

Developing Empathy and Embracing Multiple Ways of Knowing about Ocean Science through a Participatory Art Process

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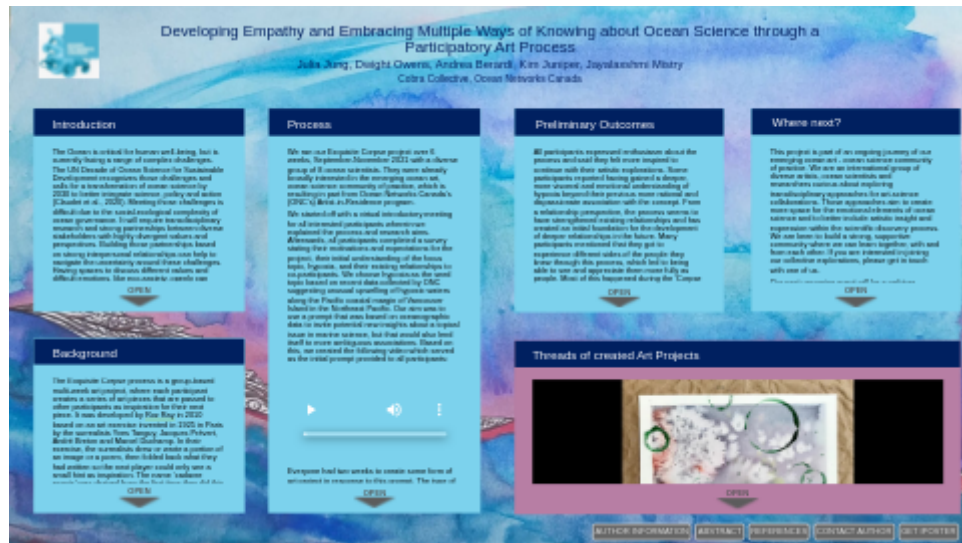
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November 26, 2022

Abstract

Ocean governance is characterised by social-ecological complexity and divergence in stakeholder values and perspectives. Meeting the challenges set out in the UN Decade of Ocean Science for Sustainable Development will require transdisciplinary approaches that can embrace multiple ways of knowing to develop shared understandings within interdependent communities of practice and ensure they can be applied in interventions that are adaptive, proactive, socially just, critically reflexive and fit to meet the Decade's challenges. We present the outcomes of an innovative participatory art process, the Exquisite Corpse Project, with the aim of highlighting multiple perspectives, and developing empathy between participants. We will engage a selected group of researchers from the emerging 'Ocean Art-Ocean Science' community to explore the topic of marine heatwaves and their impacts based on data collected in the Northeast Pacific by Ocean Networks Canada and other sources. Through a facilitated process, participants will create three pieces of art that will build on each other and will be exchanged between participants. At the end, all created artworks will be reviewed by the full group to explore emerging insights on marine heatwaves and to surface participants' underlying values and emotions, which is rarely done in scientific circles where the main mode of discourse employs rational dispassionate exchange. By creating a fun, emotionally-engaging process, we aim to show how the Exquisite Corpse project can strengthen interpersonal bonds, build social cohesion, create opportunities to surface people's values and perspectives, and develop new transdisciplinary insights in a non-confrontational way. This study is part of an ongoing process exploring transdisciplinary approaches for multidirectional art-science collaborations and developing new research methods for including artistic insight and expression within the scientific discovery process. Instead of the conventional 'outward looking' strategy of many art-science projects translating scientific outputs to new formats, our approach is primarily 'inward looking'. We aim to provide an opportunity for scientists to create art, thus allowing them to explore their own emotions, values and experiences through different ways of knowing.

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PRESENTED AT:



INTRODUCTION

The Ocean is critical for human well-being, but is currently facing a range of complex challenges. The UN Decade of Ocean Science for Sustainable Development recognizes those challenges and calls for a transformation of ocean science by 2030 to better integrate science, policy and action (Claudet et al., 2020). Meeting those challenges is difficult due to the social-ecological complexity of ocean governance. It will require transdisciplinary research and strong partnerships between diverse stakeholders with highly divergent values and perspectives. Building those partnerships based on strong interpersonal relationships can help to navigate the uncertainty around these challenges. Having spaces to discuss different values and difficult emotions, like eco-anxiety, openly can create this social cohesion. Being able to communicate openly also helps to ensure interventions are being developed in a critically reflexive way.

We present the Exquisite Corpse Project, a participatory art engagement process as a possible method to foster empathy and surface values and perspectives openly. We wanted to create a fun and emotionally-engaging process that might strengthen interpersonal relations and could lead to new insights. By creating an opportunity for scientists to create art, we hoped to allow them to explore their own emotions, values and experiences through different ways of knowing.

