



UiO : **University of Oslo**

Workshop om MusicLab, åndsverk og åpen forskning

13. oktober 2020

Velkommen

Halvor Kongshavn, Universitetsbiblioteket

Introduksjon til åpen (musikk)forskning

Alexander Refsum Jensenius, RITMO/Institutt for musikkvitenskap

Introduksjon til MusicLab

Solveig Sørbø, Universitetsbiblioteket

Kaffepause

Rundebordsdiskusjon

Ledet av Halvor Kongshavn, Universitetsbiblioteket

Oppsummering

Halvor Kongshavn, Universitetsbiblioteket



UiO : **RITMO Centre for Interdisciplinary Studies in Rhythm, Time and Motion**
University of Oslo

Åpen (musikk)forskning

Alexander Refsum Jensenius




The Research Council of Norway



Expert Group on Open Science / Science 2.0
European University Association



Professor i musikkteknologi
Musikkforsker <> Forskermusiker

- 
1. NFR/Plan S: krav om åpen publisering fra 2021
 2. KD: mål om full åpen publisering innen 2024
 3. Politisk ønske om åpen tilgang til forskningsdata
 4. Krav fra mange tidsskrifter om tilgjengeliggjøring av data sammen med artikkel

Hva er åpen forskning?

Åpen forskning \approx Open research

\neq

Åpen vitenskap \approx **Open science**

```
graph LR; A[Application] --> B[Research]; B --> C[Output];
```

Application

Research

Output


```
graph LR; Application[Application] --> Research[Research]; Research --> Output[Output];
```

Application

Research

Output

```
graph LR; Application[Application] --> Research[Research]; Research --> Output[Output];
```

Application

Research

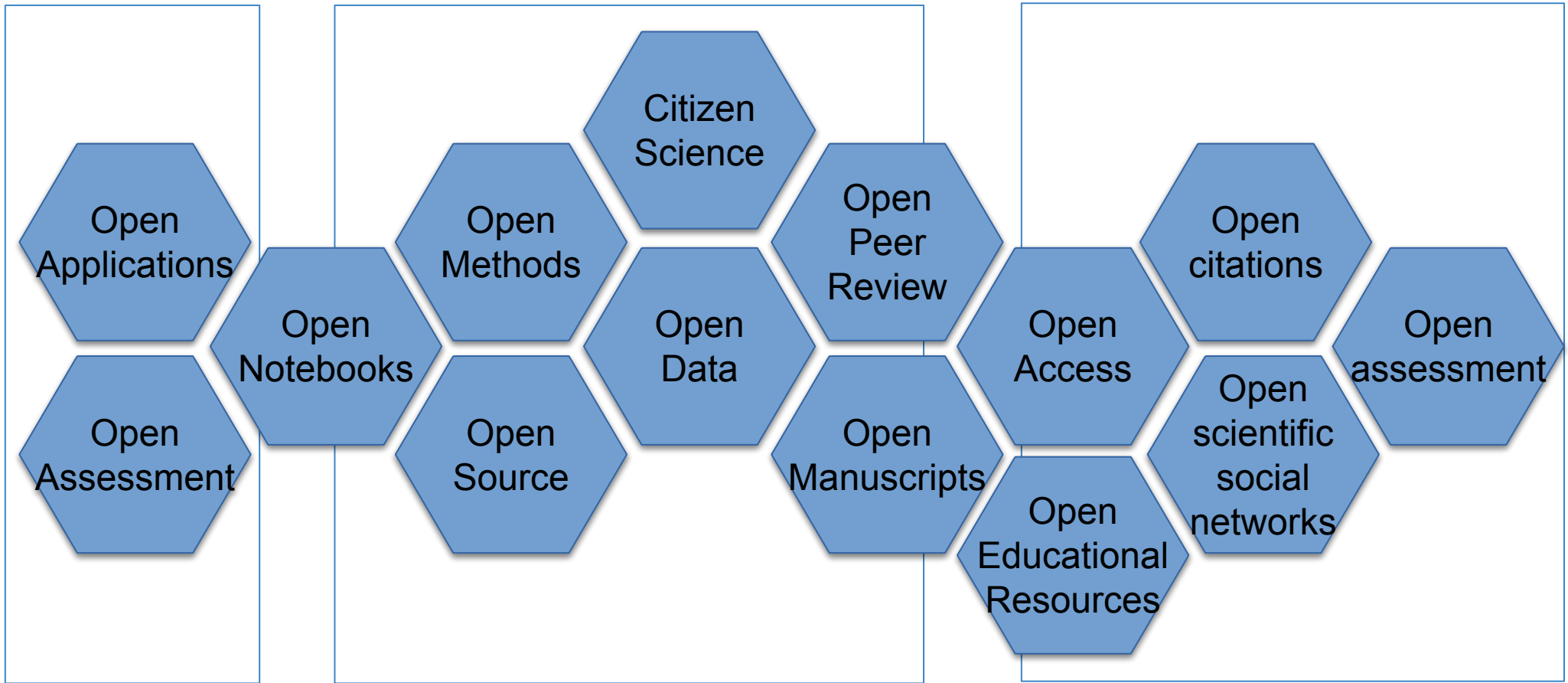
Output

```
graph LR; Application[Application] --> Research[Research]; Research --> Output[Output];
```

