the bassline. Rate the ease of hearing the interpretation provided below:

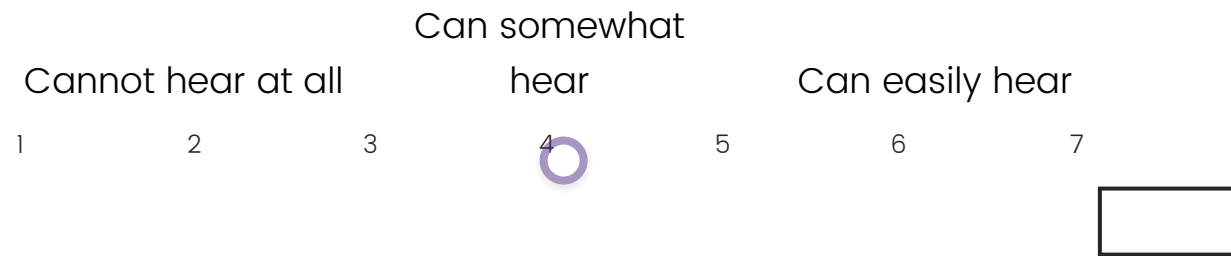
0:00 / 0:00

Interpretation A:

[PAC – Tonic Pedal]  $\rightarrow \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \overbrace{\# \hat{4} - \hat{5}}^{\%}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt again and attend to the bassline. Rate the ease of hearing the interpretation provided below:

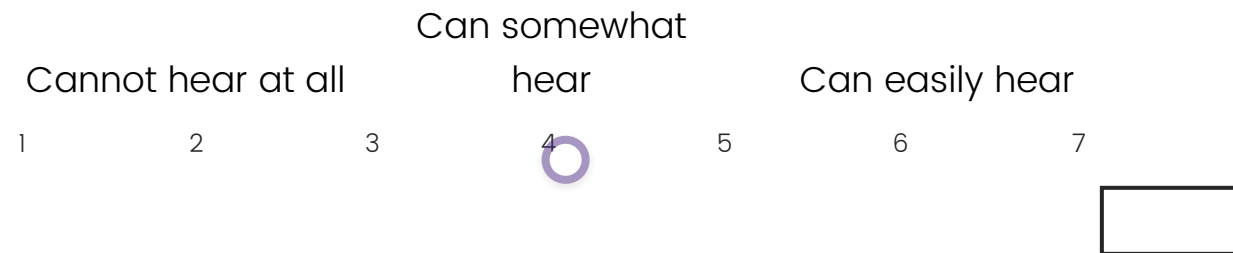
0:00 / 0:00

Interpretation B:

[PAC – Tonic Pedal] →  $\hat{1}$   
 $\hat{4} - \hat{3} - \hat{2} - \hat{1}$   
 $\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \hat{\sharp 4} - \hat{5}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the  
 bassline interpretations provided on each successive listening.



Interpretation A:

[PAC – Tonic Pedal]  $\rightarrow \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \hat{\sharp 4} - \hat{5}$

%

Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \hat{1}$

$\hat{4} - \hat{3} - \hat{2} - \hat{1}$

$\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \hat{\sharp 4} - \hat{5}$

%

Please rate the ease of change between these two interpretations:

Ease of change

Cannot alternate		Can somewhat		Can easily	
interpretations		alternate		alternate	
		interpretations		interpretations	
1	2	3	4	5	6
					7

Cannot alternate interpretations		Can somewhat alternate interpretations		Can easily alternate interpretations	
1	2	3	4	5	6

## Recap: Bassline (Order 2)

Listen to the excerpt and attend to the bassline. Rate the ease of hearing the interpretation provided below:

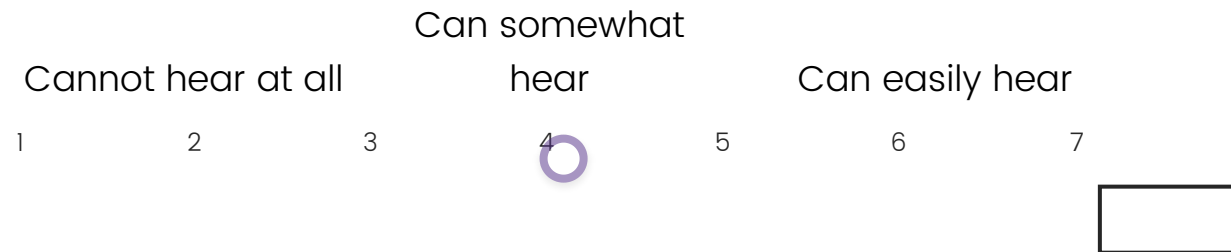
0:00 / 0:00

Interpretation A:

[PAC – Tonic Pedal]  $\rightarrow \hat{1}$   
 $\hat{4} - \hat{3} - \hat{2} - \hat{1}$   
 $\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \hat{\#4} - \hat{5}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt again and attend to the bassline. Rate the ease of hearing the interpretation provided below:

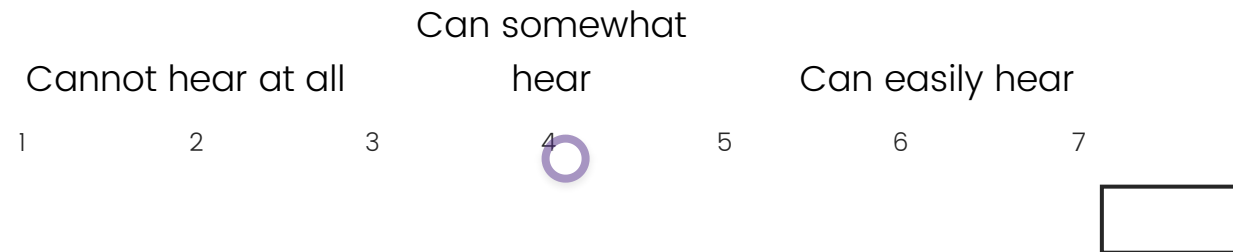
0:00 / 0:00

Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \overbrace{\# \hat{4} - \hat{5}}^{\%}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the  
baseline interpretations provided on each successive listening.

0:00 / 0:00

Interpretation A:

[PAC – Tonic Pedal]  $\rightarrow \hat{1}$   
 $\hat{4} - \hat{3} - \hat{2} - \hat{1}$   
 $\hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \sharp\hat{4} - \hat{5}$

Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{4} - \sharp\hat{4} - \hat{5}$

Please rate the ease of change between these two interpretations:

Ease of change

Cannot alternate  
interpretations

Can somewhat  
alternate  
interpretations

Can easily  
alternate  
interpretations

1 2 3 4 5 6 7




**Recap: Soprano (Order 1)**

Listen to the excerpt and attend to the soprano line. Rate the ease of hearing the interpretation provided below:

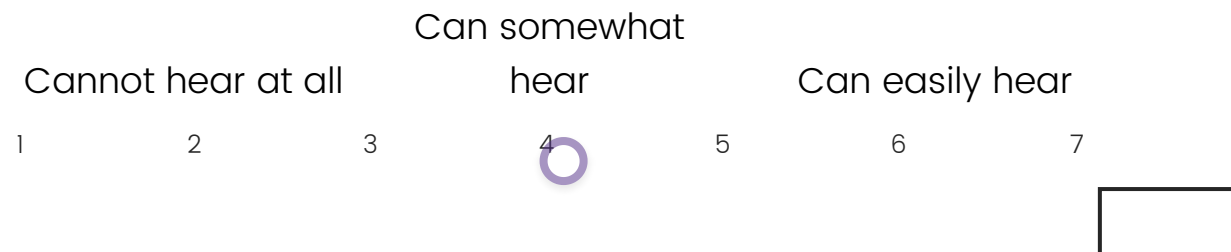
0:00 / 0:00

Interpretation A:

[PAC – Tonic Pedal]  $\rightarrow \hat{3} - \hat{2} - \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \overbrace{\hat{1} - 7}^{\%}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt again and attend to the soprano line. Rate the ease of hearing the interpretation provided below:

0:00 / 0:00

Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \hat{3}$   
 $\hat{6} - \hat{5} - \hat{4} - \hat{3}$   
 $\hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{7}$  %

Please rate the following:

Ease of Hearing this Interpretation

Cannot hear at all      Can somewhat hear      Can easily hear

1      2      3      4      5      6      7



Listen to the excerpt, and attempt to alternate between the soprano line interpretations provided below on each successive listening.

0:00 / 0:00

Interpretation A:

[PAC – Tonic Pedal]  $\rightarrow \hat{3} - \hat{2} - \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \overbrace{\hat{1} - \hat{7}}^{\%}$

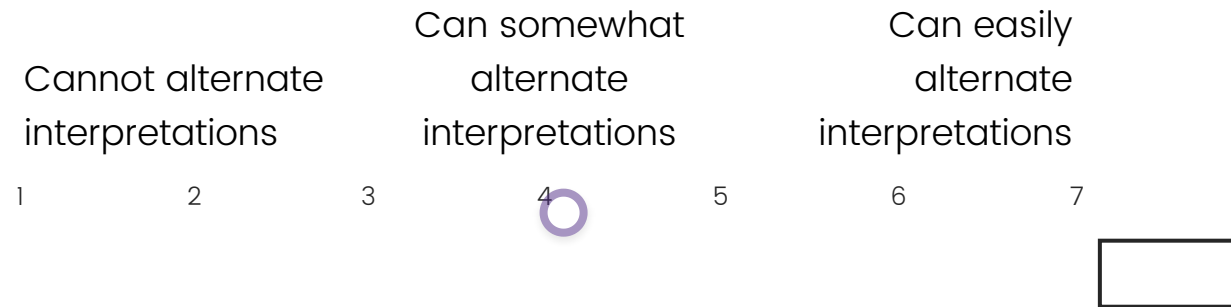
Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \overbrace{\hat{3}}^{\%} - \hat{6} - \hat{5} - \hat{4} - \overbrace{\hat{3}}^{\%} - \hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \overbrace{\hat{1} - \hat{7}}^{\%}$



Please rate the ease of change between these two interpretations:

Ease of change



## Recap: Soprano (Order 2)

Listen to the excerpt and attend to the soprano line. Rate the ease of hearing the interpretation provided below:

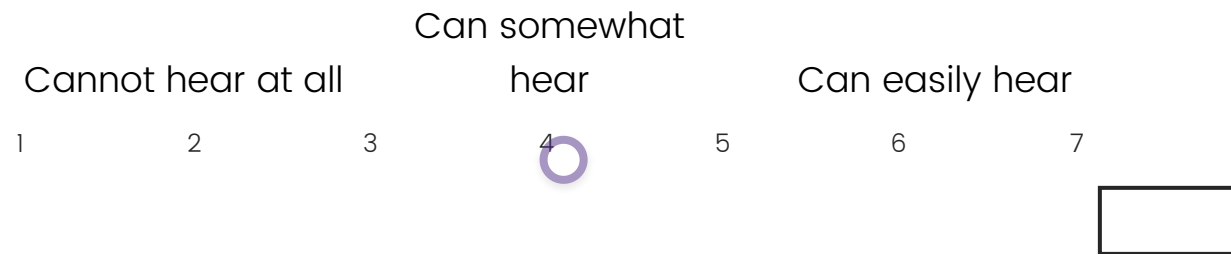
0:00 / 0:00

Interpretation A:

[PAC – Tonic Pedal] →  $\hat{3}$   
 $\hat{6} - \hat{5} - \hat{4} - \hat{3}$   
 $\hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{7}$  %

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt again and attend to the soprano line. Rate the ease of hearing the interpretation provided below:

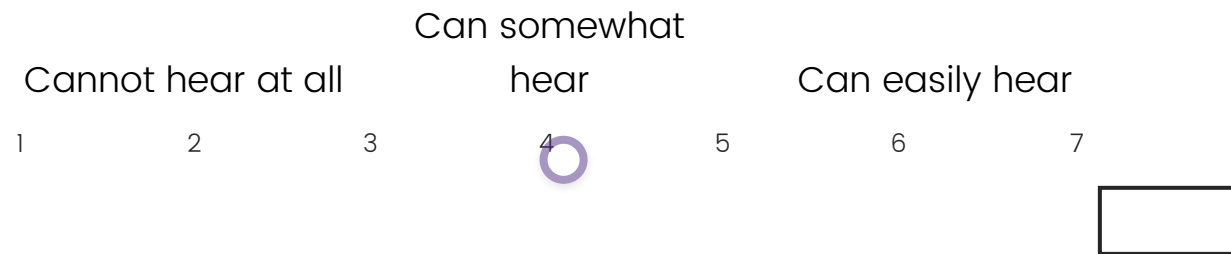
0:00 / 0:00

Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \hat{3} - \hat{2} - \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \overbrace{\hat{1} - 7}^{\%}$

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the soprano line interpretations provided below on each successive listening.

0:00 / 0:00

Interpretation A:

[PAC – Tonic Pedal]  $\rightarrow \hat{3} \text{ } \hat{6} - \hat{5} - \hat{4} - \hat{3} \text{ } \hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{7}$

Interpretation B:

[PAC – Tonic Pedal]  $\rightarrow \hat{3} - \hat{2} - \hat{1} - \hat{7} - \hat{6} - \hat{5} - \hat{4} - \hat{3} - \hat{2} - \hat{1} - \hat{7}$

Please rate the ease of change between these two interpretations:

Ease of change



## Recap: Schema (Order 1)

Listen to the excerpt and rate the ease of hearing the schemata interpretation provided below:

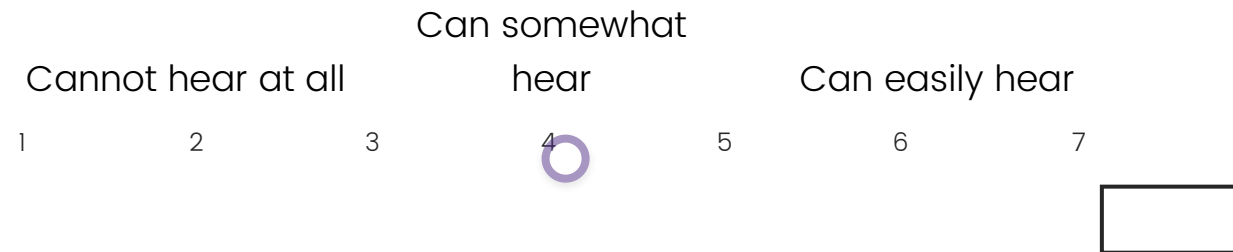
0:00 / 0:00

Interpretation A:

PAC – Tonic Pedal – Step-Descent Romanesca – Converging

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt again and rate the ease of hearing the schemata interpretation provided below:

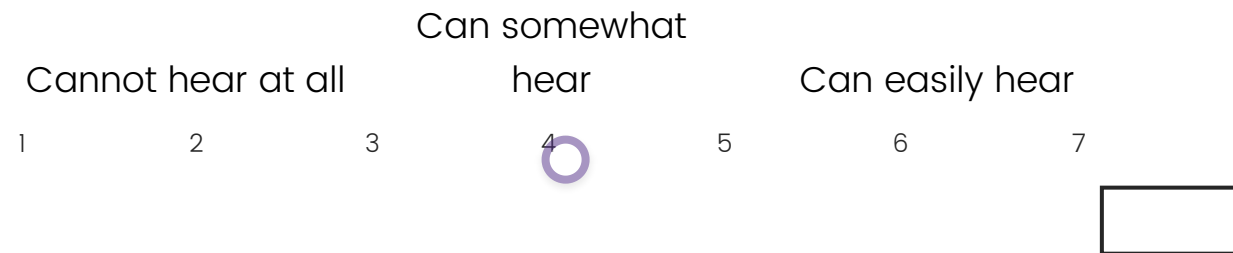
0:00 / 0:00

Interpretation B:

PAC – Tonic Pedal – Modulating Prinner 1 – Modulating Prinner 2 – Converging

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the schemata interpretations provided below on each successive listening.

