The human dimension of global climate change is one of the most pressing issues of modern societies. Whereas most people accept that climate change is real and man-made, the tendencies of consumers and policy-makers to act are weak. Obviously, the standard ways of communicating climate change in general and climate change actions to the public in science and media (news & documentaries) are not effective enough to change people’s behavior. Previous research has found that an important problem of climate communication is the psychological distance to the phenomenon, it affects people or species potentially far away in time and space. High psychological distance means also that the emotional response of people is weak which in turn has been identified as one of the main issues in lacking action. Thus, new ways of communicating need to be developed, which are better suited to speak to people’s emotions and give them a personal experience of a problem, that otherwise would be just abstract and mediated by media.

Following this line of reasoning, a research group at NTNU lead by Christian A. Klöckner – an environmental psychologist – started a research program (Climart -> www.climart.info) exploring the psychological effects of being confronted with climate change related artwork. After studying a large variety of 38 climate change art projects in different countries, which underlined the decisive role of emotional activation in triggering a new kind of thinking, a different mindset, the project culminated in a collaboration between the research team and an artist (Michael Pinsky). During this collaboration, an art installation (the “Pollution Pods”) was developed in an intense dialogic process. The installation premiered in Trondheim in the Festningspark during and after the Starmus festival in June 2017. The
art installation was not only an art project, but also an essential part of the research project. During the event in Trondheim which was visited by about 1500 people, a quantitative survey of the audience (about 1100 answers) and individual qualitative interviews (78 interviews) were conducted and are currently analyzed. We consider the Pollution Pods a very good candidate for the Brain Power Award, because it is an innovative example of research activity with a close connection to societal challenges. It combines disciplines that hardly work together and finds new answers to pressing problems.

**Information about the Pollution Pods artwork**

The artwork created for the project was named Pollution Pods. Five geodesic domes were connected to form a ring. Within each dome, the air quality of five global cities was recreated in a sophisticated procedure of smell (we worked with a perfume maker and created some smells ourselves), humidity, visibility, and temperature. Starting from the hosting city Trondheim, the visitor could pass through polluted domes of different character (London, New Delhi, Beijing, and Sao Paolo), from dry and cold locations to hot and humid, from locations characterized by diesel fumes (London) to locations characterized by burning of coal and wood for home heating (Beijing). The release of toxic gases from domestic and industrial sources both increase the rate of global warming and have a direct effect on our present day health. In the West, in cities such as London, one in five children suffer from asthma. Whilst in the developing countries such as New Delhi, over half the children have stunted lung development and will never completely recover.

However, this pollution is difficult to understand through images, as the smog of such as Delhi seems almost romantic and much of the most dangerous toxins are not visible at all. Whilst we here in Norway and the rest of the developed world live in an environment with relatively clean air, people in countries such as China and India are being poisoned by the air borne toxins created from industries fulfilling orders from the West. The experience of walking through the Pollution Pods demonstrates that these worlds are interconnected and interdependent. In this installation, we can feel, taste and smell the environments that are the norm for a huge swathe of the world’s population. Perhaps the visceral memory of these toxic places will make us think again before we buy something else we do not really need?

A 6 minutes video about the installation can be found here: [https://youtu.be/I7nMME-3aC8](https://youtu.be/I7nMME-3aC8)

This 7 minutes video for the NRK children’s program Newton produced in the Pollution Pods shows very nicely the experience: [https://www.youtube.com/watch?v=TQoQOPlnTTA](https://www.youtube.com/watch?v=TQoQOPlnTTA)
The response from the audience (and also the media response) showed us clearly, that the Pollution Pods succeeded in reaching people emotionally, the bodily experience of breathing the air of one of those cities made a totally different impression than reading about it.

**Information about the Climart research project**

Two of the hardest aspects of communicating the facts of climate change are affecting both decision-making and behavioral change. Although researchers have explored visualizing climate change, research about the contribution of contemporary art to the topic has been scarce. The project suggests that visual art using more *emotive* and *personally relevant* narratives may help bridge the divide between scientific information and personal responsibility. This type of artwork may well be more effective not only on those who are already concerned about the issue, but on those who are not. During the first phases of this project, we documented effects from past projects across Europe related to climate art. We want to know how viewers respond to a diverse range of climate change related art in differing contexts. What are the emotional reactions they experience, what thoughts are triggered, what do they perceive, and crucially, what actions do climate related artworks prompt? In the final stage we commissioned an artist to respond to these findings. Here psychology acted as a kind of ‘glue’, or mediator, as the artist reworks the data of natural science into a more affective visual language. The aim is not to illustrate climate science per se, but rather to engender an in-depth dialogue between natural and environmental science, psychology and contemporary art. In this final phase earlier developed methodologies of measuring audience interaction will be repeated with the project’s final public artwork. The team publishes its findings across a range of platforms, such as scientific papers on psychology and communication, arts organizations, and through public presentations to a variety of audiences (see [www.climart.info](http://www.climart.info) for the publications and public appearances so far).
Information about the research group
The research group for “Consumption, Environment, and Traffic” at the Department of Psychology at NTNU is lead by Christian A. Klöckner, who is an environmental psychologist, working on understanding drivers of pro-environmental behavior and finding innovative means of communicating environmental problems to the population. In this project, which is funded by the Research Council, an international team of psychologists, artists, visual communicators, and climate scientists works together. Two PhD candidates are about to finish their theses with findings from the project.

Information about the artist
Michael Pinsky is a British artist whose international projects have created innovative and challenging works in galleries and public spaces. His work has for example been shown at: TATE Britain; Museum of Contemporary Art, Chengdu; Saatchi Gallery; Victoria and Albert Museum; Institute for Contemporary Art, London; La Villette, Paris.

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