Application

Research

Output



Open Applications

Open Assessment

Open Notebooks

Open Methods

Open Source

Citizen Science

Open Data

Open Peer Review

Open Manuscripts

Open Access

Open Educational Resources

Open citations

Open scientific social networks

Open assessment

Tilgjengeliggjøring av forskningsdata Revidert 2017

Policy for
Norges forskningsråd



Plan S

Making full and immediate Open Access a reality

Open
Data

Open
Access

Rettighets- og
lisensspørsmål ved
åpen publisering

Torger Kielland

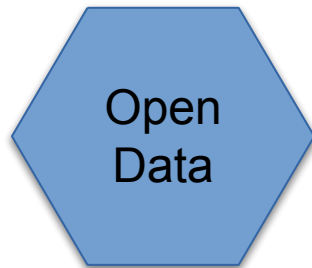
Du er her: Forsiden • Dokument • Rapporter og planer •
Nasjonal strategi for tilgjengeliggjøring og deling av forskningsdata

Nasjonal strategi for tilgjengeliggjøring og deling av forskningsdata

Plan/strategi | Dato: 19.12.2017

Forskning som skjer ved bruk av offentlige midler, skal være til det beste for alle. Derfor er det viktig at også dataene bak forskningsresultatene er tilgjengelige for flest mulig: for andre forskere, men også for forvaltningen og næringslivet.

Les dokumentet >



Etterprøvbarhet
Replisering
Gjenbruk

empirisk/
eksperimentell

Hva er musikkforskning?

Forskning på egen kunstnerisk praksis og utvikling



Forskning på “live” musikkopplevelser
- både musikere og publikum



Lab/kontorbasert forskning på musikkopplevelser





Musikkforskning

Forsker på andres
musikalske praksis

Musikken er
forskningsobjekt

Lyd/videofiler
Noter
Tekst
Sensordata

Forskningsmusikk

Forsker gjennom egen
musikalsk praksis

Musikken er (del av)
forskningsresultatet

Variability of Head Motion and Gaze in String Quartet Performance

Laura Bishop^{1,2}, Victor Gonzalez Sanchez^{1,2}, Bruno Laeng^{1,3}, Alexander Refsum Jensenius^{1,2}, and Simon Hoffding^{1,2}

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²Department of Musicology, University of Oslo

³Department of Psychology, University of Oslo



1 Introduction

As listeners and observers, we are impressed by the high quality of coordination that skilled music ensembles are able to achieve. Successful coordination may take the form of dialogic call-and-response in a group improvisation, a blending of vocal timbres in a choral performance, the patterning of complimentary rhythms in group drumming, or the collective shaping of time in a classical string quartet performance. Ensembles of all compositions and genres face the challenge of maintaining coordination despite uncertainty over how the performed music will sound. In the case of a string quartet—the focus of the current study—uncertainty arises primarily in relation to how fellow ensemble members may veer from a mutually-decided interpretation.

This paper describes the results of a case study that we conducted as part of an ongoing comprehensive investigation of body motion, mental effort, and physiology in string quartet performance. Participating in the study was a quartet comprising students from a local music academy, who agreed to give a concert in our lab for a live audience. They performed some of their current repertoire while we captured body motion, eye gaze, pupil data, and heart rate. The concert also served as the quartet's semester exam. In addition to the concert, the quartet completed



Lyd/videofiler

Vrengt: A Shared Body–Machine Instrument for Music–Dance Performance

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a.r.jensenius@imv.uio.no

ABSTRACT

This paper describes the process of developing a shared instrument for music–dance performance, with a particular focus on exploring the boundaries between standstill vs motion, and silence vs sound. The piece *Vrengt* grew from the idea of enabling a true partnership between a musician and a dancer, developing an instrument that would allow for active co-performance. Using a participatory design approach, we worked with sonification as a tool for systematically exploring the dancer's bodily expressions. The exploration used a "spatiotemporal matrix," with a particular focus on sonic microinteraction. In the final performance, two Myo armbands were used for capturing muscle activity of the arm and leg of the dancer, together with a wireless headset microphone capturing the sound of breathing. In the paper we reflect on multi-user instrument paradigms, discuss our approach to creating a shared instrument using sonification as a tool for the sound design, and reflect on the performers' subjective evaluation of the instrument.

Author Keywords

Music, dance, EMG, breathing, sonification, sound synthesis, multi-user instruments, improvisation

CCS Concepts

•Applied computing → Sound and music computing; Performing arts; •Human-centered computing → User centered design;

1. INTRODUCTION

In today's experimental performance scene, many musicians are exploring performance practices that approach dance, and many dancers are working with interactive music systems. A challenge in such exploration, however, is fundamentally different intentions ranging from particular embodied practices [36]. For a musician, the sound is the primary focus of attention, and the movements needed to produce the sound (the sound-producing and sound-modifying actions) are the result of that aim. For a dancer, on the



Figure 1: The dancer, blindfolded, in the first live performance of *Vrengt*. (Photo: Sophie C. Barth)

other hand, the movements are the primary focus of attention, and any sonic output is secondary. It is therefore not surprising that the dancer in an interactive context does not intuitively render her movements into instrumental actions for active sound-making, but rather maintains her regular dance-actions influencing the sound generation in an abstract way. Similarly, the musician either takes the role of the composer without active involvement, or, as the performer enacting her own instrument.

