

Perceptual Similarity of Musical Orchestration

Purpose

The purpose of this listening test is to perceptually evaluate musical orchestration.

Informed Consent

Please read this informed consent sheet carefully before starting the test. After reading this informed consent sheet, click “START” to proceed. By clicking “START” you are consenting to take part in the study. If you choose to take part, you are consenting to listen to music sounds and to rate perceptual aspects of these sounds. You are free to withdraw at any time by leaving the webpage of the survey. You must be aged 18 or older to participate in this study.

Voluntary Participation

Your participation is completely voluntary. It is up to you to decide whether to participate. Choosing not to participate will not disadvantage you in any way. If you do decide to participate, you are still free to withdraw at any time during the test and without giving a reason by closing the webpage. Refusal to participate or withdrawal will involve no penalty nor loss of benefits to which you are otherwise entitled. Any answers provided will NOT be saved if you choose to leave the test without submitting the results.

Risks

These experiments involve no foreseeable hazards, risks, side effects, nor disadvantages to the participant. To avoid hearing-related health risks, you will be asked to adjust the volume level of your device to a comfortable level. All the sounds in this test were normalized to the same level. Follow the steps below to adjust the volume level of your device.

Volume level adjustment:

- Lower your device's volume level to the minimum;
- Click “PLAY” below;
- Raise the volume of your device to a comfortable level;
- Click “PLAY” again if the sound ends before you have finished adjusting the volume.

Anonymity and Confidentiality

Responses to this survey are anonymous and confidential. All your test responses will be anonymous and it will not be possible to link them to you personally. Your

answers will never be individually revealed or linked to your name. All data collected will be stored electronically in a secure, password-protected computer behind locked doors. Only approved members of the research team will be able to access it. The data from the survey will be aggregated, analysed and may be made public (in full, in summary or in direct quotation) in scientific publication(s) (you will not be identifiable from it). None of the data collected will be used for commercial purposes.

Test Duration

The entire test will take approximately 15 minutes (although you can finish earlier if you want).

The Test

In this listening test, you are asked to evaluate the **perceptual similarity** between a reference sound and musical orchestrations created to approximate the reference sound. Each musical orchestration typically comprises notes of several musical instruments played in unison. Each page contains 1 reference sound and 16 orchestrations. There are 7 pages with 16 sounds in each page. Thus you will listen to and rate 112 sounds in total. In each page, you are asked to:

Rate the perceptual similarity between each orchestration and the reference sound.

Use the scale ranging from “**VERY DISSIMILAR**” to “**VERY SIMILAR**”. The orchestrations are presented randomly and are not ordered by any **similarity** measure.

Click “**PLAY**” to listen to the sounds, and “**STOP**” to stop playing the sounds. You can click “**PLAY**” while a sound is playing to automatically stop playing the current sound and start playing the next one. You can listen to each sound as many times as you want. To rate an orchestration, move the slider to the position that corresponds to your perceptual assessment along the scale “**VERY DISSIMILAR**” and “**VERY SIMILAR**”. After you have rated all the orchestrations in the current page, click “**NEXT**” to go to the next page.

When you click “**NEXT**” in page 7, the following message pops up **This was the last test. Do you want to finish?** Click “**OK**” to go to the last page and submit the test results. The last page contains questions about your age and listening conditions. These questions are optional and you can choose to leave any or all of the fields empty. You will only submit your results if you click “**SUBMIT**”. At this point, you can choose **NOT** to submit your results by leaving the page.

Test Instructions:

- Feel free to listen through the reference and all orchestrations before you do any ratings to get used to the material.

- Rate the **perceptual similarity** of the orchestrations relative to the reference on top.
- While rating the **perceptual similarity**, always listen to the reference sound before listening to each orchestration.
- Rate the **perceptual similarity** using the beginning of the orchestrations (while all instruments are playing together). If you notice one or more sounds ending sooner than others, try to ignore the tail.
- Try to rate the “overall” **perceptual similarity** of the orchestrations without focusing on single aspects.
- Use the whole scale from **Very dissimilar** to **Very similar**.
- Take the test in a quiet environment.
- Use high-quality studio headphones and a good soundcard. Do not use low-quality equipment such as earphones or laptop loudspeakers.

Click “**START**” to voluntarily consent to take part in the test and advance to the first test page. By clicking “**START**” you acknowledge: **I have read the information in this informed consent sheet and all my questions about the research have been answered to my satisfaction.** If you have questions or concerns about this experiment or the results, please contact us via email.