

nologies in Music Education & Art



# Use of music apps, tablets and smartphones to make music **Classical music with a** digital twist



11th October 2018 **EBU Academy** Rome, Italy

Matthias Krebs Berlin University of the Arts // Research Center for Mobile Music Making www.forschungsstelle.appmusik.de/en

#### Matthias Krebs



scientist, music and media pedagogue, trained opera singer, physicist and app musician

research associate

academic associate

head of Research Center for Mobile Music Making & App Music

current research project MuBiTec

director of the DigiEnsemble Berlin

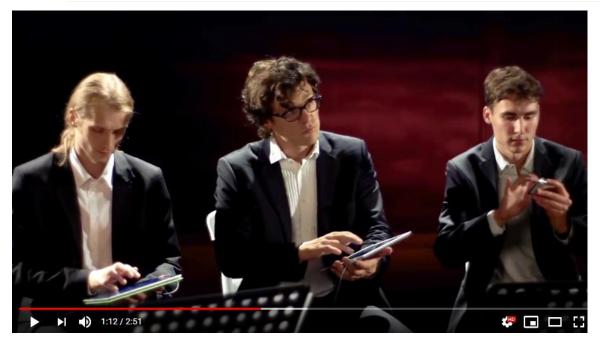
head of app2music e.V.







#### Outlook



https://www.youtube.com/watch?v=wF9h6WEovzk

# trained musicians in a live concert performance



https://www.youtube.com/watch?v=gNP6GeDT9zI



children making music together while exploring a new app





#### Classical music with a digital twist – use of music apps, tablets and smartphones to make music

- This short talk was held at the EBU Academy 2018 (<u>https://www.ebu.ch/academy</u>) of the European Broadcasting Union, the world's leading alliance of public service media. A special focus this year was on the topic "going mobile". The sessions explored how deeply the mobile shift has permeated society. The aim of this talk was to illustrate how classical cultural practices are developed and at the same time new cultural practices of participatory form arise.
- In the first part of the lecture, approaches will be presented in which musicians use apps to create pieces of music that can be classified as part of the "classical" repertoire. The examples provide insight into different forms of virtuosity, expressivity, ensemble interaction and stage presentation. The second part focuses on approaches in which the audience does not consume, but can become musically active themselves. Leading questions are: How do effective interpretations of "classical music" succeed? What approaches are there to integrate apps into participational music-making offerings? What potential do music apps offer media companies to develop new formats?



Apps and Technologies in Music Education & Art

\_\_\_\_\_

#### Agenda

- Making Music on Mobile
- Classical Music on Mobile in the Concert Hall
- Participatory Offerings With Classical Music
- Perspectives for Public Service Media Companies

# Mobile Music Making & App Music MAKING MUSIC ON MOBILE

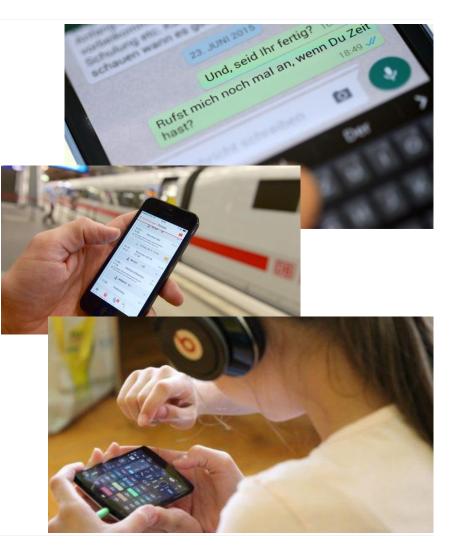
How can musical apps be defined as instruments? Where do actors of app-musical practices become visible?





#### Apps as cultural techniques

- New articulation and activity possibilities (vgl. Dolata/ Schrape 2017)
- Apps as cultural techniques, as mediators of world access (in the field of tension between cultural traditions and everyday life) (vgl. Imort 2009: 123)
- The central element of the digital transformation is the smartphone.







