



Nöörjen teknihkeles-
eatnemedaejremes universiteete

What is Music Technology?

Dr Balandino Di Donato
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future



classroom



old



creative



tech



art



wallpaper



new



futuristic



electronic

>



Music, Technology and Innovation MA
dmu.ac.uk



6 ways to make a career in music tec...
musictech.net



Music Technology and Audio Production ...
kent.ac.uk



Music Technology BASc
dmu.ac.uk



Music technology - Wikipedia
en.wikipedia.org



What is music technology
musictechstudent.co.uk



Music, Technology and Performance BA (Ho...
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9 Technologies That Changed the Way ...
interestingengineering.com



tricks for beginners to music product...
musictech.net



7 stages of Music Production | A ...
icmp.ac.uk

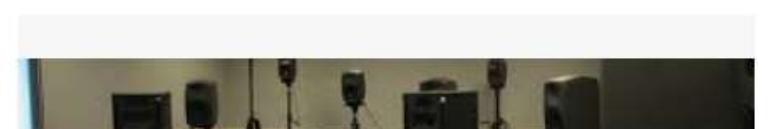
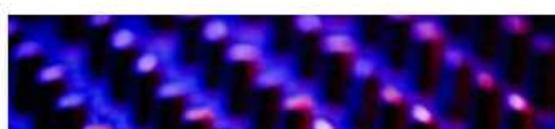


Image source: <https://www.google.com/search?q=music+technology>



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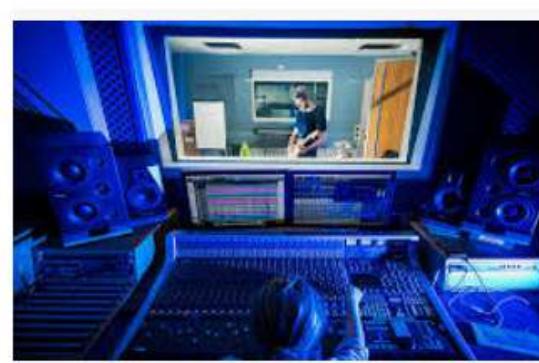
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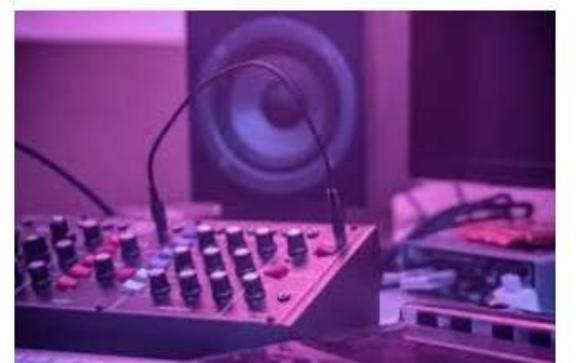
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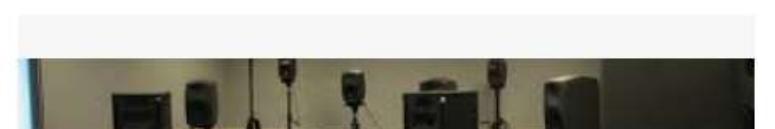
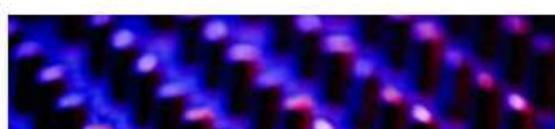
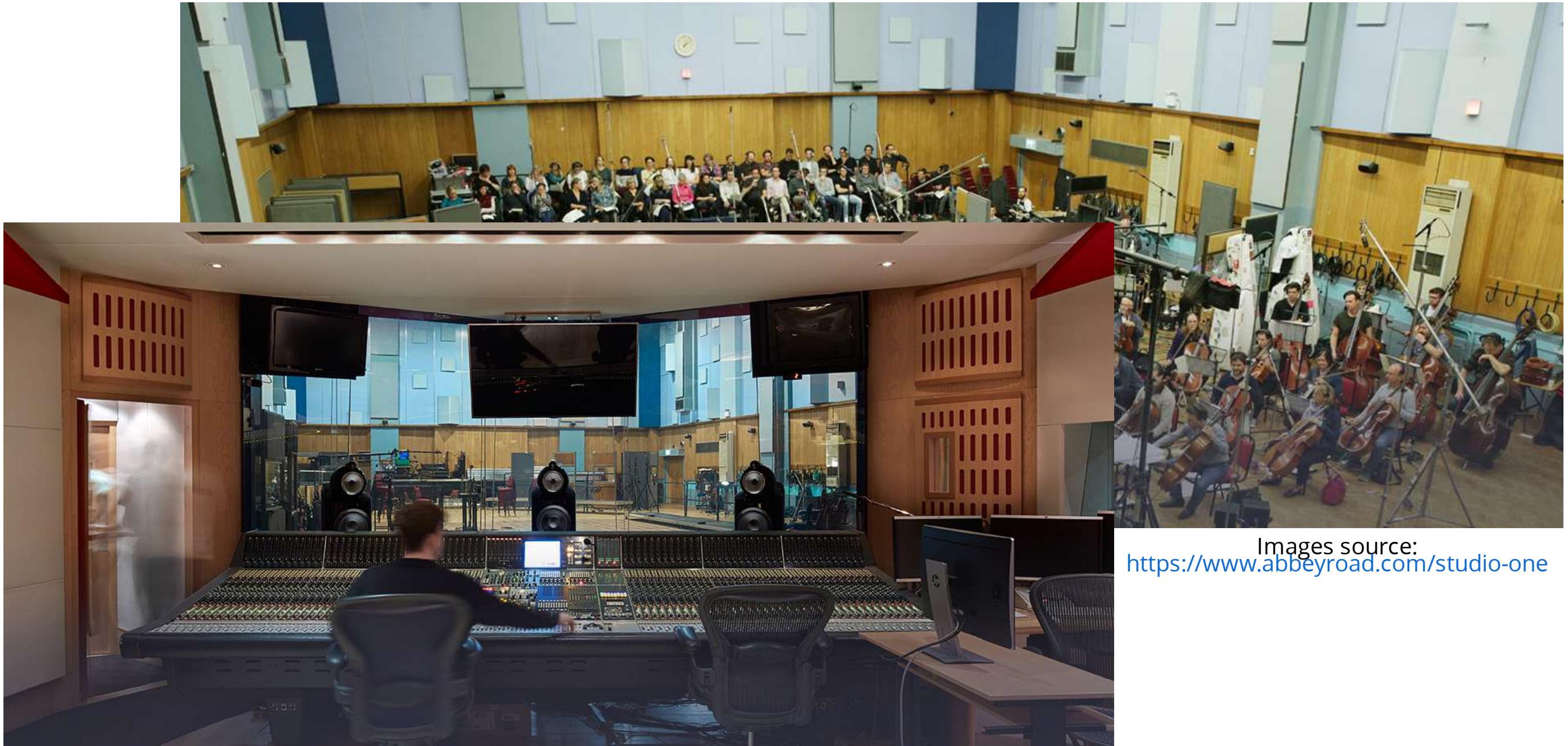


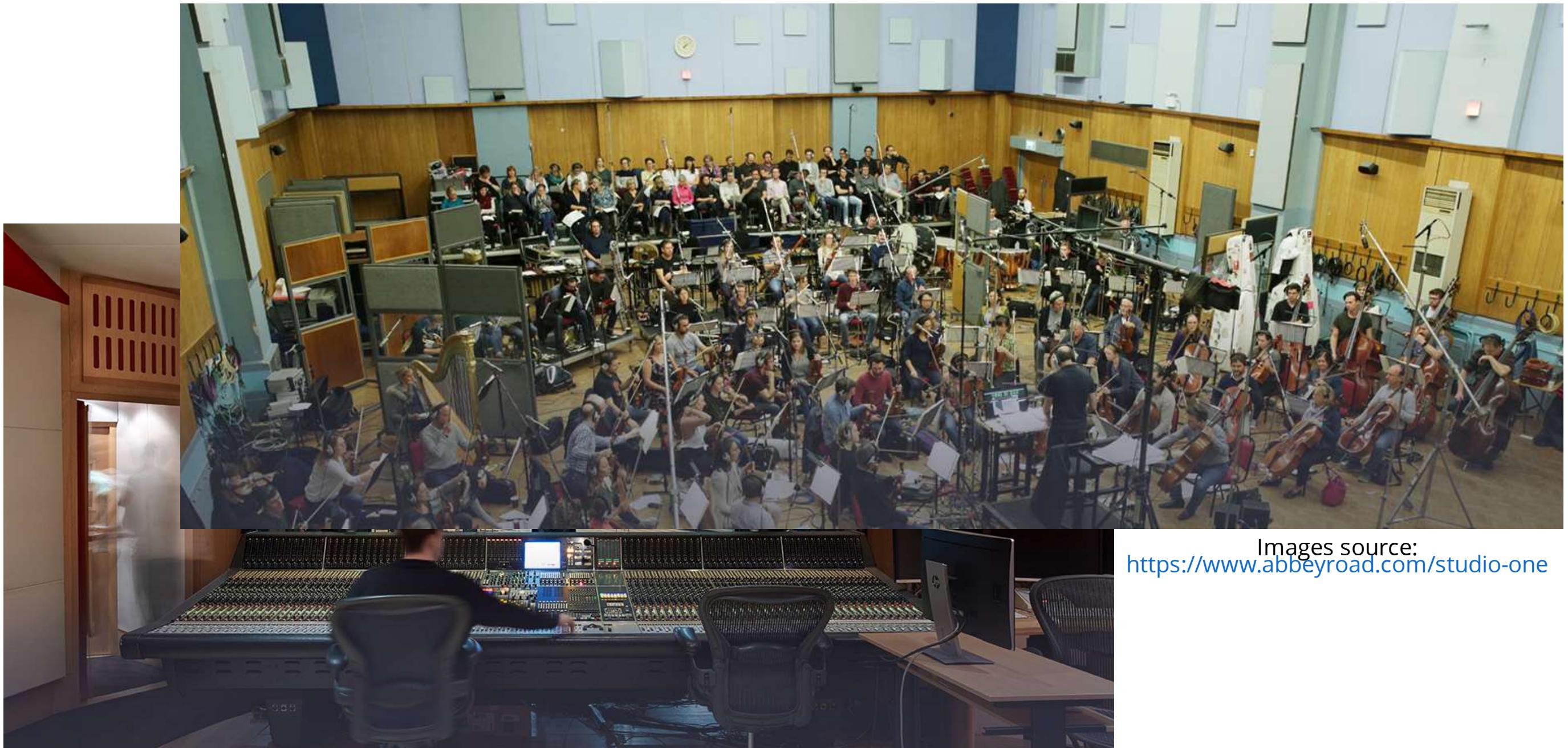
Image source: <https://www.google.com/search?q=music+technology>

