



HIFMB OLDENBURG

 ALFRED-WEGENER-INSTITUT
HELMHOLTZ-ZENTRUM FÜR POLAR-
UND MEERESFORSCHUNG

The Ocean Science Jam: Using creative
improvisation as a tool for novel science
communication

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CITIES AND MEMORY

HIFMB Helmholtz Institute for Functional Marine Biodiversity at the University of OLDENBURG

POLAR SOUNDS



Submersive Atmospheres präsentiert: **Unterwasser-Kino**

8 Künstler*innen
8 Meereswissenschaftler*innen
8 Neue Filme

7. – 22. DEZEMBER
13 – 20 UHR
ACHTERNSTRASSE 22, OLDENBURG
FREIER EINTRITT



HIFMB Helmholtz-Institut für Funktionale Marine Biodiversität an der Universität Oldenburg
AWI ALFRED-WEGENER-INSTITUT HELMHOLTZ-ZENTRUM FÜR POLAR- UND MEERESFORSCHUNG
Carl von Ossietzky Universität Oldenburg
RAUM — AUF ZEIT
2023



- **Polar Sounds** - 103 artists from 31 countries all over the world given 50 hydrophonic sound clips from the Arctic and Antarctic seas given to create their own compositions.
- **Mirrors** - A sound installation that follows the acoustic journey of the Minke Whale as it travels from Antarctica to Namibia.
- **Future Oceans** - Brought together 4 ocean scientists from worldwide institutions with 4 AI artists and 4 musicians
- **Submersive Atmospheres: Unterwasser Kino** - Matches 9 ocean scientists with 8 international artists to produce 8 short films which will be displayed in a free to-public exhibition in the city centre of Oldenburg from the 7th - 22nd of December.
- **Polar Portal** – Physical phone booth which holds the polar sounds project (still tweeking)



OCEAN SCIENCE JAM

12. Oktober 2023
um 19:00 h

Core, Markthalle
Heiligengeiststraße 6-8, Oldenburg

THEMA:
"MIKROBIOLOGISCHE WELT"

Musiker:innen, Tänzer:innen, Dichter:innen,
Sänger:innen, Künstler:innen
wir brauchen euch! Bringt eure Instrumente,
Leinwände, Tanzschuhe mit!

KEIN EINTRITT
ZUSCHAUER:INNEN
WILLKOMMEN!

MEHR INFORMATIONEN

HIFMB Leibniz-Institut für Funktionelle Marine Biochemie an der Universität Oldenburg

AWI ALFRED WEGENER-INSTITUT für Polarforschung an der Universität Oldenburg

Carl von Ossietzky Universität Oldenburg

OCEAN SCIENCE JAM

25. Januar 2024
Von 19:00 – 21:00

Core, Markthalle
Heiligengeiststraße 6-8, Oldenburg

THEMA:
"DIE WELT DER KORALLEN"

Wir projizieren Bilder und Geräusche von Forschungsarbeiten zur biologischen Vielfalt der Meere auf eine Leinwand. Danach seid ihr dran, in Echtzeit auf die Eindrücke zu reagieren, z.B. mit Musik, Tanz, Poesie, Performance oder Malerei. Gemeinsam werden wir etwas völlig Spontanes schaffen und uns gegenseitig inspirieren. Nur Zuschauer ist auch möglich. Eintritt ist frei – alle sind willkommen.

FREIER EINTRITT

MEHR INFORMATIONEN

HIFMB Leibniz-Institut für Funktionelle Marine Biochemie an der Universität Oldenburg

AWI ALFRED WEGENER-INSTITUT für Polarforschung an der Universität Oldenburg

Carl von Ossietzky Universität Oldenburg

2021 Leibniz-Preis für Naturwissenschaften

OCEAN SCIENCE JAM

23. Mai 2024
Von 19:00 – 21:00

Core, Markthalle
Heiligengeiststraße 6-8, Oldenburg

THEMA:
"POLARWELT"

Kommt und jammt mit uns. Gemeinsam und spontan verbinden wir eure vor Ort entstandene Kunst, Musik und Texte mit der Wissenschaft über die Artenvielfalt der Polarmeere

FREIER EINTRITT

MEHR INFORMATIONEN

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Carl von Ossietzky Universität Oldenburg

2021 Leibniz-Preis für Naturwissenschaften

Ocean Science Jam

3 events so far with almost **300** people attending

3 Themes – **Microbial, Coral** and **Polar World**



Why?

If we think of science communication as creating moments “in which science and society come into contact through a medium” (Horst and Michael 2011: 285), the question I wanted to ask was, how can creative improvisation be used as this medium, and what does this mean for how we create touching points with the ocean and ocean science?



