

## From Representation to Action

How Art Addresses Climate  
Change

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During the COP15 climate summit meeting in Copenhagen in December 2009, I was involved in the construction of a public art installation called "Atmosphere – the sound and sight of CO<sub>2</sub>" that was placed in front of the city town hall.

### Interfacing climate change

The installation converted data from CO<sub>2</sub> measurements at three chosen locations in Copenhagen to sound and visuals presented through headphones and on a 2-meter high, quadrant sculpture that functioned as a transparent, low resolution LED screen. Hereby the public was giving sensuous access to the symbolic villain of climate change i.e. carbon dioxide; and a normally non-sensuous phenomenon suddenly became visible and audible.

"Atmosphere – the sound and sight of CO<sub>2</sub>" is intended as an interface that allows for new ways of recognizing and understanding environmental relations and issues of climate change. As in works of art like Nuage Vert by the Paris based art and design partnership HeHe, where the contour of clouds of vapour emitted from energy plants are illuminated by the help of green laser beams, allowing for a discussion and reflection on daily energy consumption or Translator II, Grower 2004-06 by Chicago based artist Sabrina Raaf, a robotic installation that draws vertical lines of green ink on gallery walls in response to the measured CO<sub>2</sub> variation in the air of the gallery, resulting very poetically in grass like images, Atmosphere – the sound and sight of CO<sub>2</sub> involves an epistemological concern. As work of arts and as aesthetic interfaces the works mentioned hold a value in the sense that they present new representational forms that plays with the visual rhetoric of scientific imagery, and who as ambiguous, tentative and poetic expressions opens for other kinds of narratives than those told by images or interfaces based on values like truth, precision and exactness and hereby the idea of scientific facts.

### Interfacing complexity

An important aspect of climate art works like the ones mentioned above is that they help us recognize the complexity of the subject matter on different levels. One level is the representational complexity that encompasses the relationship between measurement, representation and reality and hereby

the relationship between technology, perception and cognition. As science studies show, reality is interpreted and the scientific fact constructed already at the level of the technological equipment involved (Latour, 1979). The data resulting from the technological measurements is then on a second level phenomenological interpreted into sound and images confronting us with questions of how to stage the object e.g. in relation to scale. Dealing with visualizations of non-sensuous elements as in Atmosphere – the sound and sight of CO<sub>2</sub> or Translator II, Grower concerns on a basic level reflection on form and color, in short the semiotic encoding of reality, and the complexity of encoding is readable in the interface/imagery of the works.

On another level of complexity art works help us realise the ambiguity of the subject matter and its symbols. As claimed above CO<sub>2</sub> is the symbolic villain of climate change but through the process of photosynthesis CO<sub>2</sub> is also a crucial element of life. About this Sabrina Raaf poetically reminds us in her work. Also Nuage Vert expresses the ambiguity of environmental sustainability in that the work not only visualizes levels of gas emission in a purely abstract and isolated way, but also relates it to ways of living. Hereby Nuage Vert recognizes climate changes as a cultural problem and calls for cultural solutions, not only for technological ones.

On a third level climate art in its mixed forms of scientific and artistic rhetoric unmistakably shows, how we have moved beyond modernity. As Bruno Latour has described it, modernity was defined by a separation between facts and values each belonging to separate domains of culture. Today, as in the case of global climate change, the discourse of science, art, politics and ethics etc. are all entangled (Latour 2010). Instead of seeing this as a dystopian situation we have to find new discursive ways of dealing with the complexity and works of art that challenge the visual imagery of science, politics and commerce can play a significant role in this.

### Interfacing action

As a final aspect we should remember that bringing about new ways of sonifying and visualizing environmental aspects of climate change is also a way of allowing for action. Not only politically or discursively but also physically. In order for us as citizens to act on climate change the problem (if not the solution to it) needs to be visible and: "Here art can assist in confronting us with new ways of seeing [...]" perhaps leading also to new ways of acting (Pold, 2009, p. 31).

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### References

- Latour, Bruno, Woolgar Steve (1979). Laboratory Life: the construction of scientific facts. Sage Publications.
- Latour, Bruno (2009) "It's development, Stupid!" or: How to modernize modernization. In Anne Sophie Witzke & Sune Hede eds. 2009. RETHINK Contemporary Art & Climate Change. Alexandra Institute, pp 59-61.
- Pold, Søren (2009). Imaginary Interfaces in the Blue Sky. In Anne Sophie Witzke & Sune Hede eds. 2009. RETHINK Contemporary Art & Climate Change. Alexandra Institute, pp 30-33.