music recording



Images source:
<https://www.abbeyroad.com/studio-one>

music recording



Images source:
<https://www.abbeyroad.com/studio-one>

music production



Image source: <https://tileyardnorth.co.uk/>

music composition



Image source: <https://www.avid.com/sibelius>

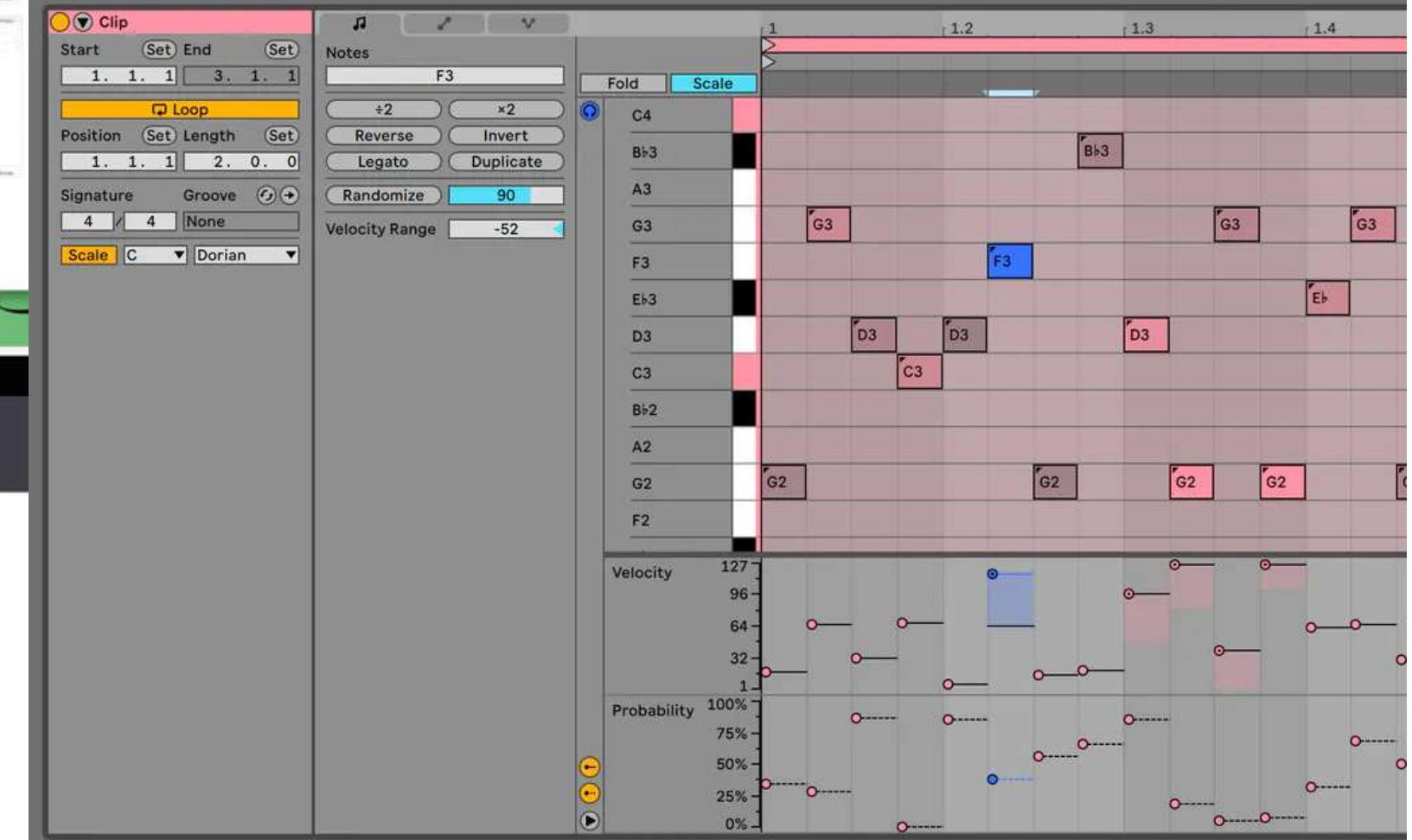


Image source: <https://www.ableton.com/en/>

music composition

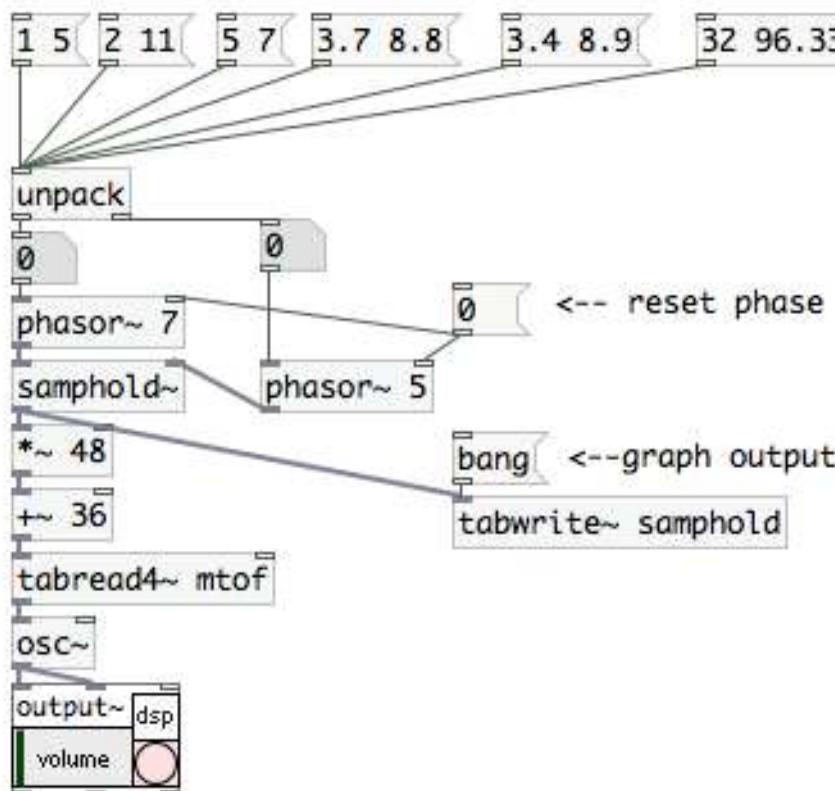