#### Metamorphosis of the digital music studio

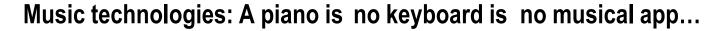
 In the 2000s there was a rapid expansion in desktop music production software for both beginners and pros. Today the mobile music making eco-system is finally experiencing similar growth. (Elsdon 2017)





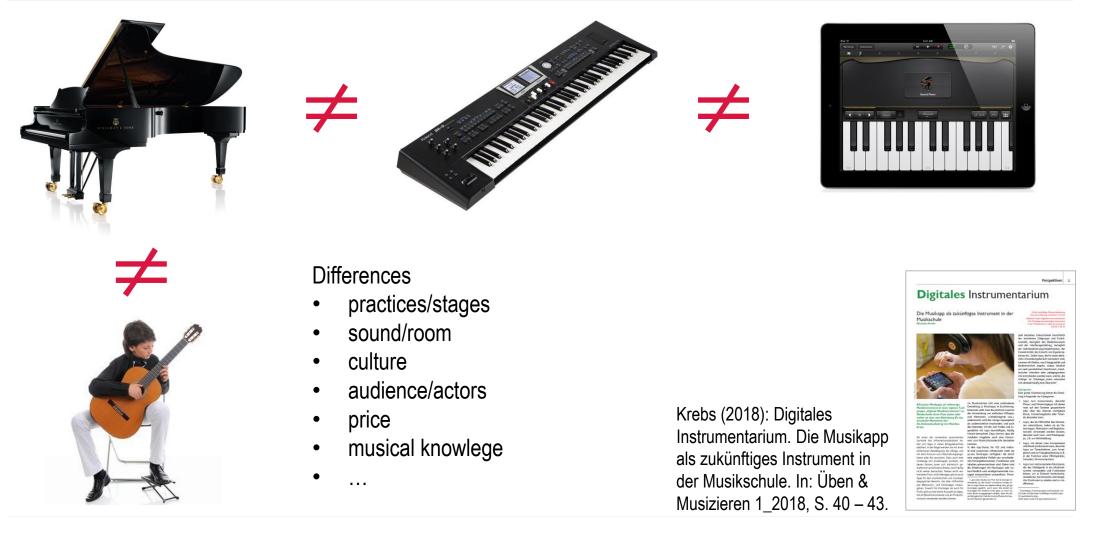
"What's in the picture is pretty much all I use for everything I create." (J. Capes, 09.07.2014, Facebook-Post)

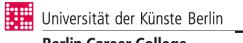






#### Krebs/Godau (2016)

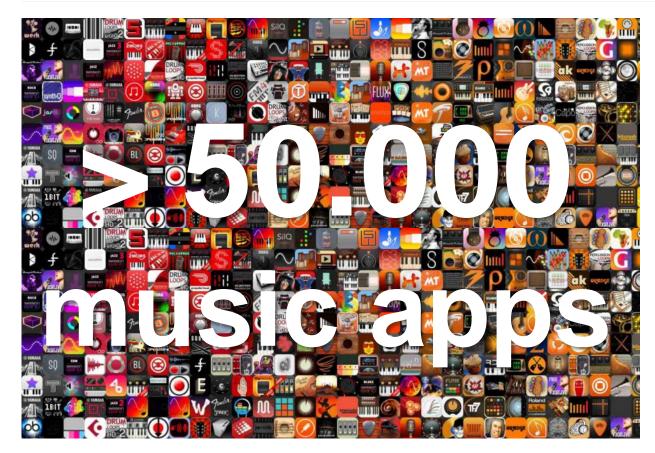








## Mobile Music Making = Appmusik (in German)



- The term "mobile music making" is used to describe all music practices in which apps are involved in creative design processes.
- Mobile music apps offer a powerful and versatile set of digital music instruments. They change the way people make music and produce