In this paper, we continue our exploration of working between dance and music, this time focusing on co-performance on a "shared" instrument. As opposed to creating a system for interactive dance, we wanted to develop what is experienced as one, coherent instrument that enables a true partnership for the musician and dancer. The challenge, then, is to what extent the dancer is able to adopt musical intentions on top of her movement practice, and whether the composer-performer can waive the control of performing while still "playing together"?

2. BACKGROUND

2.1 Between the conscious and the unconscious

Experiencing the body as part of your subjective presence rather than a mere series of shapes on the stage, is described by dancers as "being in your body" [34]. This is often the result of skill acquisition, which Dreyfus has argued is a con-



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NIME'19, June 3–6, 2019, Federal University of Rio Grande do Sul, Porto Alegre, Brazil.

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Vrengt: A Shared Body–Machine Instrument for Music–Dance Performance

[Erdem, Cagri](#); [Schia, Katja Henriksen](#); [Jensenius, Alexander Refsum](#)

Chapter; PublishedVersion; Peer reviewed

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Year

2019

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Original version

Music Proceedings of the International Conference on New Interfaces for Musical Expression. 2019

Abstract

What if a musician could step outside the familiar instrumental paradigm to adopt a new embodied language for moving through sound with a dancer in a true partnership? And what if a dancer's body could coalesce with a musician's actions and intuitively render movements into instrumental actions for active sound-making?

'Vrengt' is a multi-user instrument, specifically developed for music-dance performance, with a particular focus on exploring the boundaries between standstill vs motion, and silence vs sound. We sought for creating a work for one, hybrid corporeality, in which a dancer and a musician would co-create and co-dependently interact with their bodies and a machine. The challenge was how could two performers with distinct embodied skills unite in a continuous entanglement of intentions, senses and experiences to control the same sonic and musical parameters? This was conceptually different than they had done before in the context of interactive dance performances.



Vrengt: A Shared Body–Machine Instrument for Music–Dance Performance

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Variability of Head Motion and Gaze in String Quartet Performance

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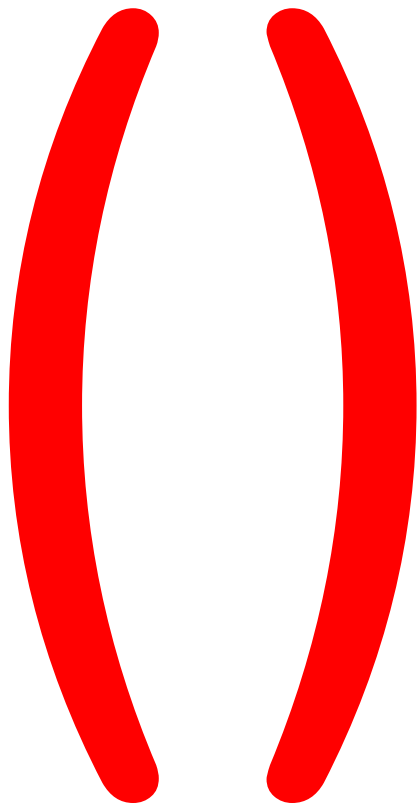
This paper describes the results of a case study that we conducted as part of an ongoing comprehensive investigation of body motion, mental effort, and physiology in string quartet performance. Participating in the study was a quartet comprising students from a local music academy, who agreed to give a concert in our lab for a live audience. They performed some of their current repertoire while we captured body motion, eye gaze, pupil data, and heart rate. The concert also served as the quartet's semester exam. In addition to the concert, the quartet completed