0:00 / 0:00

Interpretation A:

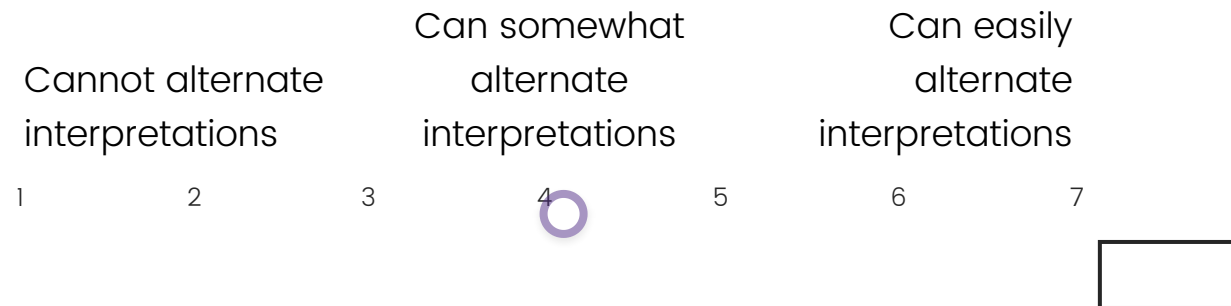
PAC – Tonic Pedal – Step-Descent Romanesca – Converging

Interpretation B:

PAC – Tonic Pedal – Modulating Prinner 1 – Modulating Prinner 2 – Converging

Please rate the ease of change between these two interpretations:

Ease of change



**Recap: Schema (Order 2)**



Listen to the excerpt and rate the ease of hearing the schemata interpretation provided below:

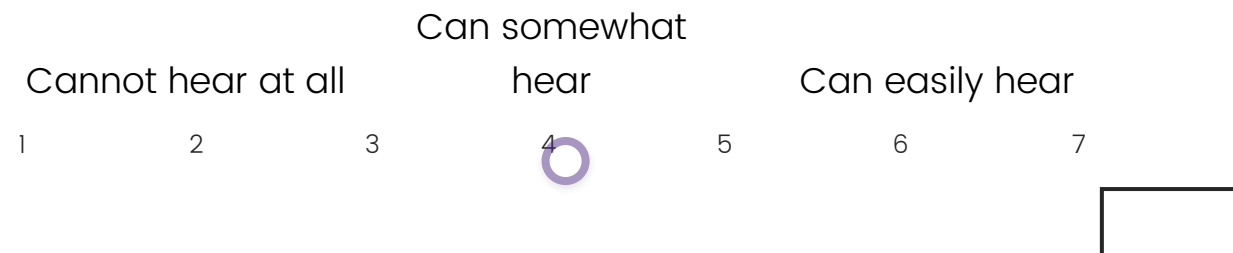
0:00 / 0:00

Interpretation A:

**PAC – Tonic Pedal – Modulating Prinner 1 – Modulating Prinner 2 – Converging**

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt again and rate the ease of hearing the schemata interpretation provided below:

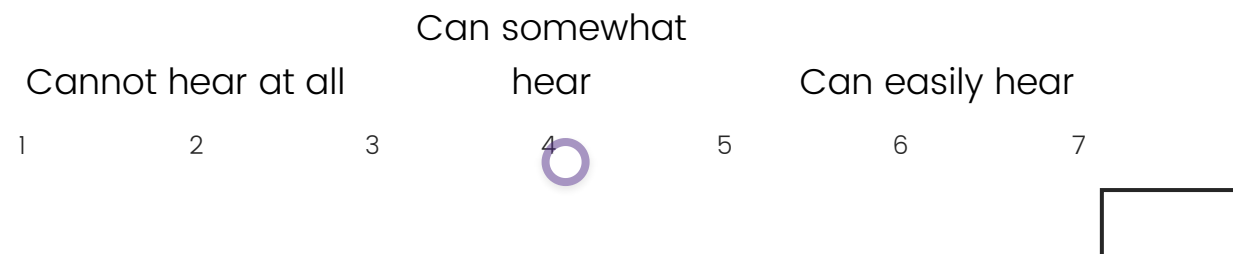
0:00 / 0:00

Interpretation B:

## PAC – Tonic Pedal – Step-Descent Romanesca – Converging

Please rate the following:

Ease of Hearing this Interpretation



Listen to the excerpt, and attempt to alternate between the schemata interpretations provided below on each successive listening.

0:00 / 0:00

Interpretation A:

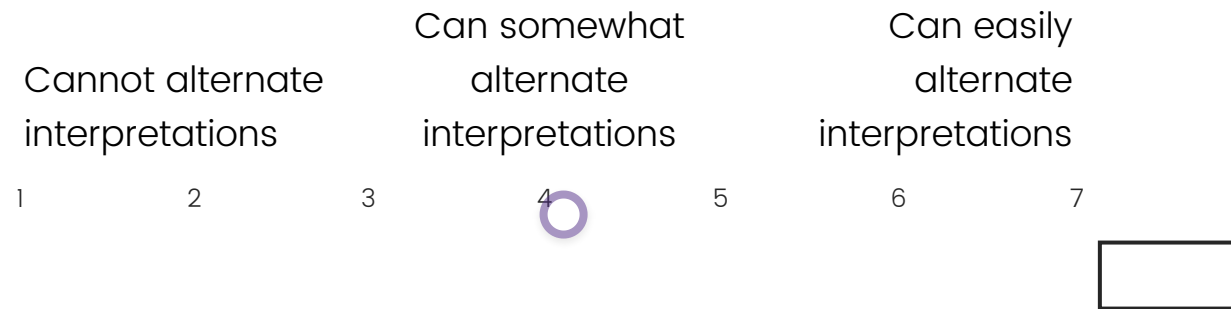
**PAC – Tonic Pedal – Step-Descent Romanesca – Converging**

Interpretation B:

**PAC – Tonic Pedal – Modulating Prinner 1 – Modulating Prinner 2 – Converging**

Please rate the ease of change between these two interpretations:

Ease of change



## Conclusion: Bio Survey

### Biographical Information

Thank you for completing the ratings! The survey will conclude with some short questions regarding your background.

### Music Theory Background

Please select your education / training level:

- ☐ Undergraduate Student
- ☐ Graduate Student
- ☐ Postdoctoral Researcher
- ☐ Professor
- ☐  Other, please specify:

Please select the number of years of music theory experience (training, teaching):

- ☐ 1-2 years
- ☐ 3-5 years
- ☐ 5-10 years
- ☐ 10 + years

Please select the number of years of aural skills experience (training, teaching):

- ☐ 1-2 years
- ☐ 3-5 years

☐ 5-10 years

☐ 10 + years

Please select your level of fluency with tonal scale degree hearing:

☐ Not fluent at all

☐ Somewhat fluent

☐ Fluent

☐ Very fluent

☐ I am an expert, scale degree hearing is effortless

Please select your level of familiarity with Galant Schemata:

☐ Completely unfamiliar

☐ Somewhat familiar

☐ Familiar

☐ Very familiar

☐ I am an expert (analysis, playing, composition, etc.)