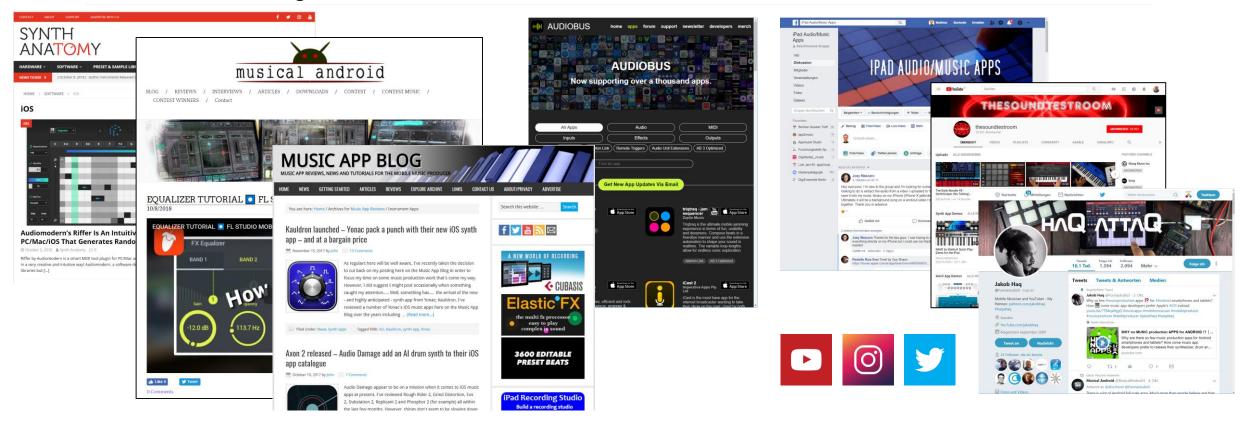
music.

GET IT ON Google Play Download on the App Store





#### Mobile music making communities online



• The Social Web contains remarkable structures of social communities with a large number of participants that deal with the topic of mobile music making.

http://forschungsstelle.appmusik.de/ quellen-akteure-gemeinschaften/





# International Symposium MOBILE MUSIC IN THE MAKING 2017



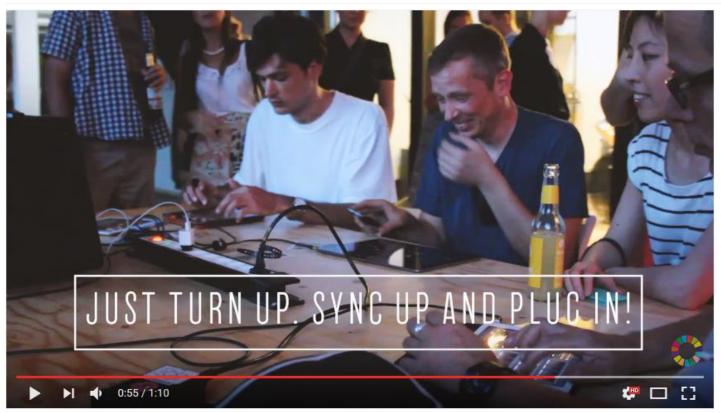
Subtitle: Present and future of mobile music making from the perspective of music pedagogy, art, technology development and science

more: www.mmm2017.appmusik.de/en





#### **Open LINK Jams**



All you need is a wifi router to make music in a group of 60 people playing electronic music together.

► BERLIN OPEN Link JAM am 21. Juli 2016 https://www.youtube.com/watch?v=7cj7w2NbPEU

((( **BOLjam** ))) BERLIN OPEN Link JAM

more: www.berlin.openlinkjam.com

Matthias Krebs | www.forschungsstelle.appmusik.de/about





#### Roundup

- The spread of mobile digital technologies such as smartphones and tablets has led to massive changes in musical practices in recent years.
- The central concepts of musical instrument, music production and the practices associated with these concepts have been radically expanded (Harenberg 2012, Strachan 2017).

making classical music on mobile

# **CLASSICAL MUSIC ON MOBILE IN THE CONCERT HALL**

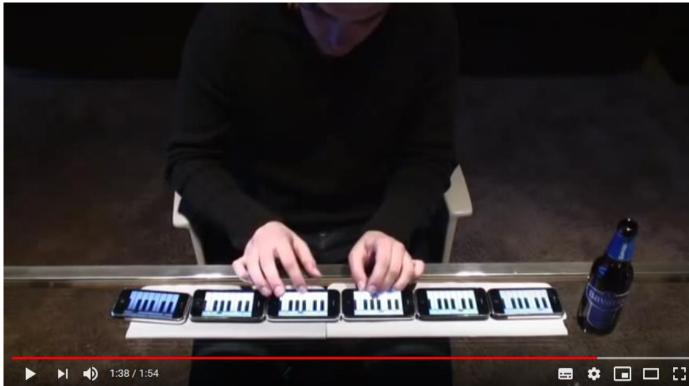
Which approaches are there to play music apps in the concert hall? How do effective interpretations of "classical music" succeed?