Image source: <http://puredata.info/>

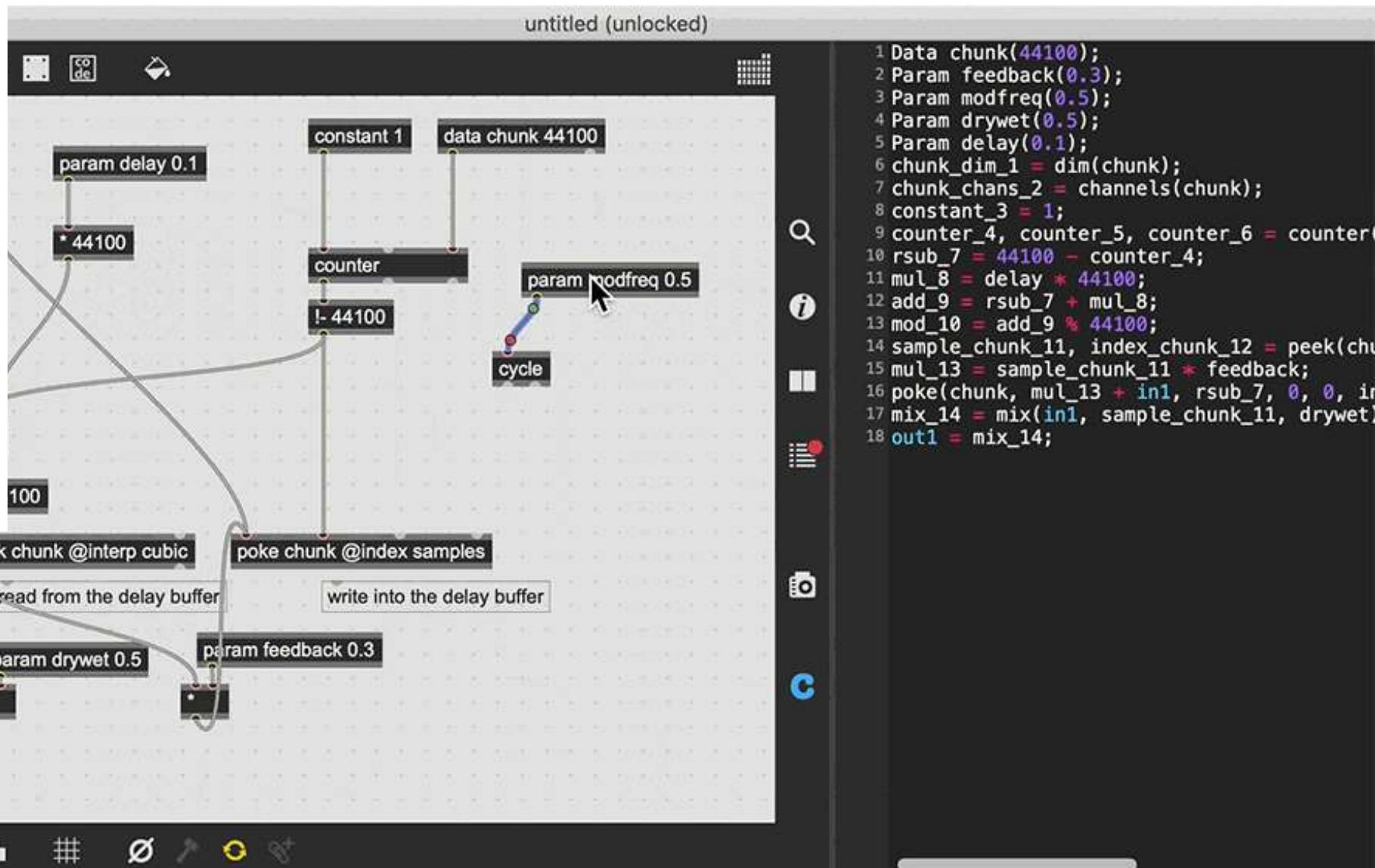


Image source: <https://cycling74.com/products/max>

music performance

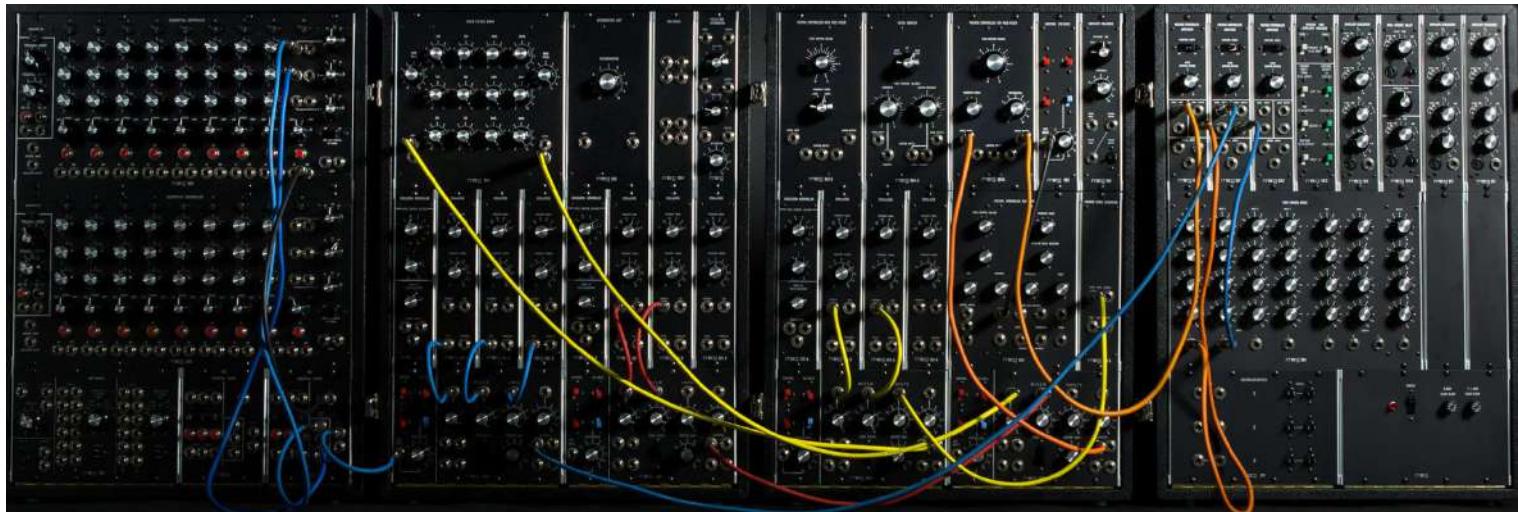


Image source: <https://www.moogmusic.com>



"Home Recording Studio Setup"
by gavinwhitner is licensed
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Image source: <https://www.nordkeyboards.com/>