BACKGROUND

The Exquisite Corpse process is a group-based multi-week art project, where each participant creates a series of art pieces that are passed to other participants as inspiration for their next piece. It was developed by Roz Ray (<https://www.rozray.net/>) in 2010 based on an art exercise invented in 1925 in Paris by the surrealists Yves Tanguy, Jacques Prévert, André Breton and Marcel Duchamp. In their exercise, the surrealists drew or wrote a portion of an image or a poem, then folded back what they had written so the next player could only see a small hint as inspiration. The name ‘cadavre exquis’ was derived from the first time they did this art exercise, which resulted in the line “le cadavre exquis boira le vin nouveau” (‘the exquisite corpse will drink the new wine’).

The Exquisite Corpse process can be classified as a projective technique. Projective techniques are qualitative research approaches that have recently been gaining increasing attention (Clarke et al., 2019). Instead of common self-reporting methods like interviews or focus groups, they aim to generate responses by providing ambiguous stimulus material which allows participants to express their own ideas, values and perspectives in response to the stimulus (Kitzinger & Powell, 1995). The reasoning behind this can be explained with an adaptation of the ‘Iceberg’ metaphor, originally developed by Virginia Satir, that describes the relationship between our behaviour and external actions and our internal state including our attitudes, values and worldview (Innes, 2002). By providing an ambiguous stimulus that stirs imagination, participants are invited to project their ideas onto it, which are influenced by their experiences, socio-cultural context, worldviews and values (Rabin & Zlotogorski, 1981; Smith, 2019). Thereby, engaging with the produced material can help to elicit and surface some of those personal values and emotions.

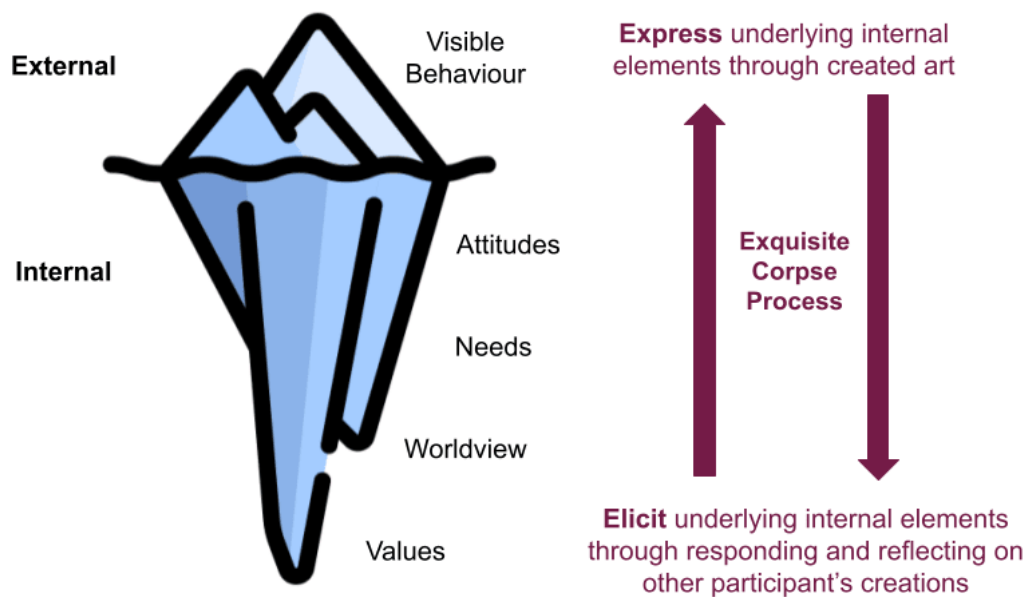


Fig. 1: The influence of internal factors on a person's externally portrayed behaviors. The Exquisite Corpse process mediates between those internal elements and external behaviors by creating space for the expression of, for example deeply held values, in participant's art projects. Engaging with other participant's projects can further elicit and surface those internal elements and invite open conversation about them.

PROCESS

We ran our Exquisite Corpse project over 6 weeks, September-November 2021 with a diverse group of 8 ocean scientists. They were already broadly interested in the emerging ocean art, ocean science community of practice, which is resulting in part from Ocean Networks Canada's (ONC's) Artist-in-Residence program.

We started off with a virtual introductory meeting for all interested participants wherein we explained the process and research aims. Afterwards, all participants completed a survey stating their motivations and expectations for the project, their initial understanding of the focus topic, hypoxia, and their existing relationships to co-participants. We choose hypoxia as the seed topic based on recent data collected by ONC suggesting unusual upwelling of hypoxic waters along the Pacific coastal margin of Vancouver Island in the Northeast Pacific. Our aim was to use a prompt that was based on oceanographic data to invite potential new insights about a topical issue in marine science, but that would also lend itself to more ambiguous associations. Based on this, we created the following video which served as the initial prompt provided to all participants:

[VIDEO] https://res.cloudinary.com/amuze-interactive/video/upload/vc_auto/v1638282349/agu-fm2021/C2-EE-AA-54-04-61-8F-09-9F-AC-64-06-38-45-59-2D/Video/ExquisiteCorpseSeed_b9nx0f.mp4

Everyone had two weeks to create some form of art project in response to this prompt. The type of art project, scope and medium was entirely up to participants. After two weeks, everyone passed their creation on to another participant and received a creation from someone else. The art project they received was their new inspiration and the process repeated as illustrated in table 1. After two weeks, everyone had to pass their projects on to someone else again and received someone else's creation as their new prompt.