Matthias Krebs | www.forschungsstelle.appmusik.de





#### Yann Tiersen on 6 iPhones / 20.11.2009



https://www.youtube.com/watch?v=5ZWC0kk77GI

• Comptine D'un Autre Été: L'après Midi from the soundtrack from Amelie (by Yann Tiersen) on 6 iPhones.





### Lang Lang playing flight of the bumblebee...on an iPad / 19.4.2010



https://www.youtube.com/watch?v=HvplGbCBaLA

#### https://www.youtube.com/watch?v=fhRSHvji140

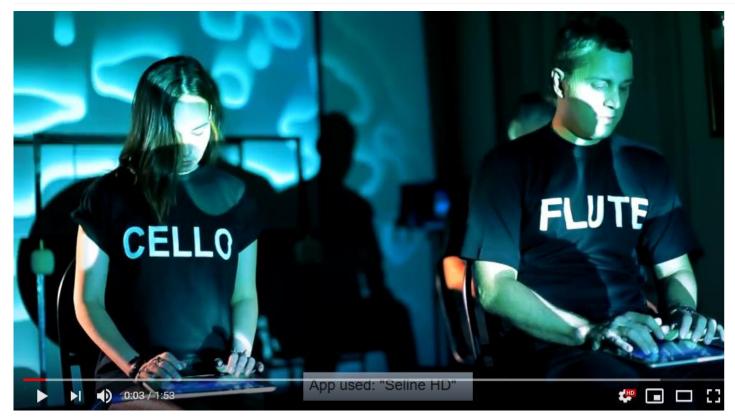


 concert on 4/19/2010 at san francisco davies symphony hall - he walked out on stage with an ipad for his first (out of three) encores to play this.





#### "Sweet Dream" by The iPad Orchestra / 20.08.2010



https://www.youtube.com/watch?v=OBrHj\_StdJE

• In the comments to the video you will find a detailed discussion about making music with apps.





## Smule – Magic Fiddle for iPad [St. Lawrence String Quartet] / 08.11.2010



https://www.youtube.com/watch?v=U8wjFmLQJT4

Magic Fiddle, for iPad, by Smule. Performed by St. Lawrence String Quartet.
 As of April 2012, Smule took the Magic Fiddle app out of the app store.





### St. Anna for iPod, iPad & iPhone / 04.04.2011



https://www.youtube.com/watch?v=xdYt2mHg9pk

https://www.youtube.com/watch?v=geJtpFFaOHY



• First original composition for music apps by Uwe Schamburek played by the DigiEnsemble Berlin in the concert hall of the Berlin University of the Arts. The musicians make use of motion control of the volume.





## Ombra Mai Fu played on smartphones / 15.11.2011



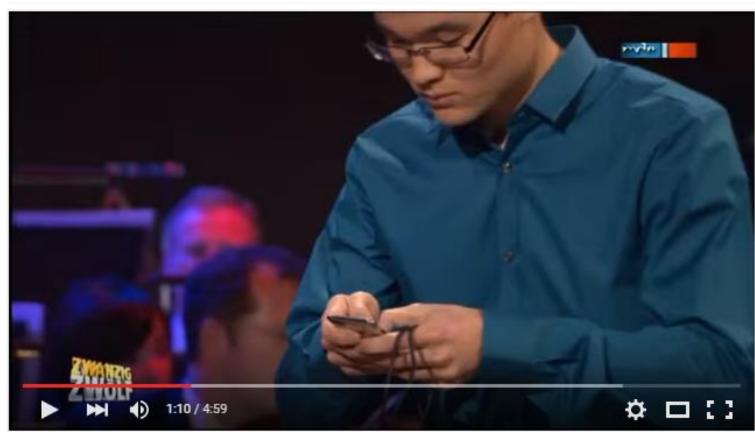
https://www.youtube.com/watch?v=\_t9t0kZRJ54

• In this musical experiment an aria was selected and tried to accompany a singer by using apps only.