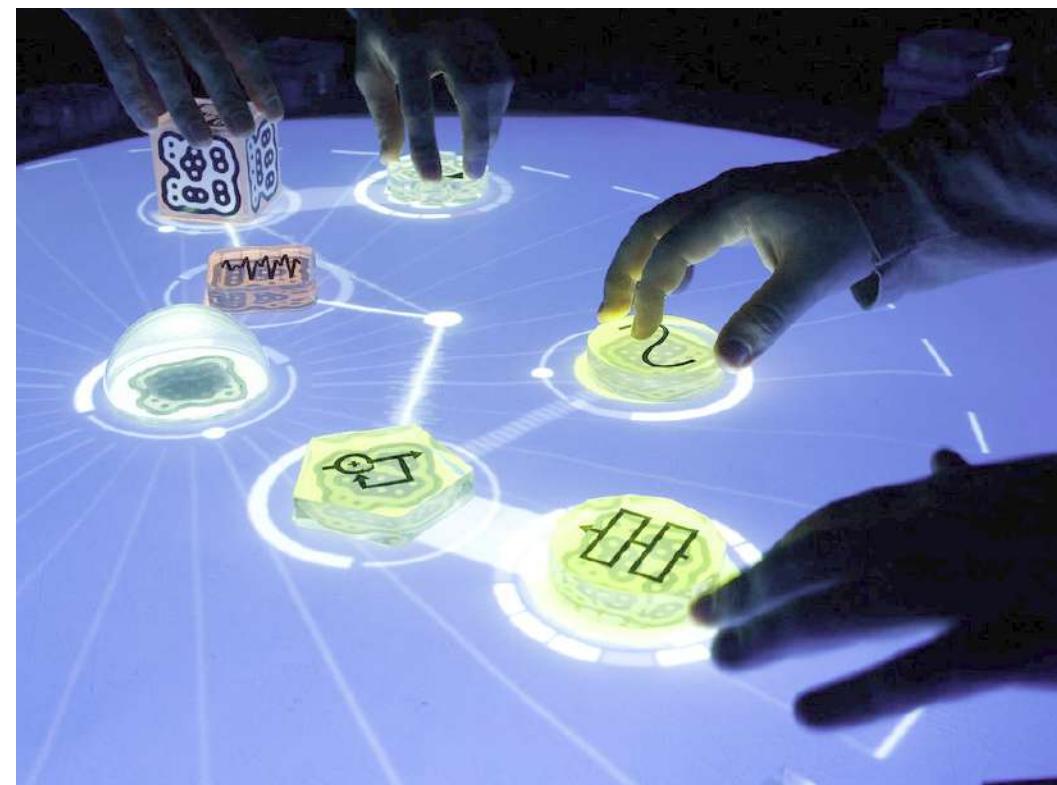


Image source:
<https://reactable.com/>

instruments



Video source: <https://youtu.be/8n-bEy9ISpM?t=5>

instruments

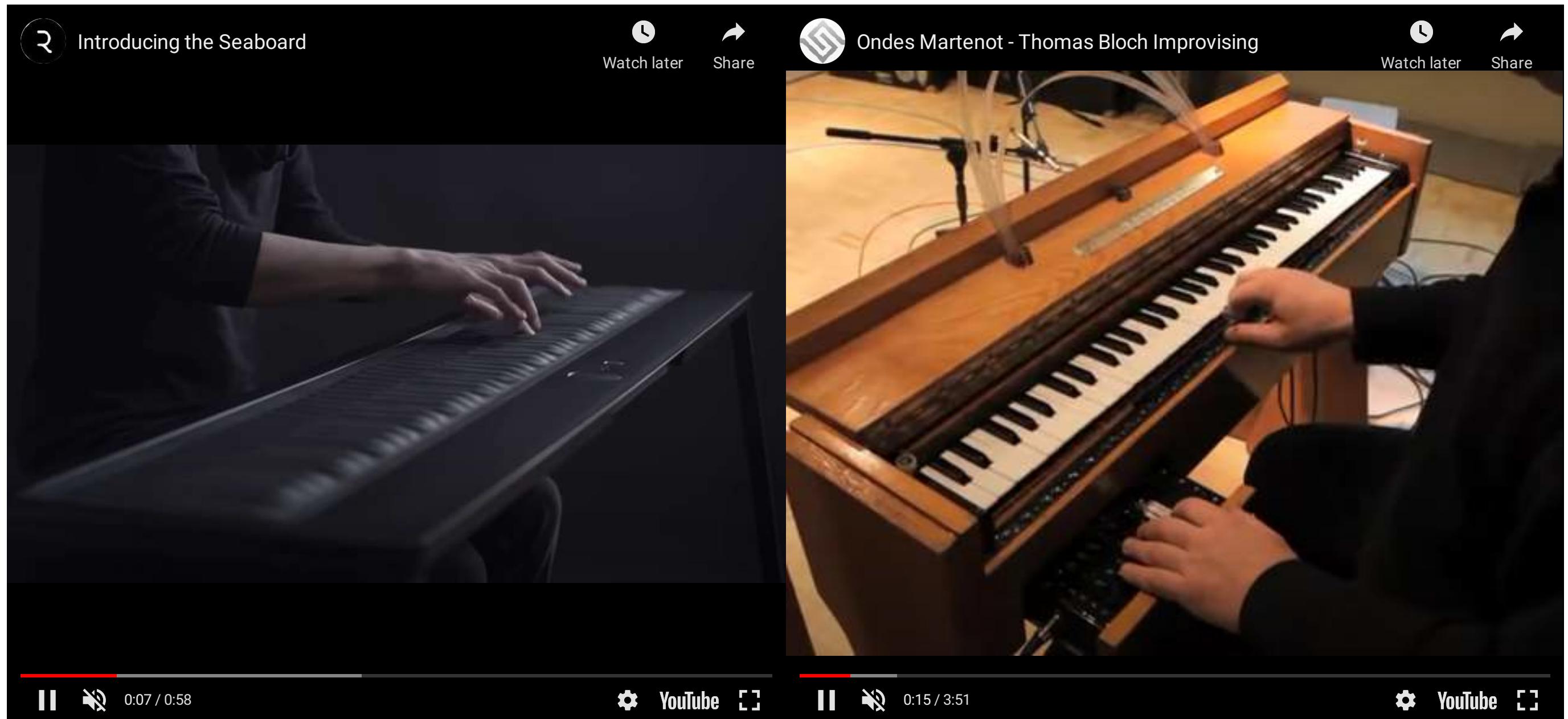


Video source: <https://youtu.be/NnU0ATg24dU?t=13>

instruments

**What are the
similarities and differences
between the two instruments?**

interaction design (IxD)



The image consists of two side-by-side video frames from YouTube. The left frame, titled 'Introducing the Seaboard', shows a person's hands playing a dark-colored Seaboard instrument. The right frame, titled 'Ondes Martenot - Thomas Bloch Improvising', shows a person's hands playing an Ondes Martenot instrument, which has a wooden case and various metallic rods and keys. Both frames include standard YouTube video controls at the bottom: play/pause, volume, timestamp, settings, and sharing options.

Introducing the Seaboard

Ondes Martenot - Thomas Bloch Improvising

Watch later Share

Watch later Share

0:07 / 0:58

YouTube

0:15 / 3:51

YouTube

Video source: <https://youtu.be/8n-bEy9ISpM>

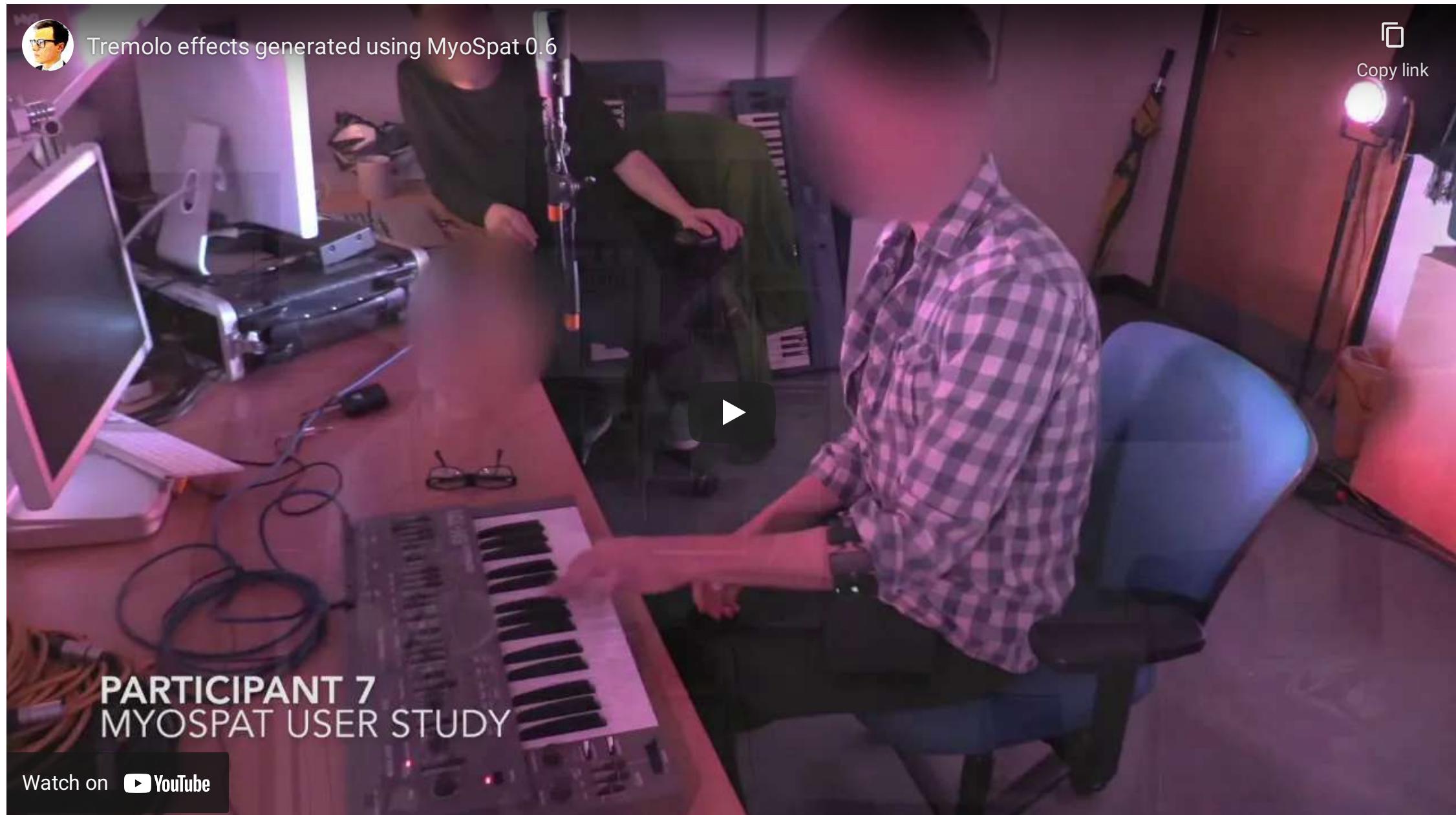
Video source: <https://youtu.be/NnU0ATg24dU?t=13>

interaction design (IxD)



Video source: <https://youtu.be/s8OT7EFKE78>

interaction design (IxD)



Video source: <https://youtu.be/tTYUbqV-2Oc>

interaction design (IxD)