Lisens

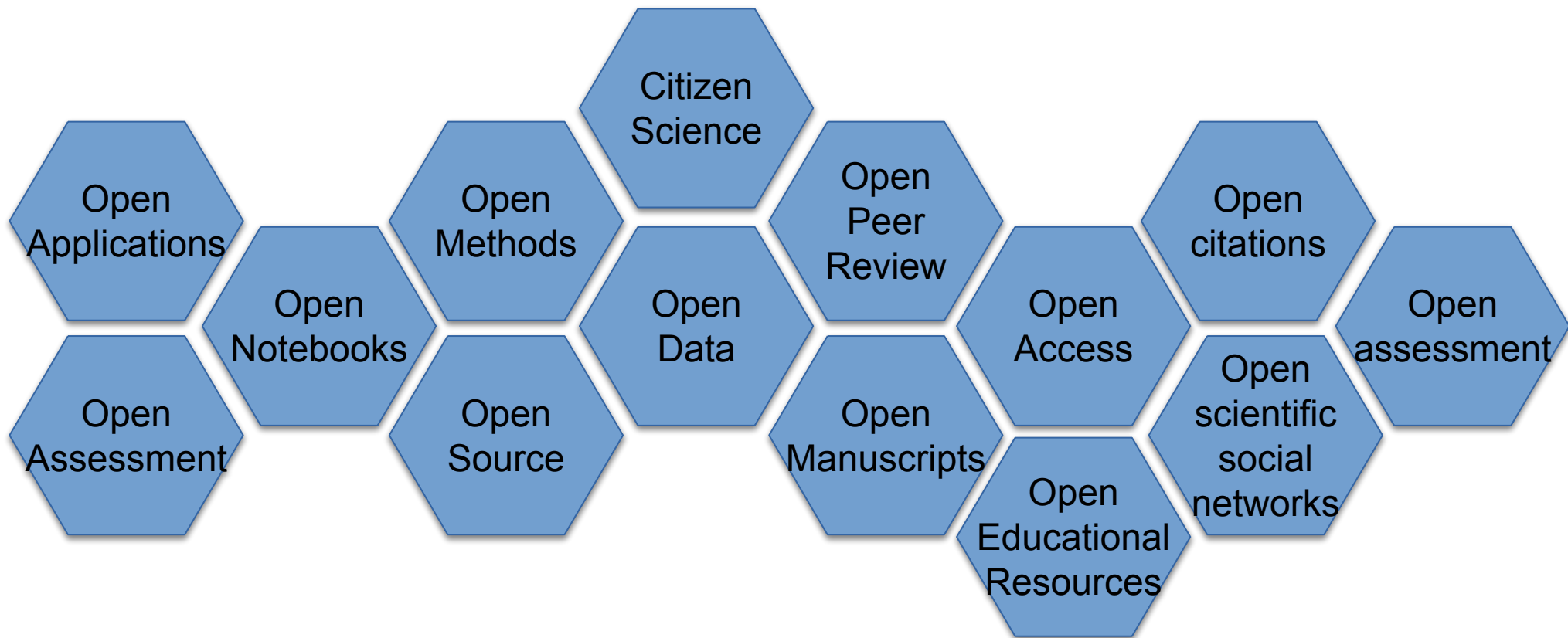


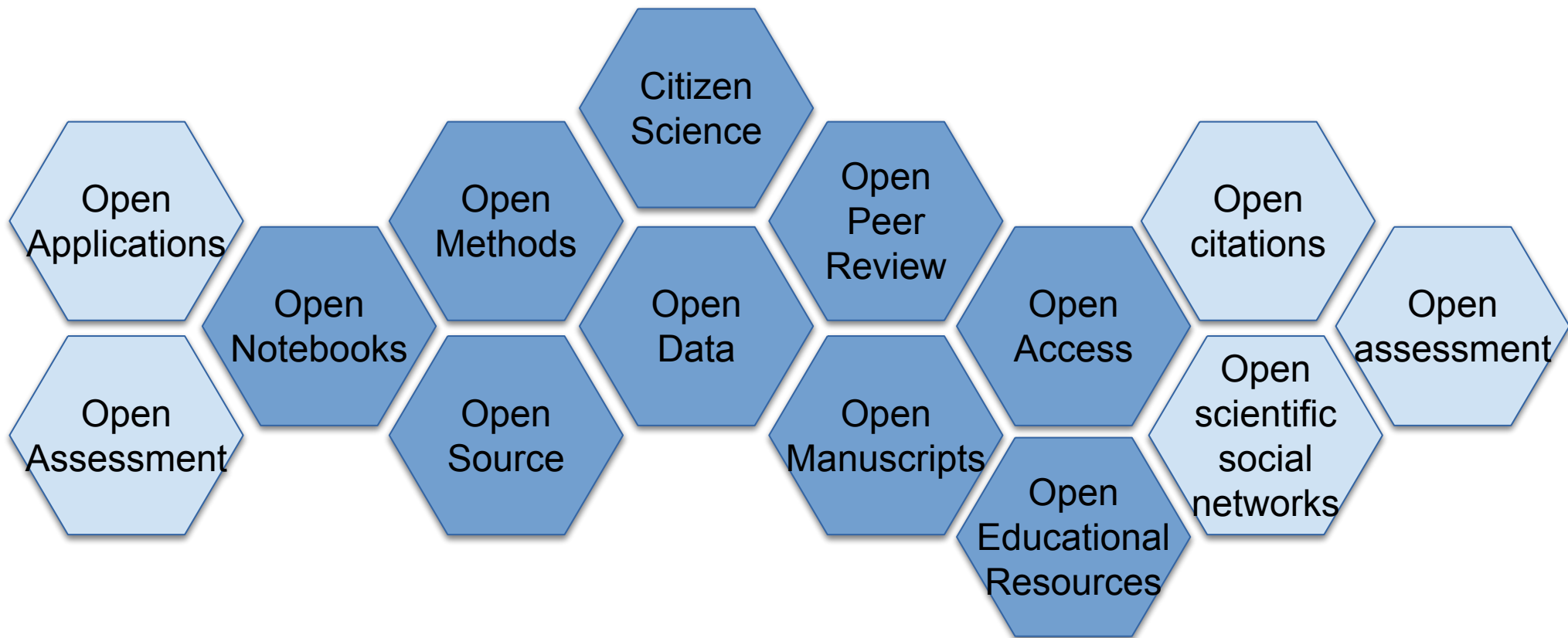
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Musikk er en (ubevisst) del av
mange andre typer
forskningsdata også:

- medievitenskap
- andre kunstfag
- samfunnsfag
- helsefag





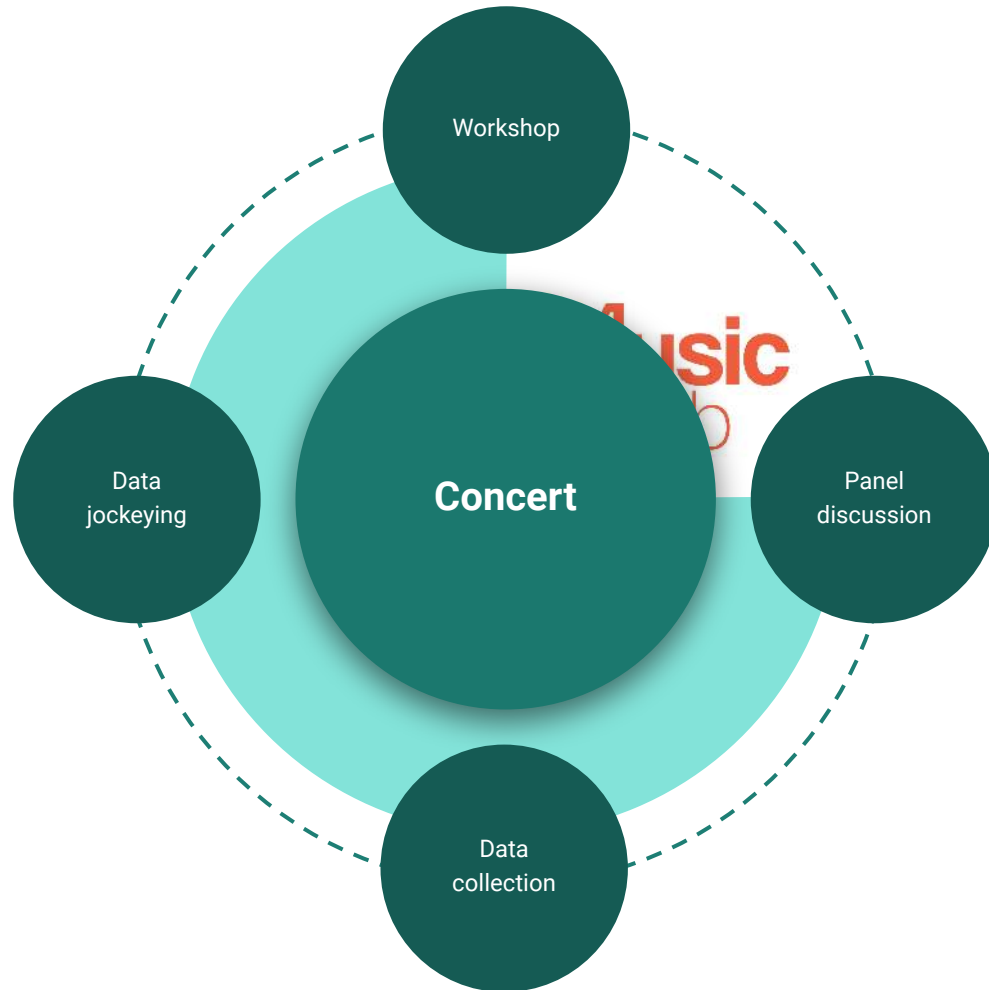
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University of Oslo