#### E. Grieg: Morning Mood – DigiEnsemble & the MDR Symphony Orchestra under Jun Märkl / 1.1.2012



https://youtu.be/SngPaTYTfqw

• An experiment to explore how smartphones with an orchestra harmonize with each other.





#### **Concerto for iPad and Orchestra by Ned McGowan / 13.8.2012**



https://www.youtube.com/watch?v=eRYkC6fY190

 The iPad soloist performs in standard concerto position in front of the orchestra. The iPad is amplified via a line out from a volume pedal. A full range sound system is neccessary, including subwoffer.





### BACH: Aria "Großer Herr" on mobile devices / 20.09.2012



#### https://www.youtube.com/watch?v=wF9h6WEovzk

• The first violin is played by a heavy metal guitarist, the oboe by an organist and the trumpet by an opera singer.





### Antonella Ruggiero con DigiEnsemble / 21.02.2014



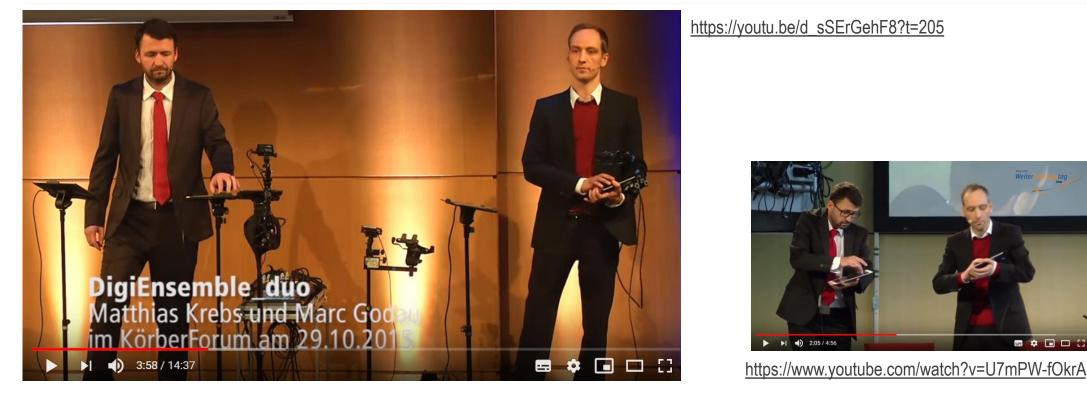
#### https://vimeo.com/88346605

• Antonella Ruggiero con DigiEnsemble Berlin Festival di Sanremo quarta serata 21/02/2014





### Pachelbel Kanon by DigiEnsemble\_duo / 29.10.2015



"Isn't it better to learn to play a real instrument?" Such questions are asked again and again. Music apps
offer new possibilities for music on stage, in class and from a scientific point of view.





#### Sample players for high-quality classical instrument sounds (examples)



https://www.youtube.com/watch?v=5\_BAEPjzXlg

https://www.youtube.com/watch?v=gLLMw6zLuxM

- Several sound generator apps can be executed simultaneously on one device and played from a suitable app as a playing surface. They are simultaneously mixed via mixing console pads and modulated by effect apps.
- The music production becomes a live music making session.



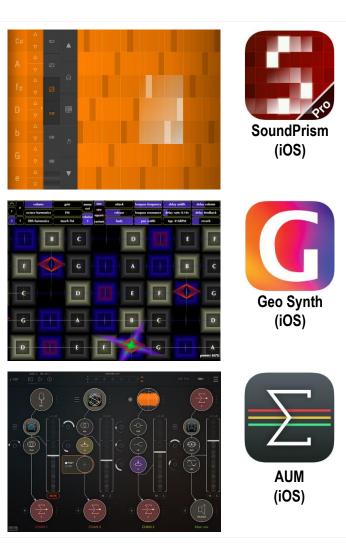


#### Virtuoso sound control with the help of powerful sensors

• Some apps allow the sound to be effectively modulated by incorporating the integrated sensors of the smart devices.



https://www.youtube.com/watch?v=r47QhX3lkTE







#### Interim conclusion: Apps as instruments in the concert hall

- Apps can be used to create both convincing (sound generators) and virtuoso (sound control) live music in concerts.
- There is a large variety of music apps available. By combining different apps, musicians can become "instrument makers" who find their individual solutions.
- Making music on apps is something new and extraordinary.