Video source: <https://youtu.be/gYu4Za-1E48>

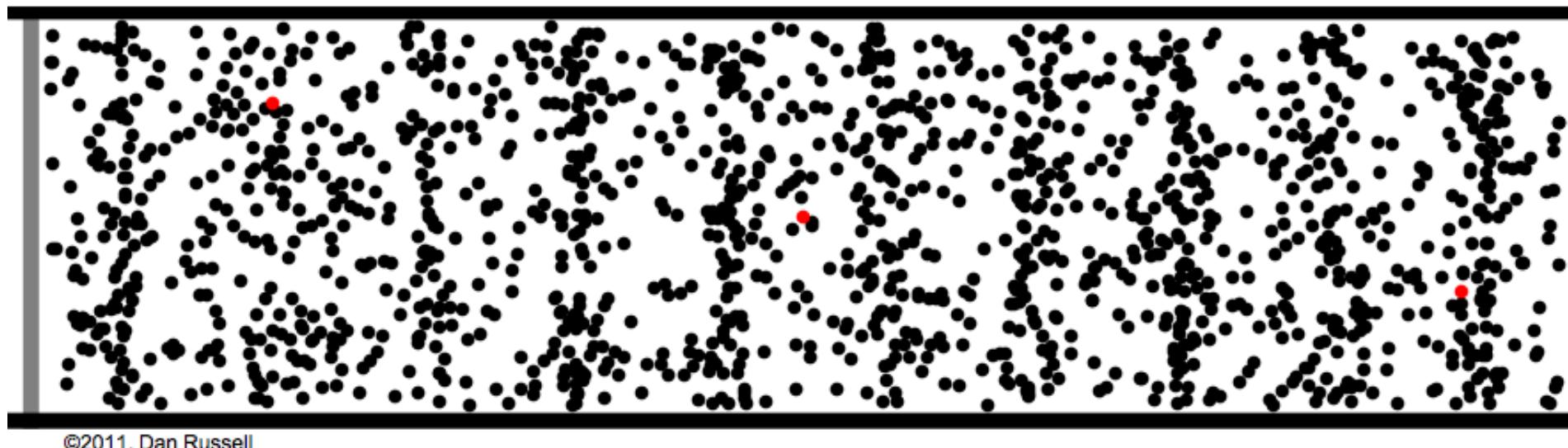
Part of the HaroCI project
Di Donato (2017)

acousmonium

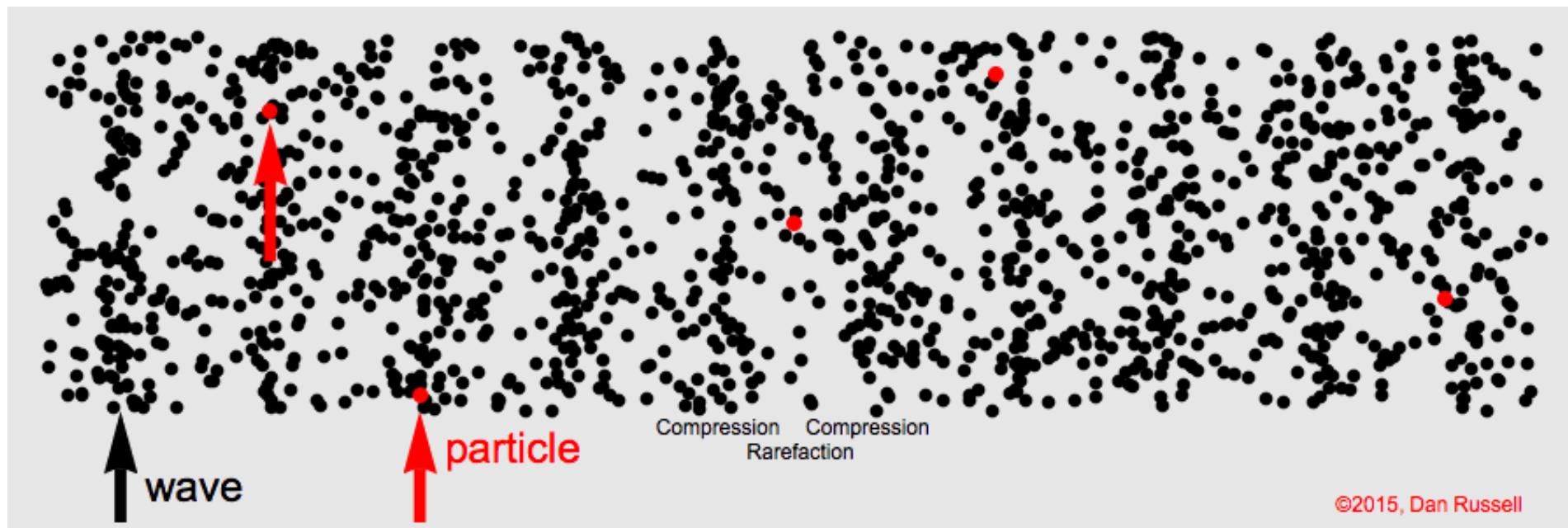


Images source: <https://www.acousmonium.info>

what is a sound wave?



©2011. Dan Russell



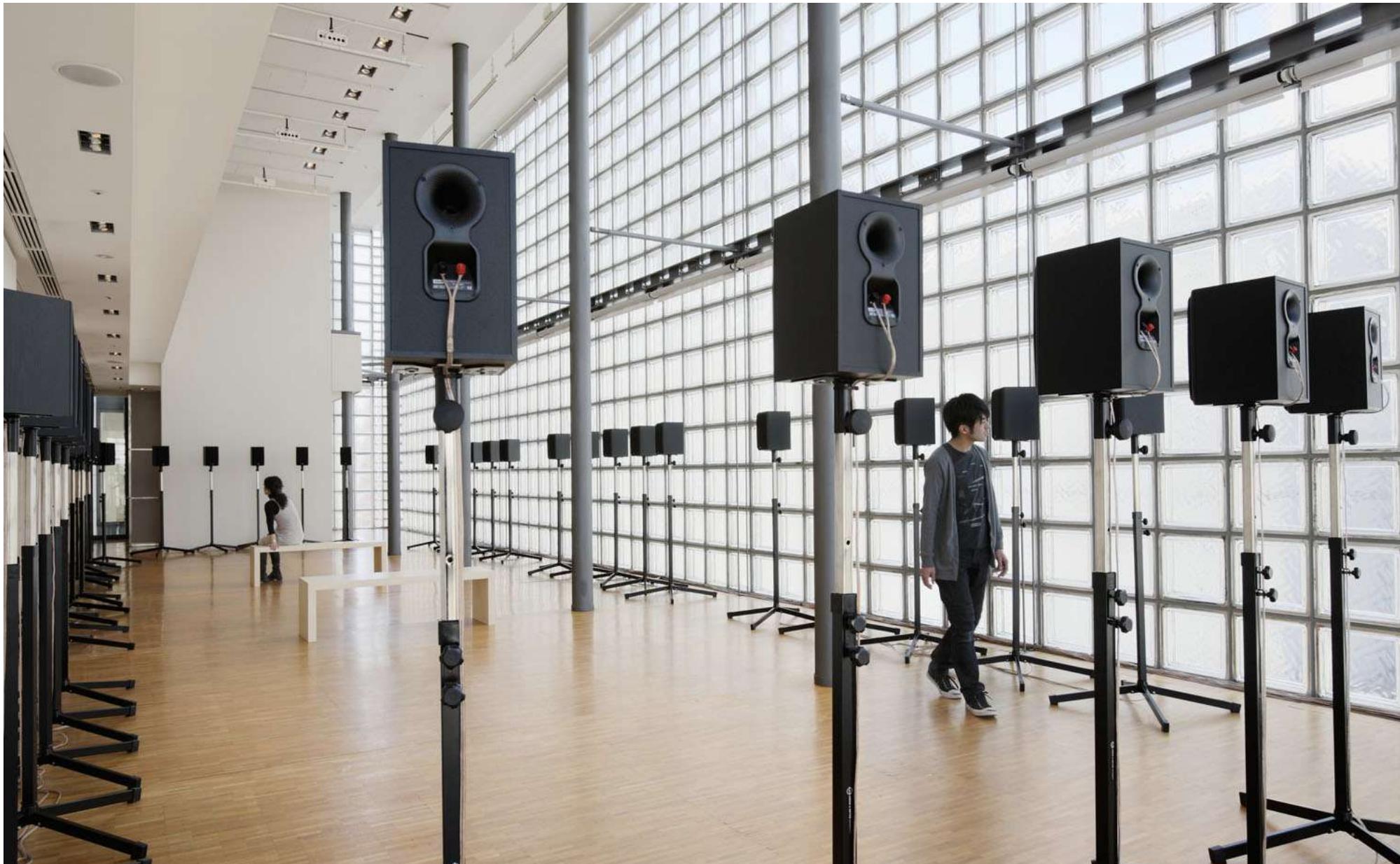
Images source: <https://www.acs.psu.edu/drussell/Demos/waves/wavemotion.html>

How sound waves behave?