Table 1: Process of passing projects between participants. Each color represents a 'thread' of consecutive projects created by different participants.

	Cycle 1	Cycle 2	Cycle 3
Participant A	Project 1	Project 2	Project 3
Participant B	Project 1	Project 2	Project 3
Participant C	Project 1	Project 2	Project 3
Participant D	Project 1	Project 2	Project 3

After six weeks (three cycles), everyone had created three projects which were all shared during a final online workshop, the 'Corpse Party'. During this Corpse Party, everyone presented their creations in three-part series or 'threads' tracing the evolution of the seed through creative work by three successive participants. The format of this party allowed the group to share the collective art that had been produced and reflect on each piece as well as the overall process. See some of the artworks created in the red box on the bottom right. They show the three-part 'threads' of consecutive projects created by different participants, each serving as the new seed or inspiration for the ensuing two-week project.

Following the party, each participant completed another survey capturing their experience and engaged in a 1:1 interview with the project lead to reflect on their experiences during the process.

PRELIMINARY OUTCOMES

All participants expressed enthusiasm about the process and said they felt more inspired to continue with their artistic explorations. Some participants reported having gained a deeper, more visceral and emotional understanding of hypoxia beyond their previous more rational and dispassionate association with the concept. From a relationship perspective, the process seems to have strengthened existing relationships and has created an initial foundation for the development of deeper relationships in the future. Many participants mentioned that they got to experience different sides of the people they knew through this process, which led to being able to see and appreciate them more fully as people. Most of this happened during the 'Corpse Party' while listening to others reflecting on their experience during the process or explaining their motivations and inspirations for creating their projects. Sharing the associations that came up while viewing other's projects also surfaced different values and perspectives. Some participants reflected on their practice as ocean scientists in a changing world considering the norms of conducting research and forming partnerships. They were wondering how we could incorporate different ways of knowing and more creative ways of engaging with others and our research topics into our practice.

Overall, the process of creating and sharing art collectively seems to be able to strengthen relationships by adding more emotional depth and opportunities to explore more creative approaches and questions. Figure 2 below illustrates these insights through some selected quotes.



Fig. 2: Selected quotes from participants' surveys and interviews illustrating how the process of creating and sharing art collectively mediates the relationships and reflections on practice.

WHERE NEXT?

This project is part of an ongoing journey of our emerging ocean art - ocean science community of practice. We are an international group of diverse artists, ocean scientists and researchers curious about exploring transdisciplinary approaches for art-science collaborations. Those approaches aim to create more space for the emotional elements of ocean science and to better include artistic insight and expression within the scientific discovery process. We are keen to build a strong, supportive community where we can learn together, with and from each other. If you are interested in joining our collective explorations, please get in touch with one of us.

Our next upcoming event will be a webinar sharing the outcomes of this Exquisite Corpse process in more detail in January 2022 and our innovative session “#SciArt: What can ocean scientists and artists learn by working together?” (<https://www.aslo.org/osm2022/innovative-sessions/>) at the Ocean Sciences Meeting in February 2022.

THREADS OF CREATED ART PROJECTS

[VIDEO] https://res.cloudinary.com/amuze-interactive/video/upload/vc_auto/v1638822333/agu-fm2021/C2-EE-AA-54-04-61-8F-09-9F-AC-64-06-38-45-59-2D/Video/BlueWhale1_xnxb1k.mp4

[VIDEO] https://res.cloudinary.com/amuze-interactive/video/upload/vc_auto/v1638721621/agu-fm2021/C2-EE-AA-54-04-61-8F-09-9F-AC-64-06-38-45-59-2D/Video/Vaquita_ywmnso.mp4

[VIDEO] https://res.cloudinary.com/amuze-interactive/video/upload/vc_auto/v1638721588/agu-fm2021/C2-EE-AA-54-04-61-8F-09-9F-AC-64-06-38-45-59-2D/Video/GrayWhale_r2n9gd.mp4

[VIDEO] https://res.cloudinary.com/amuze-interactive/video/upload/vc_auto/v1638871642/agu-fm2021/C2-EE-AA-54-04-61-8F-09-9F-AC-64-06-38-45-59-2D/Video/Orcasmall_feozji.mp4

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ABSTRACT

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