## Listening and Interpretation

Excerpt Familiarity:

- ☐ This was the first time I have heard this
- ☐ I have heard this before
- ☐ I am very familiar with this piece

I have analyzed this piece before:

- ☐ No, not at all
- ☐ Yes, somewhat
- ☐ Yes, extensively

Please rate the following statements:

Strongly disagree

Strongly agree

1

2

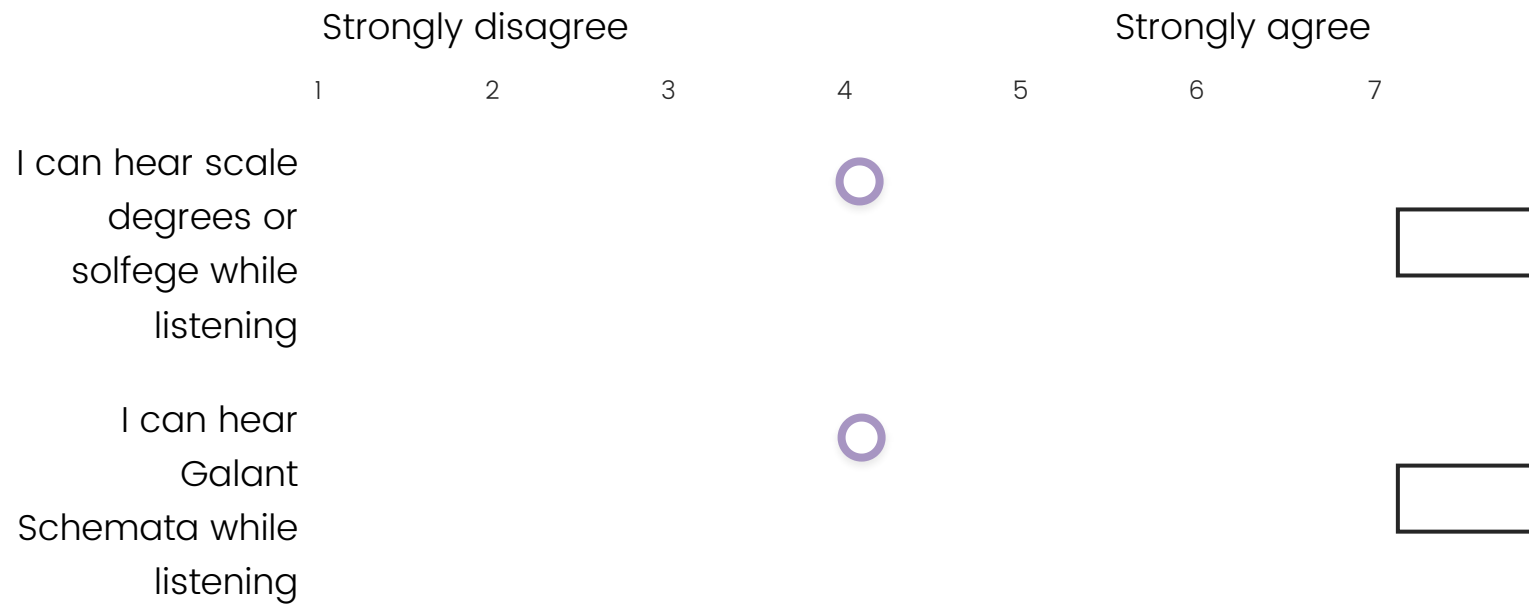
3

4

5

6

7



I have perfect pitch:

- ☐ Yes
- ☐ No

In order to hear the interpretations provided in this survey, I did the following (select all that apply):

- ☐ I have no idea, I could just hear it!
- ☐ I imagined scale degrees or solfege as I listened



- ☐ I subvocalized (silent rehearsal, spoken or sung) scale degrees or solfege while listening
- ☐ I spoke or sang scale degrees or solfege while listening
- ☐ I imagined or sung/spoke the interpretation between listenings
- ☐ I sang or spoke (without scale degrees or solfege)
- ☐ I played an instrument
- ☐  Other (please specify)

**END**

Here is your ID number: \$ {e://Field/Random%20ID}. Please save this number for your records.

Should you have any questions or concerns, please contact Sarah Gates at sarahgates2015@u.northwestern.edu.

Please click below to end the survey.