Applet source: <https://www.falstad.com/ripple/>

← Please, click on the link
to view the ripple applet

sound art installations



Janet Cardiff (2001) The Forty Part Motet, Fonadation d'entreprise Hermès, Tokyo, 2009. Photo by Atsushi Nakamichi / Nacása & Partners Inc.
Courtesy of the Fondation d'entreprise Hermès, 2009. Image source: <https://cardiffmiller.com/installations/the-forty-part-motet/>

sound art installations



Curtin Rivera and Di Donato (2019) Within Us, Interactive Season, LCB Depot, Leicester, United Kingdom

<https://www.balandinodidonato.com/soundart/installations/withinus/>



Di Donato and Curtin Rivera (2019) Inner, Biennale ArteScienza, Rome, Italy
<https://www.balandinodidonato.com/soundart/installations/inner/>

Technologies for societal challenges

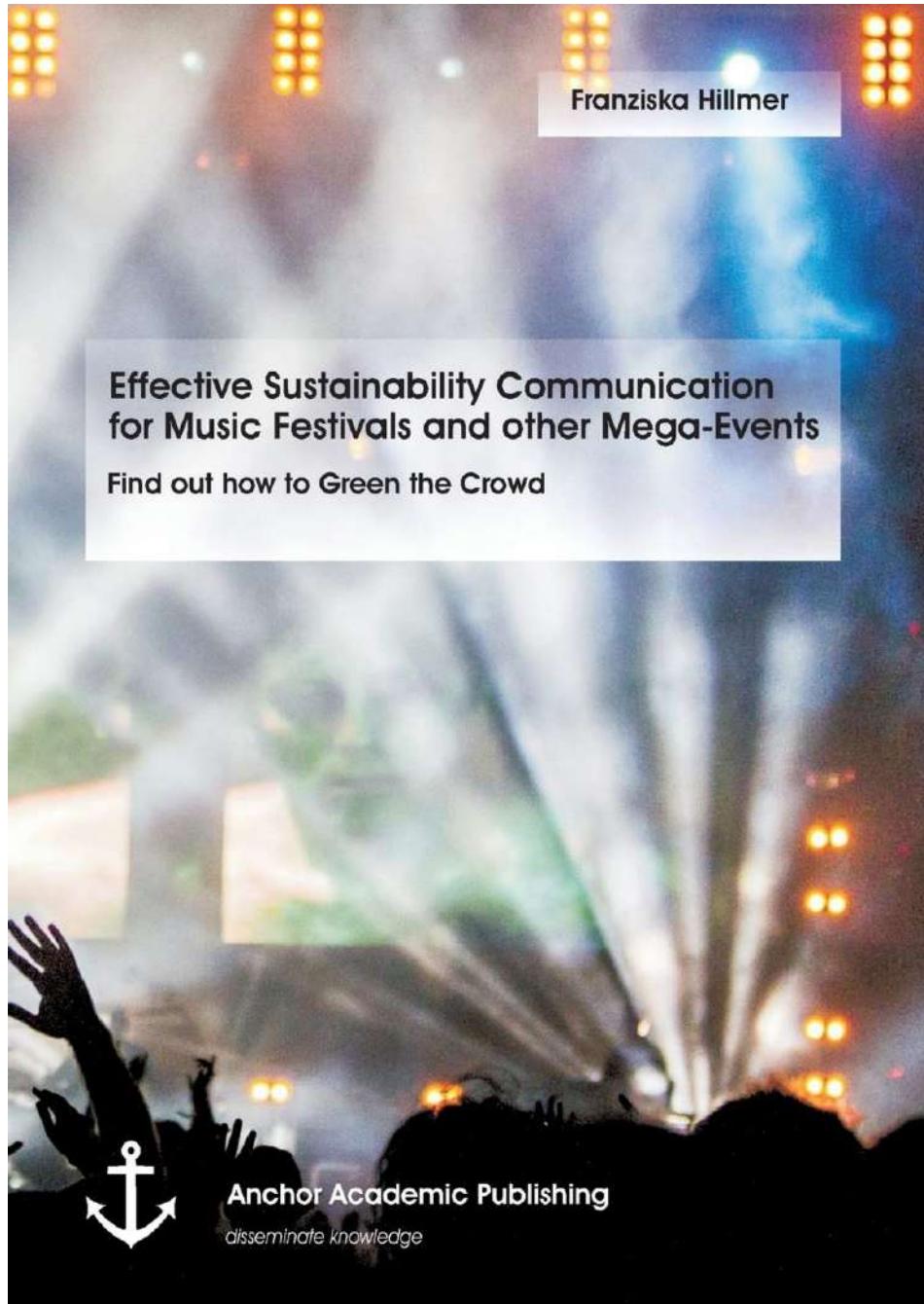


Image source: <https://www.routledge.com/Current-Directions-in-Ecomusicology-Music-Culture-Nature/Allen-Dawe/p/book/978138062498>

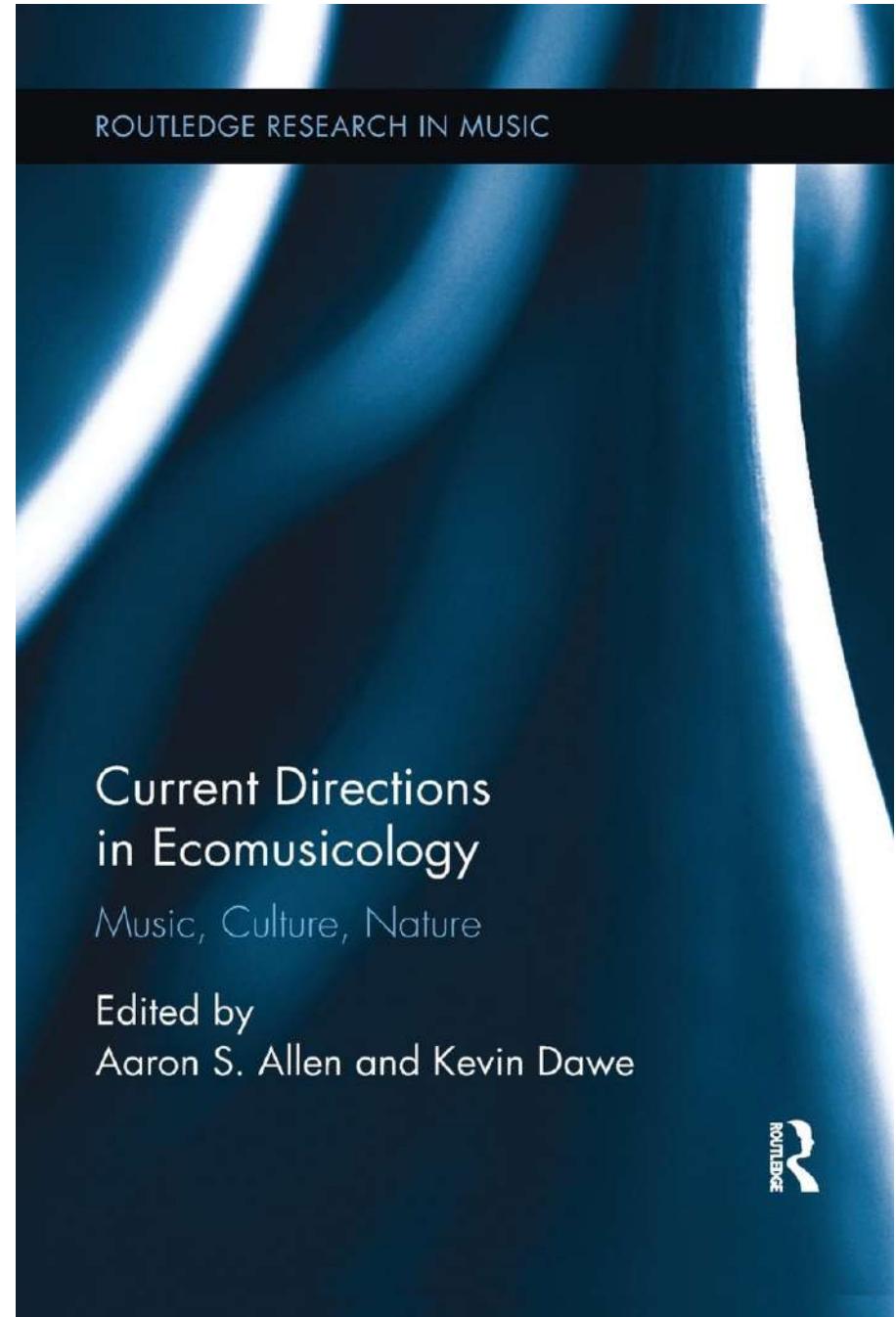


Image source: <https://www.routledge.com/Current-Directions-in-Ecomusicology-Music-Culture-Nature/Allen-Dawe/p/book/978138062498>

accessibility & inclusivity



Image source: <https://mct-master.github.io/applied-project/2020/05/02/MotionComposer.html>