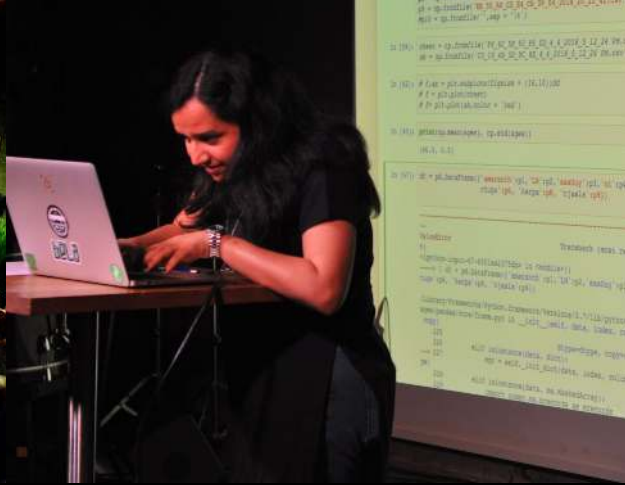
Music
Lab

UiO : Universitetsbiblioteket

Solveig Sørbo







Music
Lab Vol. 1
: BIOPHYSICAL MUSIC



Music
Lab

MusicLab Vol.2
BREATH



MUSICLAB JU
LOCKDOWNRAVE LIVE



KHOPARZI/
INDIA
19:30

RENICK
BELL/
JAPAN
22:30



University of Oslo Library



MUSICLAB VOL 4 - UTOPIA

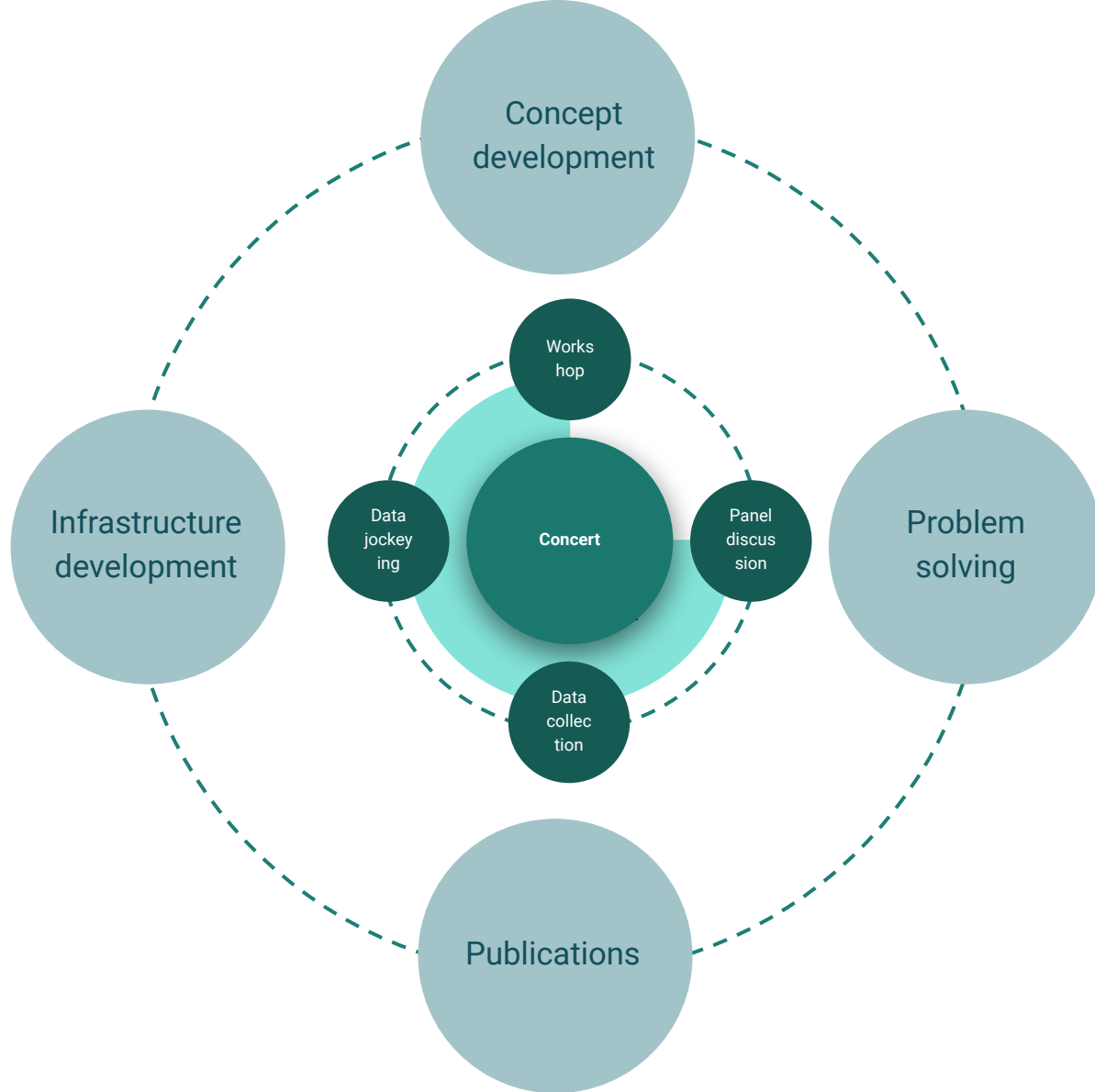
KULTURHUSET (LAB) 2. NOVEMBER AT 1PM - 3PM