- The realization of concert appearances is technically very complex. There are only a few experiences.
- The presentation is unusual and is perceived differently by the audience than a conventional concert.

→ Concert hall experience: Conventional "classical instruments" and the concert hall have developed together and fit together perfectly. Music apps can only be integrated sensibly with great effort.

making classical music on mobile

# PARTICIPATORY OFFERINGS WITH CLASSICAL MUSIC

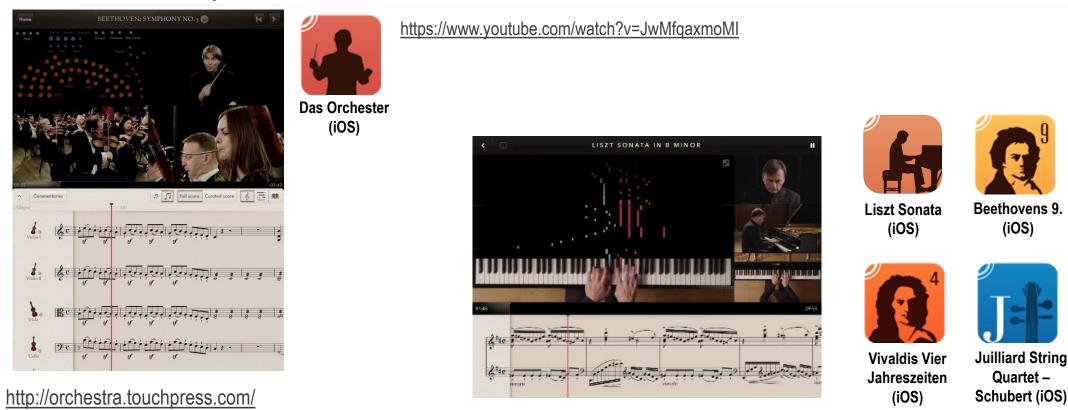
Which apps support making music? What approaches are there to integrate apps into music-making offerings?

Matthias Krebs | www.forschungsstelle.appmusik.de





#### Interactive concert performances



 A collection of apps that provides extensive material on individual works: Scores, orchestral video recordings from several perspectives and instrumentology.





#### Scores on a tablet



#### https://www.youtube.com/watch?v=Qoshc9jIHJI

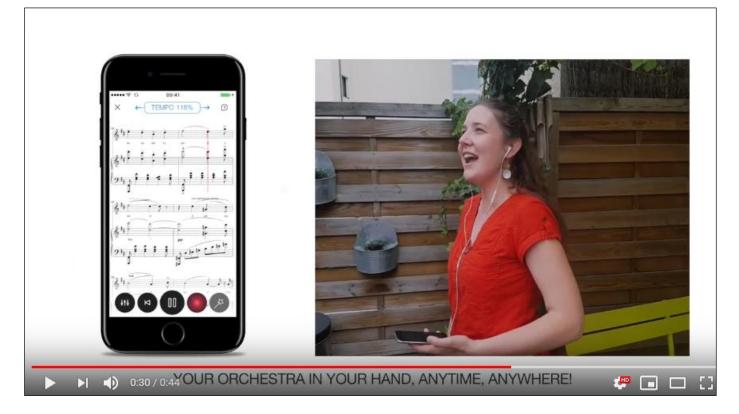


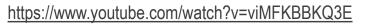
► Tablets used in the orchestra (2013) <u>https://www.youtube.com/watch?v=MDRIW85-An4</u>





#### Training supervisor apps using the sensors of the smart device







• Bored of playing your instrument or singing alone? With Metronaut app you'll never play alone again!





#### **Musical amateurs**



The smartphone as an musical instrument that you find in everyone's pocket.