Logo and image source: <http://motioncomposer.de/>

accessibility & inclusivity



Video source: https://youtu.be/4aDj7Ma_HkE

aural diversity

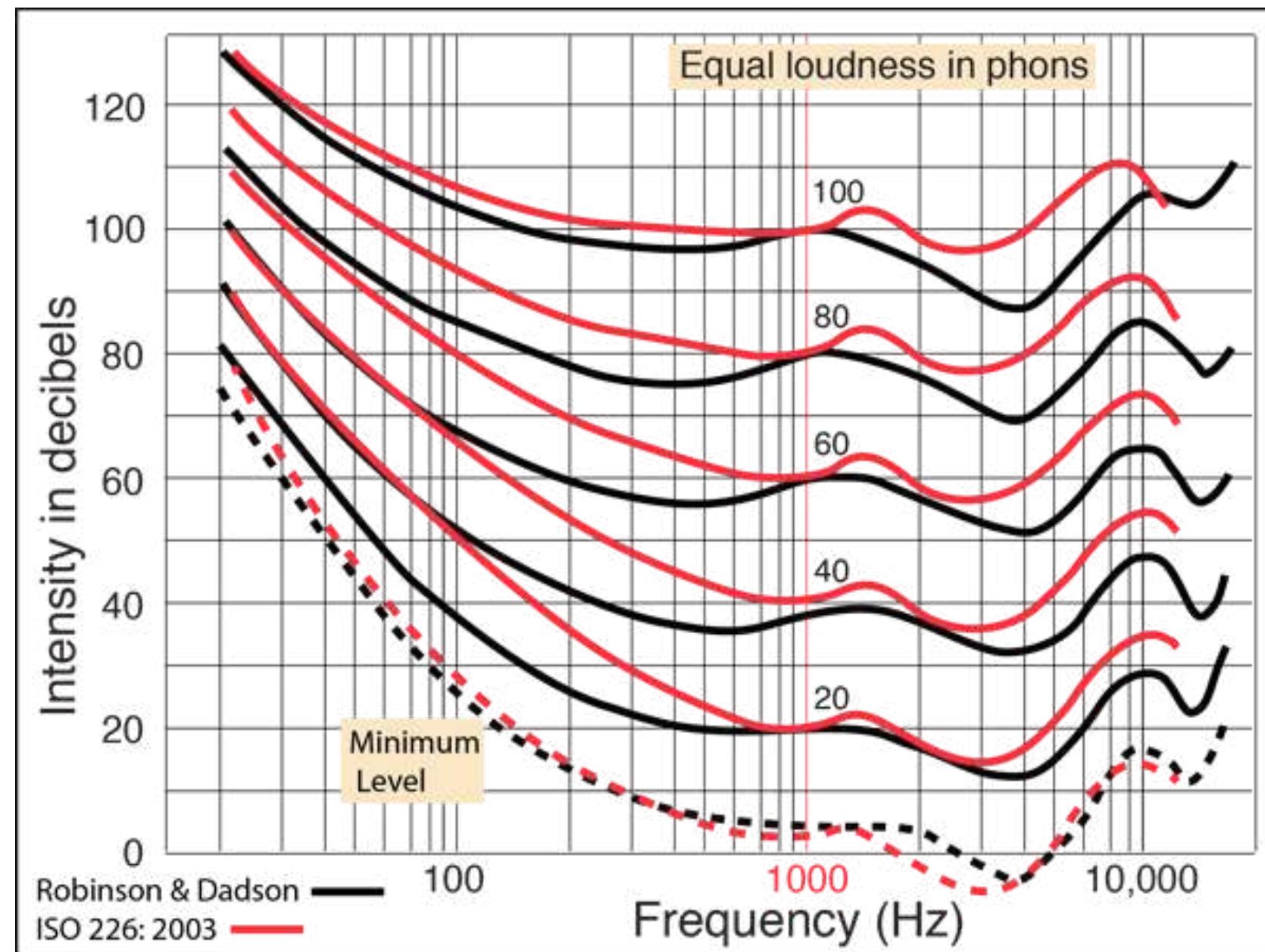


Image source: <http://hyperphysics.phy-astr.gsu.edu/hbase/Sound/eqloud.html#c1>

aural diversity

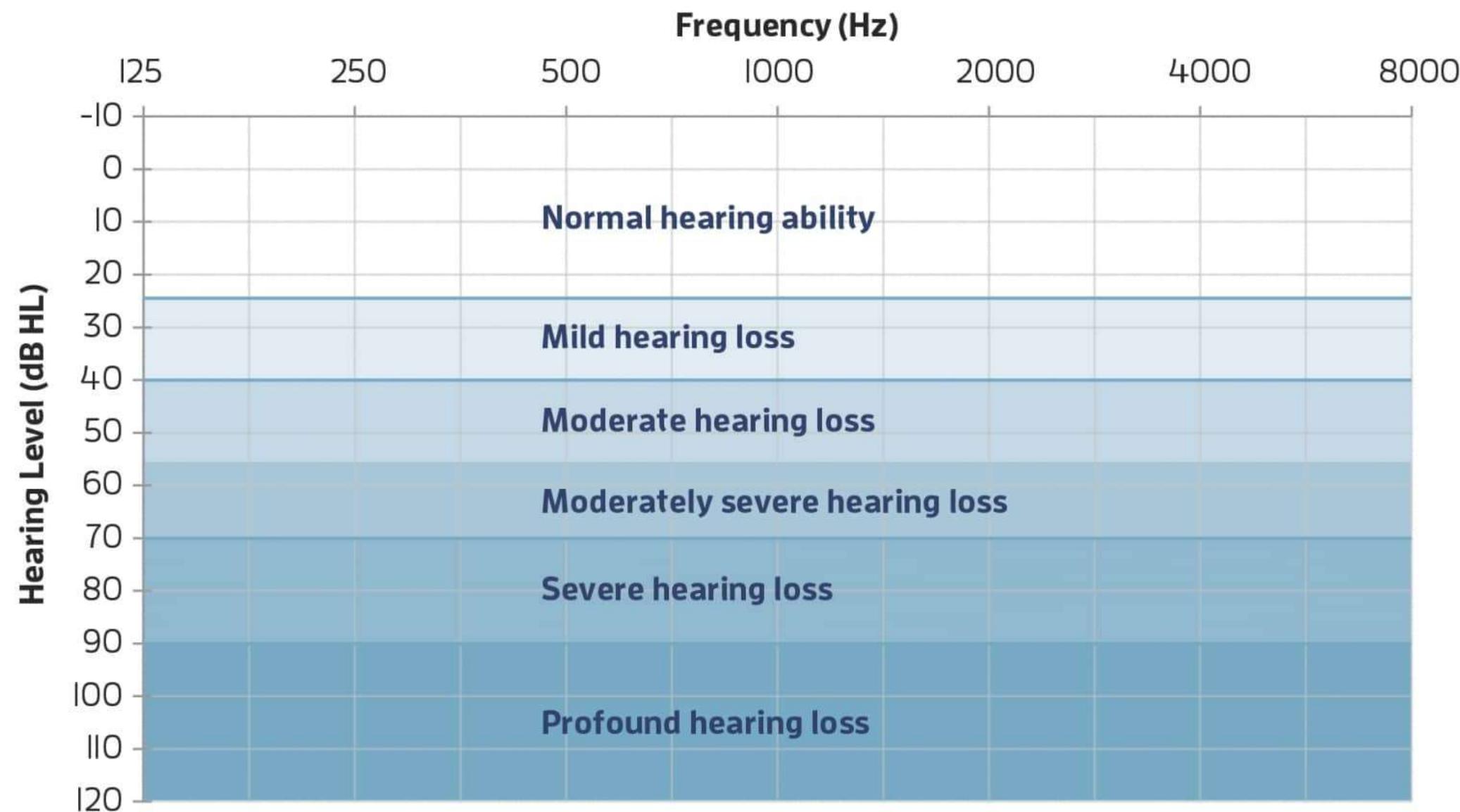


Image source: <https://www.healthyhearing.com/report/41775-Degrees-of-hearing-loss>

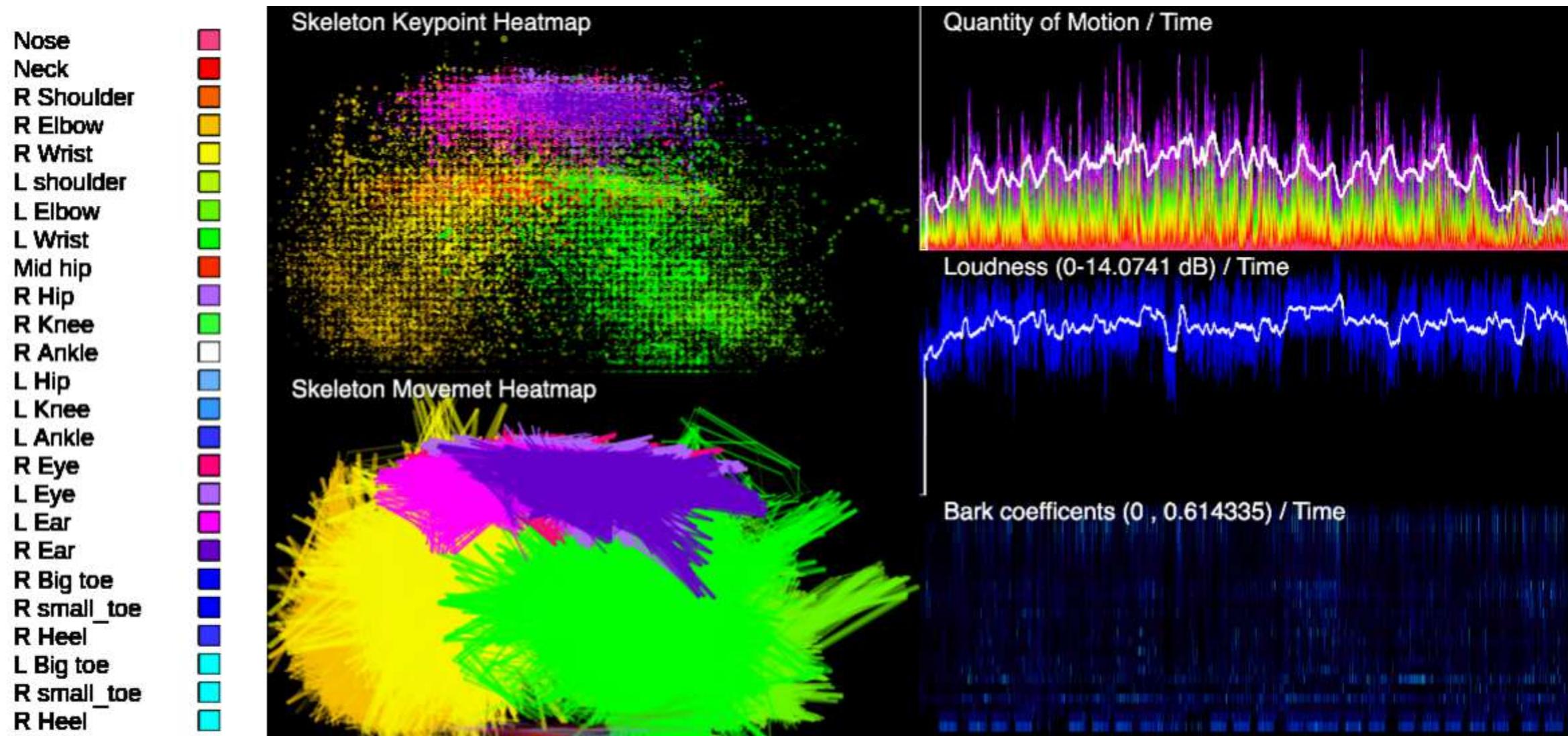
aural diversity



Video source: <https://youtu.be/MGRWeKeh9NE?t=150>

aural diversity

Example of motion and audio features data of ASL translated music.