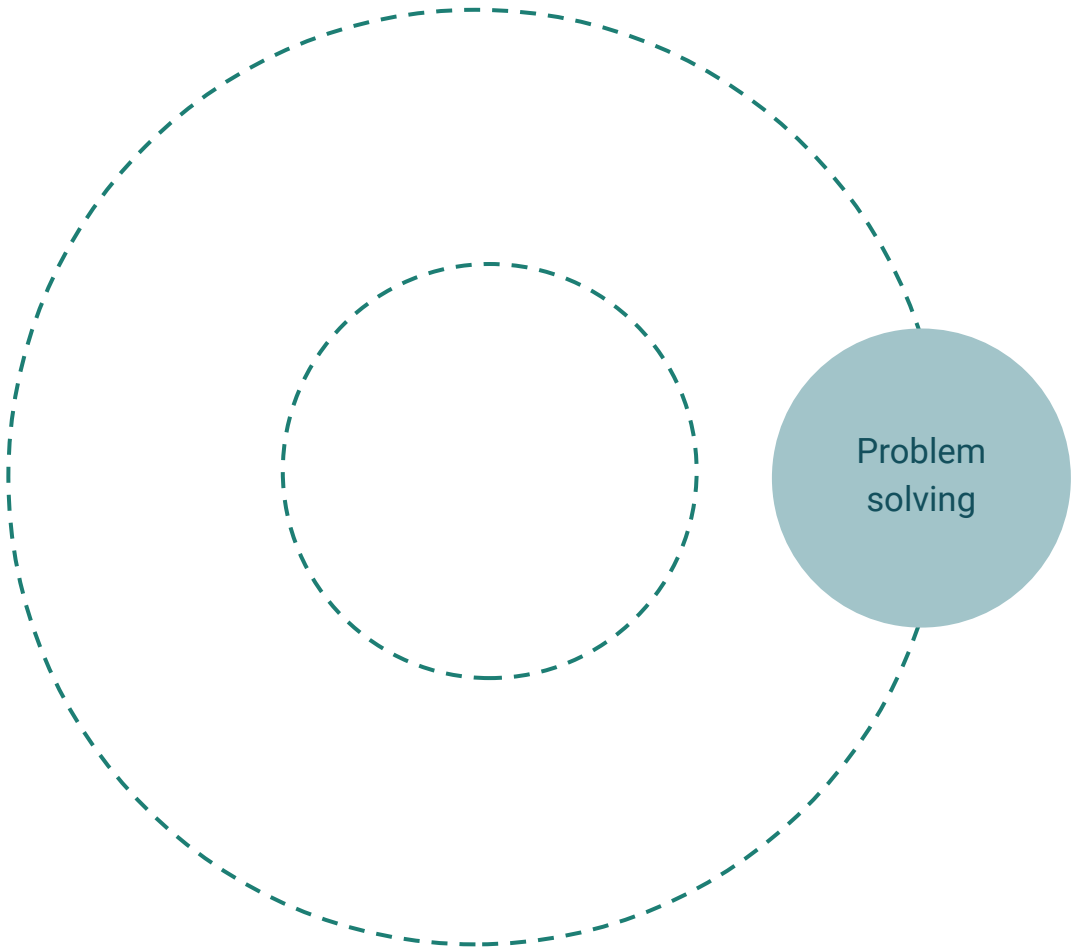


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Music
Lab

26th EDITION
OSLO
WORLD
20. OKT - 3. NOV 2019





GDPR

Copyright

GDPR
er delvis løst



GDPR

	Group 1: Audience	Group 2: Subjects	Group 3: Performers
Data collection	Video filming, thermal camera	On-body sensors (+ filming Group 1)	On-body sensors, filming (+ filming Group 1)
Level of recognition	May be recognizable	Anonymous	Recognizable
Information	web + signs + aural	sheet + aural	sheet + aural
Consent	Silent	Silent	Written
Legal basis	Legal basis: "task in the public interest"	Exempt from consent (no personal information collected)	

Copyright er uløst

MusicLab2:

Musikk av:

- Grieg
- Tveitt
- Nordheim
- Åm
- Utøverne

Lyd+video = synkronisering

Hvordan registrere?

Hvordan gjenbruke?



audio commons



Copyright

Composers

Lyricists

Performers

Producers

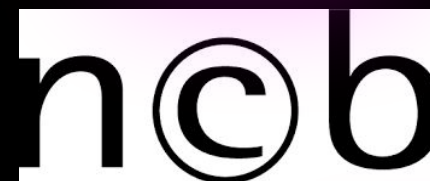
Dancers

Artists

...

GRAMO

TONO



Dato: 28. januar 2020

Utfordringer ved forskning på opphavsrettsbeskyttet materiale og åpen forskning.

Bakgrunnen for dette notatet er forskningsprosjektet MusicLab som er et samarbeid mellom RITMO, Senter for tverrfaglig forskning på rytme, tid og bevegelse, og Universitetsbiblioteket ved Universitetet i Oslo. MusicLab ser på nye metoder for forskning, forskningsformidling og utdanning. MusicLab tar utgangspunkt i kulturarrangementer som konserter, dansefremføringer o.l. Forskningen baserer seg i hovedsak på tre typer data; musikk i ulike former eller andre type kunstfremføringer til musikk, videoopptak av publikum og artister og sensordata fra utvalgte publikummere som registrerer data som pust, puls og lignende. Video og sensordataene, som baserer seg på reaksjonene fra musikken/fremføringen er unike data som ikke kan gjenskapes. Det er ønskelig å dele alle dataene åpent og dermed bidra til åpen forskning og tilgangen til åpne forskningsdata. Dette notatet adresserer ikke problemstillinger relatert til personvern.

Forskningsrådet er pådriver for åpen forskning og forskningsdata. Forskning på musikk vil i de fleste tilfeller innebære forskning på opphavsrettsbeskyttet materiale. Det oppstår en del utfordringer knyttet til publisering av åpne forskningsdata ved forskning på opphavsrettsbeskyttet materiale. Slik situasjonen er i dag kan det til tider oppfattes som en uoverkommelig hindring å forske på musikk og gjøre forskningen sin åpen tilgjengelig.

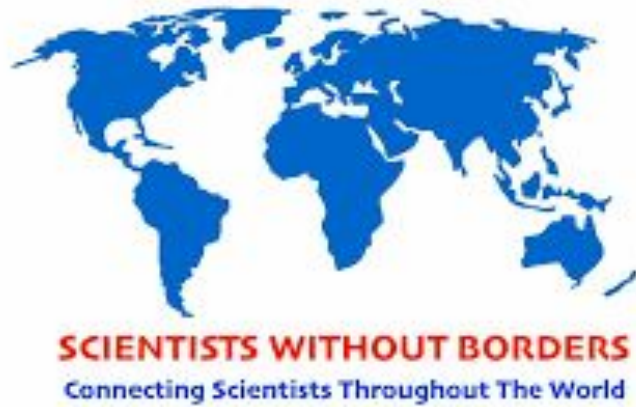
En utfordring er at mengden aktører som man må forholde seg til ved rettighetsklarering kan være omfattende og uoversiktlig. Skal man gjennomføre et arrangement som MusicLab, med etterfølgende publisering, må man forholde seg til en rekke ulike aktører i tillegg til opphaver. Det kan være selskaper som opphaver har forvaltningsavtale med (heretter selskapene), som TONO, GRAMO og NCB. Videre har vi tilfellene hvor opphaver er død og rettigheten har gått over til arvingene i henhold til Åvl §75. I tillegg så kan det være at man må forholde seg til en rekke forskjellige opphavere eller deres representanter. For eksempel hvis arrangementet velger å ta i bruk en DJ som mikser og spiller andres musikk eller hvor musikk har blitt til ved et samarbeidsprosjekt og så videre.