### Mobile music workshops with cultural and educational institutions







http://blog.appmusik.de/the-land-of-the-magic-flute/

Matthias Krebs | www.forschungsstelle.appmusik.de/about





#### Mobile music workshops with cultural and educational institutions









#### ELBPHILHARMONIE H A M B U R G





## Mobile music workshops with cultural and educational institutions: classical music in the kindergarten





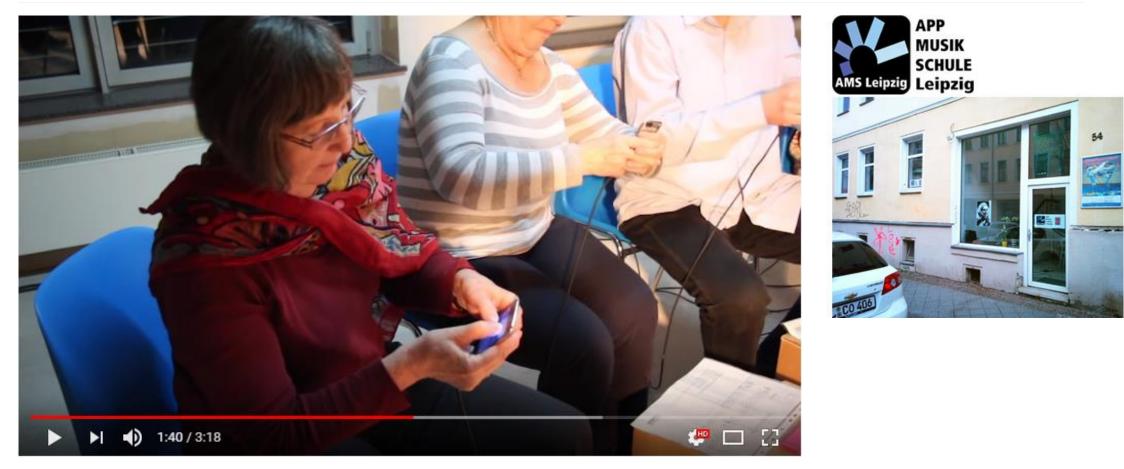


#### Matthias Krebs | www.forschungsstelle.appmusik.de/about





## **Community Music with apps**



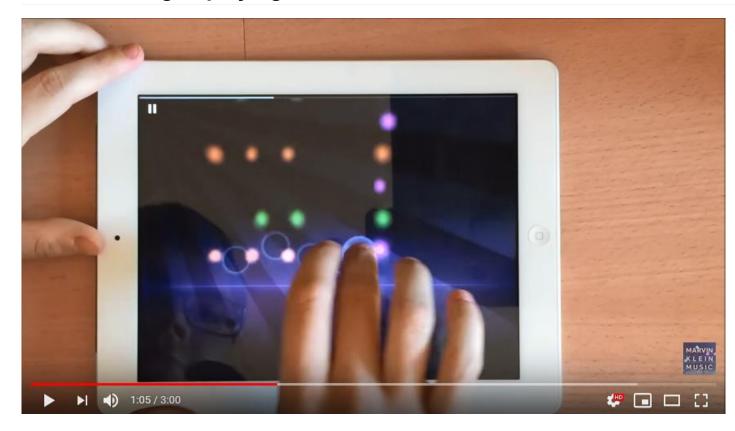
#### https://www.youtube.com/watch?v=kxkllKVx090