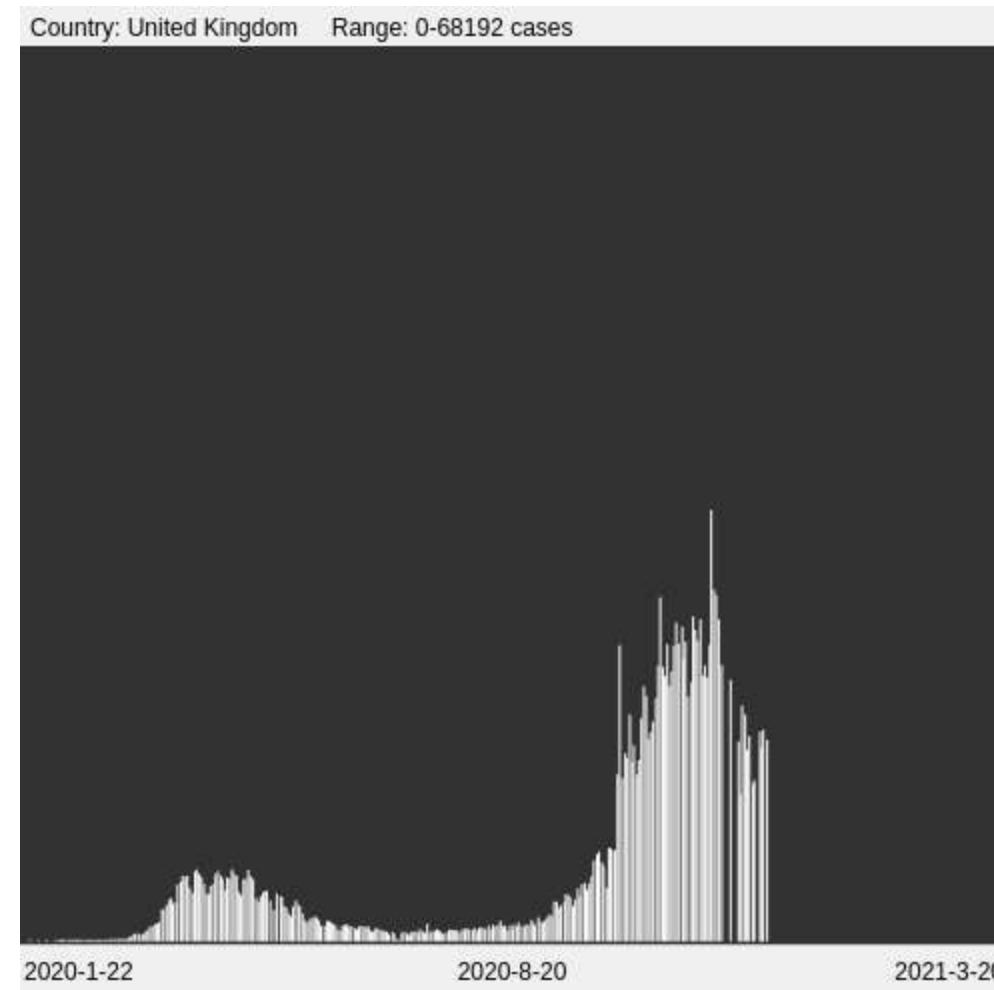


Part of the HSI project. Di Donato (2021)

Sonification

Sonification of Covid-19 daily cases from 22/01/2020 to today.

Country: Submit Audio:



Di Donato (2021)

communication

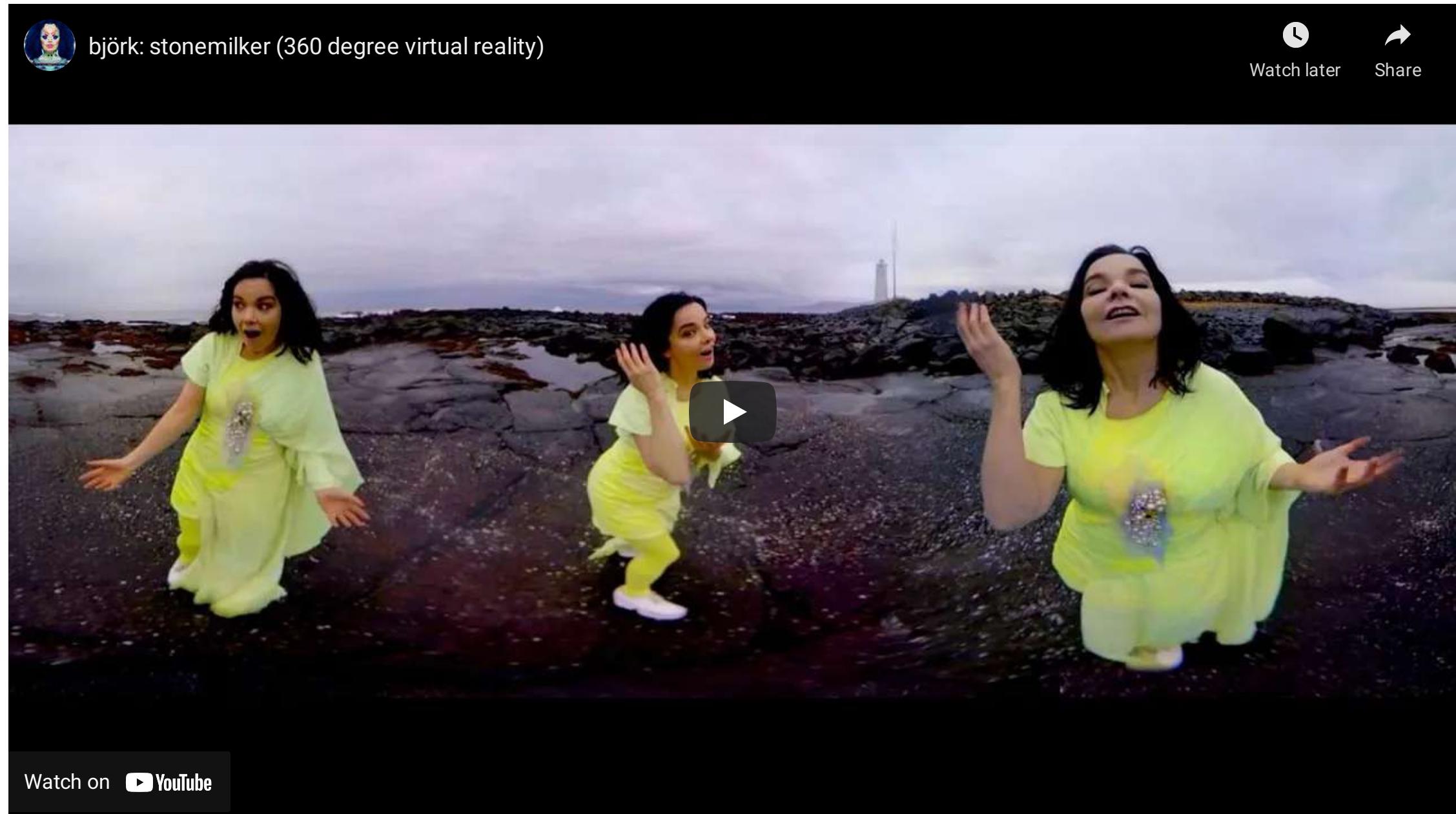


Image source: <https://avt.co.za/the-different-types-of-video-conferencing>



Image source: <https://knowingneurons.com/2019/02/28/music-for-the-mind-how-music-nurtures-cognitive-development/>

communication



Video source: <https://youtu.be/gQEyezu7G20>

so ... , music technology "is"...

- Music recording
- Music production
- Music composition
- Music performance
- Instruments (playing/building)
- Interaction design
- Sound installations
- Acoustic,
- Psychoacoustic
- Accessibility
- Sonification
- Communication
- ...
- ...



NTNU | Norwegian University of
Science and Technology

Takk for at du lyttet!

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