Improvisation + Call and response

Create an environment where everyone in the room “jointly construct the improvisational flow” of the evening (Sawyer 2011:15).

As such the ocean science jam blurs the line between who is an author and a co-contributor and who is the audience. This is what Gallagher (2010) calls a ‘spect-actor’ where the audience become both an actor performing and a spectator viewing.

Not only are they passive receivers but they can confront the science and become political actors in response to what they are seeing and hearing “harnessing the collective potential of groups can lead to breakthroughs wherein every participant is empowered.” (Rill and Hämäläinen 2018:2).

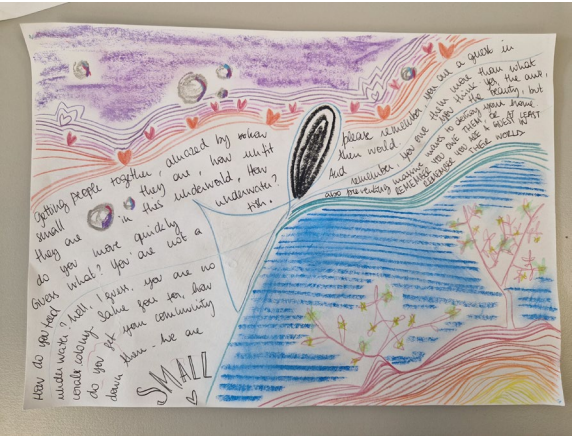
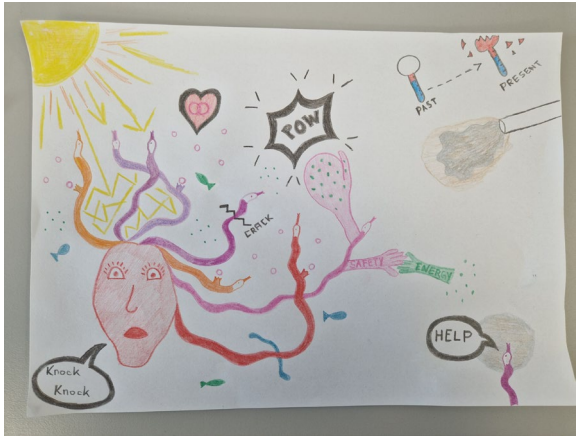
Improvisation as ‘radical’ (Matteucci 2022) and has “the potential for the overthrow of hierarchical practices” (Lewis and Piekut 2016: 7).



How we orchestrate this environment?

- Location
- Cues
- Props + tools







What do people get out of it...

- **Scientists** - Think about their work creatively, a platform to share ocean science with the public, to *see, hear, feel* the public respond to their work
- **Audience** – To not only learn but respond to Ocean science in a fun, interactive and creative way. To challenge and play with Ocean Science.



Conclusions

- Improvisation as a useful tool for ocean engagement can help create spontaneous touching points of oceanic connection
- Process + product as important as each other
- Rather than ask how can it effect *specific* change, instead, does it empower people to make more informed choices on understanding the past, present and future state of our Oceans



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A song for *Pelagibacter*. Using creative improvisation as a tool for novel science communication through the Ocean Science Jam

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Sharing complex oceanic research in an accessible way with the public is being identified by scientific institutions, universities, governmental departments, and NGOs as a critical intervention in promoting better engagement with the sea. Art–science collaborations play an integral role in this. Traditionally, these involve pairing artists and marine scientists to work on a project which is then presented to an audience. Increasingly however more interactive relationships with the public are being seen as a beneficial way to merge art and scientific data. The Ocean Science Jam is such a project that brings musicians, artists, dancers, performers, and the public together to respond creatively in real time to visual and audio cues based on a theme related to marine scientists' work. By mixing creativity with science in an integrative way the Ocean Science Jam not only acts as tool for public communication but also opens new ways for scientific data to be interpreted by non-scientists. This paper will explore this initiative from design to delivery highlighting the results of facilitating with the public moments where new responses to ocean science can be created through art. It will do so by combining the reflections of the creator of the Ocean Science Jam as well as feedback from the scientists and public who have participated. It will argue for the benefits of using improvisation and artistic co-creation for developing moments of embodied oceanic exchange and connection.

KEYWORDS

art–science, science communication, creative improvisation, ocean communication, marine governance, ocean literacy

Falling Walls 2024
winner in Science
Engagement

FALLING
WALLS
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I AM A
GLOBAL CALL
WINNER!
SCIENCE
ENGAGEMENT

#SCIENCESUMMIT24