Matthias Krebs | www.forschungsstelle.appmusik.de/about





## Get the feeling of playing classical music.



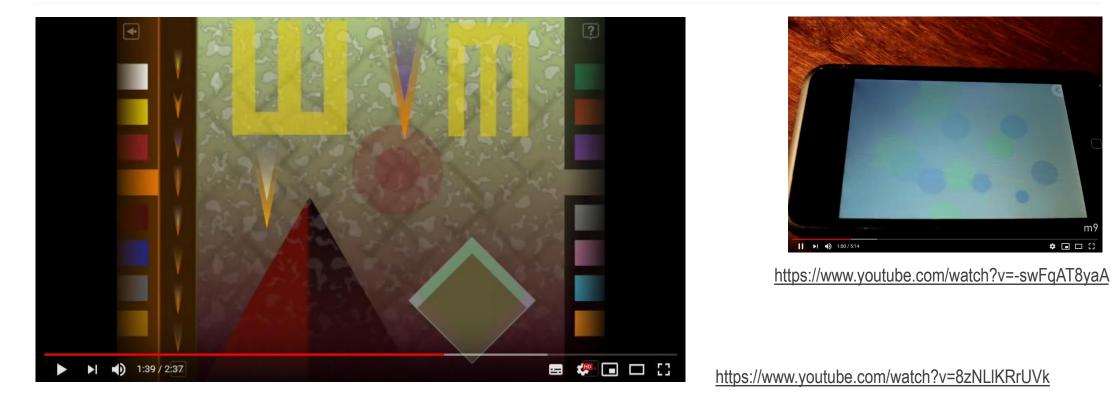


https://www.youtube.com/watch?v=DrBIKePLdWQ





## **Experimenting with generative music**



• Scape by Brian Eno and Peter Chilvers





## Potential for inclusive and participative music projects

# "The potential of the new is often recognized by the currently excluded."

(Rahel Kraska, via Facebook)



https://www.youtube.com/ watch?v=uQqcktZEgCc







## Interim conclusion: participatory offerings

- Music apps can support the making of music by amateurs.
- They can be used as instruments to open up methods for experimenting in pedagogical offers that thematize classical music.
- A selection of apps offer a low-threshold offering to enable users to experience music-making.
- Due to the large variety and the possibility to adapt the apps, they can be helpful to people with very different (physical) skills and knowledge.
- The result can be a joyful making experience.

→ Digital mobile technologies are characterized by high intuitivity, low threshold, inherent autodidactic learnability and a potential for democratization.

making classical music on mobile

# **PERSPECTIVES FOR PUBLIC SERVICE MEDIA COMPANIES**

What potential do music apps offer media companies?





## Musikapps als Instrumentarium im Kontext klassischer Musik

#### Künstler\*innen

Herausforderungen

- aufwändiges technisches Mapping
- hohe Komplexität
- mangelnde künstlerische Wertschätzung

#### Potenziale

- neues Instrumentarium
- Möglichkeit neue Rollen zu übernehmen
- Instrumente selbst entwickeln
- neue Ausdrucksmöglichkeiten und Präsentationsmöglichkeiten
- neue Akteure involviert

#### Publikum

#### Herausforderungen

- kein besonderes Klangerlebnis; klingt nach Studioaufnahme
- ungewöhnliche / erklärungsbedürftige Bühnenperformance

#### Potenziale

- Performance kann überraschen
- Visualisierung möglich
- multimediale Angebote zur Information
   und Reflexion
- Anlässe für partizipative Angebote

#### Einsteiger\*innen

Herausforderungen

- mangelndes Musikwissen äußert sich in Beliebigkeit
- Desorientierung durch Vielfalt und Komplexität des App-Angebots

#### Potenziale

- Apps haben Aufforderungscharakter
- können Musiziererfahrungen machen
- neues Instrumentarium
- Möglichkeit neue Rollen zu übernehmen
- Instrumente selbst entwickeln
- neue Ausdrucksmöglichkeiten erschließen



## **Opportunities for media institutions**

• team-building measures











## **Opportunities for media institutions**

• Developing new formats: Instructions on how to experiment creatively with everyday devices





https://www.youtube.com/watch?v=bGkjddjbGyU





 Whether you are a beginner or a pro, Playground allows you to create addictive music beats within seconds. Simply swipe & tap your finger(s) on musical shapes & our smart algorithm will do the rest.



PlayGround (iOS)



https://itunes.apple.com/de/app/playground-organic-remix/id963753435?mt=8







## Conclusion

For a strategie to meet audiences needs...

- With the help of apps, barriers can be dismantled and the audience can experience the stage for themselves.
- Apps can make making music "tangible" for the audience.

The smartphone as an musical instrument that is in everyone's pocket.

- Different degrees of participation can be used: interactive to artistic.
- Via social media they can present their individual results to the broadcaster so they can implement it to their shows...
- $\rightarrow$  Let's think about new interactive formats.





## Thank you very much for your attention!

## I would like to invite you to a discussion and exchange.

## www.forschungsstelle.appmusik.de/about



Matthias Krebs Berlin University of the Arts Head of the Research Center for Mobile Music Making & App Music

matthias.krebs@appmusik.de +49 177 7373737