



LEANING OUT OF WINDOWS 2016-2020

Art and Physics Collaborations through Aesthetic Transformations

Leaning Out of Windows (LooW) is a four-year SSHRC-funded interdisciplinary art and science project, involving four phases – 2016 to 2020. It involves co-designing, testing, and analyzing models of collaboration for art and science. Participants include Emily Carr University's faculty, art students, visiting artists + TRIUMF's physicists, post-doctoral researchers and graduate students.

Metaphor - Creative Process - Communications

We focus on the importance of interdisciplinary methodologies for considering the outstanding questions of the universe pursued by contemporary physics discourse. It takes a lot of imagination to describe an unfamiliar world.

In this venture we join together artists and physicists to share the quest to understand the nature of reality. Their diverse experiences, views, and interactions bring each discipline to see a new perspective on the creative process while also broadening the potential for communication between disciplines.

We will explore how artists might work with scientists to develop a shared understanding of how knowledge can be translated across their disciplinary communities.

We will organize and assess a process of interdisciplinary collaboration between art and science that enables "hybrid research" which can then be shared by artists and scientists.

During the collaborative process, science frames a physics topic for artists who in turn make material-based, intuitive investigations and responses. These transformations are manifest in visual art forms that may include sculpture, painting, drawing, performance, installation, sound, text, animation, interactive media, video games and other cultural forms. The artistic production and research methodology of Aesthetic Transformation is applied to the distinct disciplines of visual art and quantum physics.

Our aim is to transform the grammar of abstract knowledge by specifically addressing the barely discernible phenomena studied by physics through aesthetics, analogy, metaphor, poetry, and other inventive methods.

"Science, like art, plunges itself into the materiality of the universe though with very different aims in mind. ...This is not to say that art does not draw on science or that science does not draw on art, but in drawing on the other's resources each must transform the work of the other into its own language and its own purpose." (art and science philosopher Elizabeth Grosz)

The aim is to open new pathways for the possibility of a much richer understanding of human experience than each can attain separately. We believe that the process and outcomes of this creative research project has relevance beyond art and physics as it presents an emergent model of practice for the apprehension of complex knowledge and diverse ways of knowing.

Rather than consider how art might interpret science, our research project develops alternative models for collaboration, in order to trigger and achieve a deeper mode of understanding knowledge as a kind of moving performance. (Andrew Pickering, Mangle of Practice 2008 - "knowledge - it actually bumps up against the world.")

We are looking for a methodology that enables us to create a common space and language in which it is possible to "lean out" of our respective disciplinary worlds in order to see our shared questions from fresh perspectives, and to further the possibility of deeper interdisciplinary discourse. As students discover compelling relationships between disciplines new perspectives are developed. They construct a more integrated web of knowledge by activating their knowledge in one discipline while being confronted with another.

Research Creation Questions

1. In what ways can transformative methodologies of collaboration work to engage with the diverse languages employed by artists and physicists?
2. What are possible models for interdisciplinary learning in the studio and science lab that are creative and effective generators of new knowledge and its visualization?

"You might say we are all searching for the language of the universe." (Physicist Lisa Randall)

TIME LINE DATES

Sept 30 Orientation @ TRIUMF (Information session with physicists)

Oct. 11 Workshop on Process Design with physicists and SSHRCC collaborators

Post workshop - Series of meetings to develop parallel streams and decide on:

- how artists receive physics concept
- length of production periods
- choreography of artist/physicist conversations
- details on transfers of art works between artists + back to physicists
- (initial organization of translation hub)

Jan. 20, 2017 Science Seminar: Physics topic presented to artists

January to August 2017 Artistic Production with transfers of artworks

Fall 2017 Translation Hub, exhibition, assessment of process

Begin phase 3 with new process design for production cycle in Spring 2018 and Translation Hub Fall 2018

2019 – 2020 Documentation/ Dissemination, Overall Evaluation, Publication, Exhibition

Research Grant Investigators + Collaborators

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