En annen utfordring er at vederlag for bruk m.v. kan bli omfattende og uforutsigbare. For et prosjekt som MusicLab må det inngås avtaler om både fremføring og publisering på nett, i tillegg til redigering. Avtaler om fremføring og publisering inngås som oftest direkte med selskapene. Prismodellene som selskapene opererer med i dag medfører uoversiktlig, og til dels omfattende, kostnader som er vanskelige å budsjettere inn i et forskningsprosjekt. Hvordan man beregner vederlaget varierer fra selskap til selskap, felles er at samtlige har en uforutsigbar variabel. For eksempel; I en fremføringsavtale med TONO beregnes vederlaget pr strømmet musikkminutt ganger antall visninger ganger 5 øre. Minimumsvederlag ved nedlasting av musikk, hvor TONOs minimumsvederlag er 53 øre pr sang.

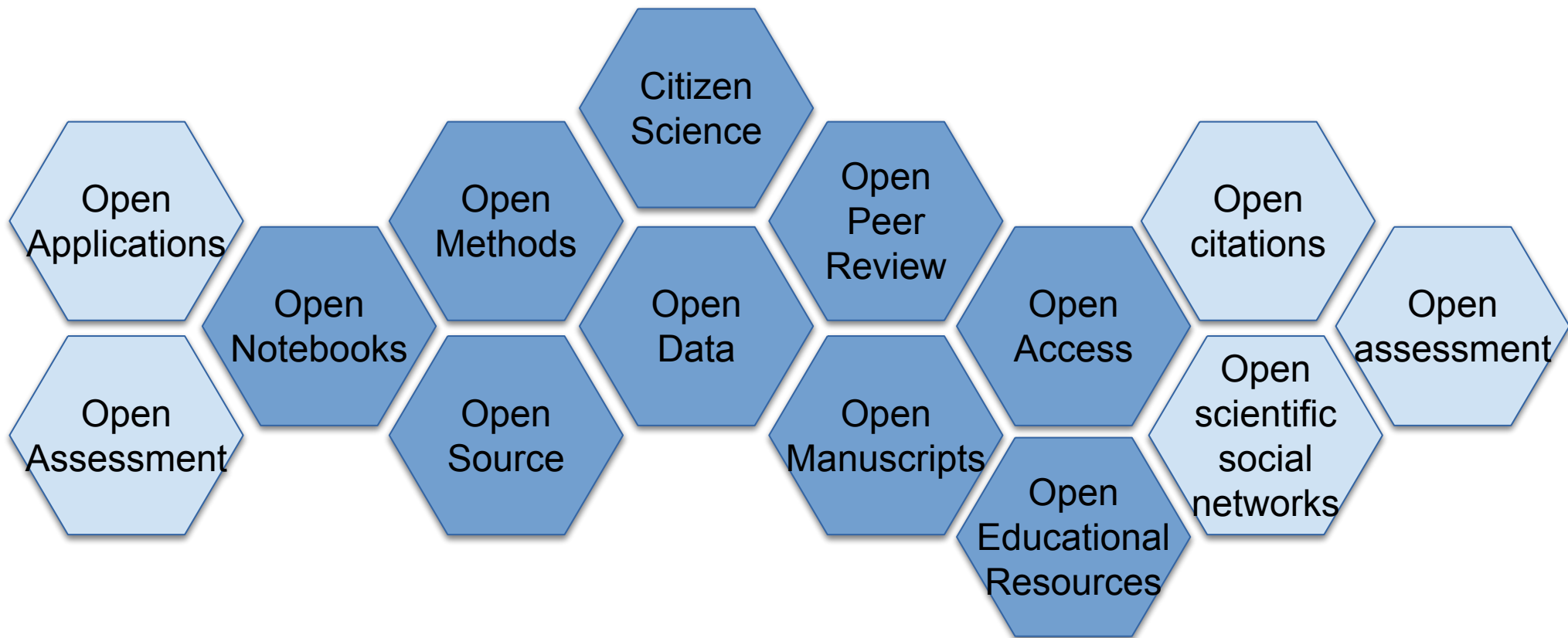
En tredje utfordring er at andre som vil bruke det opphavsrettsbeskyttede materialet også vil kunne ha utfordringer med rettighetsklarering og omfattende vederlag. Partene i de opprinnelige avtalene er kun

- Er det mulig å forenkle prosessen rundt rettighetsklarering ved bruk av opphavsrettsbeskyttet materiale i forskningsprosjekter som publiserer åpent?
- Er det mulig å få inn unntaksbestemmelser i forvaltningsavtalene med selskapene når opphavere ønsker å inngå avtaler med forskningsprosjekter?
- Er det mulig å få fastsatt faste satser for vederlag når materiale skal brukes til forskning og publiseres åpent?
- Kan man lisensiere ovennevnte materiale med CC-BY 4.0, eventuelt CC-BY-NC 4.0?
- Bør man utarbeide en standardisert lisens, skreddersydd for publisering av åpen forskning i samsvar med retningslinjene til Forskningsrådet? Hva bør en slik lisens omfatte?
- Hva slags avtale vil være innenfor norsk rett i forhold til tid og omfang? Kan det tenkes avtaler som er i strid med norsk rett i tid og omfang. Og hva kan gjøres for å unngå slike tilfeller?





Forskning er internasjonal aktivitet - kan ikke finne en særnorsk løsning





Music Lab

www.uio.no/musiclab





- Hva kan vi gjøre?
- Hvordan kan vi gjøre det?
- Hvordan kan vi skape forutsigbarhet for forskerne?
- Hvordan kan vi skape forutsigbarhet for institusjonene?