

ALL ABOUT SOUND

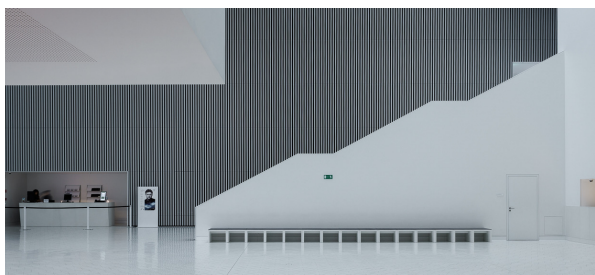
1. Listen to the same musical motif - piano suite 'Pictures at an Exhibition' by Modest Mussorgsky performed in three different spaces of the Philharmonic in Szczecin. Match what you hear with the spaces below.



SYMPHONY HALL



CHAMBER HALL



LOBBY

Tell your partner(s) which space and sound you like best and say why.

2. Listen to conductor Rune Bergmann talking about how he experiences sound in philharmonic halls where he works with orchestras. Circle the things he mentions.

acoustics distortion reverb clarity of sound
lower registers colours of sounds

3. Listen again and decided if the following statements are true or false. Write T for true or F for false. Make a note of your reasons for a given choice.

- Churches exhibit a lot of resonance and echo.
- It's hard for conductors to determine the colour and reverb of a given concert hall.
- A lot of echo in a concert hall can make an orchestra sound confusing.
- Timpanis and double basses give high-pitched sounds.
- While playing the double bass, clarity of sound can be obtained by pulling the strings really hard.
- Violins and violas play in the same registers.

Modest Mussorgsky

a Russian composer, an innovator of Russian music in the romantic period, who strove to achieve a uniquely Russian musical identity.



Rune Bergmann

a dynamic versatile Norwegian conductor, the Artistic Director of the Philharmonic in Szczecin. He is considered one of the best conductors of his generation.

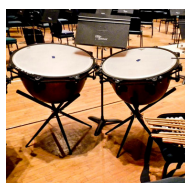


reverb

a persistence of sound after the sound has been produced. It is created when a sound or signal is reflected causing a large number of reflections to build up and then decay as the sound gets absorbed by the surfaces of objects in the space – which could include furniture, people, and air.

timpani

or kettledrums are a type of drum consisting of a skin stretched over a large bowl traditionally made of copper. They belong to the percussion family.



ALL ABOUT SOUND

4. Work with your partner(s). Discuss the following questions.

- How do you listen to music? What equipment do you use?
- Do you ever use smartphone apps for listening to music? Which ones?

5. Read the text to see if any of the things you have discussed are mentioned. If yes, which ones? Ignore the gaps.

SOUND NOW AND THEN

In the old days, people didn't use to listen to music like we do now, in big concert halls 1 _____ party venues. *People used to be more versatile and open to music 2 _____ nowadays* - says musicologist Dorota Serwa. *From the perspective of a middle-class upbringing, it was well regarded for children to know how to play 3 _____ piano.*

In the countryside, those who couldn't play any musical instrument still had the chance to experience music 4 _____ to travellers playing the lyre and singing stories they had heard along their way. Later with the development of technology, gramophones using phonograph records to play music appeared.

Nowadays we are listening to sounds with poorer and poorer quality, especially the youth. The best sounds are those produced by an instrument and received by the human ear by means 5 _____ air, without any middlemen. The recording of music in any form forces a transformation of the acoustic wave into an electric signal.

The greater the compromise we have to reach, 6 _____ poorer the quality.

The introduction of compact discs made the situation even worse, not to mention mp3 files, and not to mention youtube, where the audio is highly degraded with both high and low frequencies cut out. Despite these missing pieces not being audible 7 _____ the human ear, these sounds still reach us through our bodies. The full spectrum of such sounds can be heard in the philharmonic halls.

As 8 _____ as professional DJs are concerned, during their shows they tend to use vinyl records, compact discs as well as electronic devices 9 _____ as laptops and controllers. Both the former and latter are characterized with a high quality. Technically speaking, the later the applied technology, the better the quality of sound is presented. It all depends on the file quality, equipment, mixers and sound system. Yet all this can be futile if the size of the venue is 10 _____ small or if an acoustician is not employed to assess the hall and prepare the loudspeaker layout.

6. Fill in the gaps with the missing words. For each gap provide one word.

7. Discuss with your partner. Would you like to work with sound in the future? As who?

Dorota Serwa

a Polish musicologist and Managing Director of the Philharmonic in Szczecin. She is also an author of various publications on musicology and national heritage.



audio frequency

or audible frequency is characterized as a periodic vibration whose frequency is audible to the average human. Its SI unit is the hertz (Hz). It is the property of sound that most determines pitch. The generally accepted standard range of audible frequencies is 20 to 20,000 Hz.

sound system

a set of speakers, but also a group of DJs and audio engineers playing and producing music typically for a dance event or party.



Image credits

Page 1: Bartosz Barczyk - spaces, Ilya_Repin - Mussorgski, Anna Niemiec - Rune Bergmann, vxla, flickr - timpani.

Page 2: Kamila Koziol - Dorota Serwa, Ivan Dimitrow, flickr - sound system.