## Sensing the system

Reducing moral distance towards global climate change

by Caroline Nevejan (Delft Technical University)

Being alive and present in this world is characterized by the strive for survival and well-being.[1] From sensations to more complex emotions and feelings, human beings steer away from pain and unpleasantness.[2] Children respond immediately when something makes them laugh or cry. Grown ups, having developed complex layers of consciousness through emotional and cognitive growth, tend to have larger timeframes for response but steer towards comfortable homeostasis anyway. The trigger for ethical behaviour is rooted in the strive for survival and well-being because human beings need safe environments to be able to survive.[3] Therefore social structures are developed and nature has been conquered.

From hunter gathering to agriculture to industrial production to a now global technological society, social structures have been changing along. In these changing social structures human beings are still triggered by sensual experience, emotions and more complex feelings but most of the time the causality that the body senses is not matched with an understanding of the social structures on which one is dependent.

In the global society the sense for survival is changing. In cities, where half of the global population lives, people eat food they did not gather or grow and of which they do not know where, by whom and how it was grown. To be able to eat, one has to trust the shop, the market and the food industry with its technologies. To be able to know what is happening one has to trust the media, to be able to partake in today's business one has to trust the many mediated communications. Trust in social-technical systems is not a given thing, it is a choice, but in today's global society it is required to be able to survive.

Both presence and trust are trade-offs. Having presence and developing trust is dependent on four dimensions: time, place, action and relation.[4] When sharing time and place with friends while cooking, trust flows easily. When not sharing time or place the way in which one relates to someone will make a difference in how any communication is understood. Trust also grows when actions and transactions happen as anticipated.

By tuning the four dimensions potential trust configurations emerge. In any trust configuration human beings will make a trade-off how they will trust, if at all. Also in any trust configuration people can take moral distance to what happens by not sensing and/or accepting any responsibility to interfere. When one does not see how one's own actions may influence what happens next, for survivals sake, human beings take a moral distance, even to the own self.

Overcoming alienation and apathy is part of political struggle for centuries. Solidarity between workers, freedom fighters and those who do not accept hunger and poverty has inspired many successful fights. Sharing time and/or place, sensing the relation with fellow fighters and being prepared to act is crucial in those moments of success.

Faced with a global climate change, a crisis of resources and fair division of waste, taking a moral distance should be more hard than ever yet it seems fairly easy to do. Where before other people and territories were part of the unknown, today - because of mediated communication and the endless images it produces - human beings have an idea and an

image of others elsewhere and may be able to relate accordingly. But also the notion of climate change itself is communicated by images and representations of things that once were and now change, none of which most people perceive themselves. As in nature, many dynamics in the social- and eco technological systems are unseen and can only be known through hearsay and by interpretation of other people's work. In this situation it is unclear how one's actions may affect what happens next and a moral distance is easily accepted.

To alter climate change new bridges have to be built between what the body senses and what it cognitively knows. Structured feedback in each of the four dimensions that relate trust to presence may be such a bridge. Interactive applications in which personal input and output make it possible to 'sense' the eco technological system may provide at least one of the necessary bridges preventing a moral distance to be taken and (re-)connecting to the ethics of presence in which the strive for well-being and survival resonates most.

- [1] Riva, Giuseppe, John A. Waterworth and Eva L. Waterworth. 2004. The Layers of Presence: A Bio-cultural Approach to Understanding Presence in Natural and Mediated Environments. In *CyberPsychology & Behavior* (7) 4: 402–416.
- [2] Damasio, Antonio. 2000. *The Feeling of What Happens. Body, Emotion and the Making of Consciousness.* London: Vintage, Random House.
- [3] Damasio, Antonio. 2004. *Looking for Spinoza, Joy, Sorrow and the Feeling Brain.* London: Vintage, Random House
- [4] Nevejan 2007. Presence and the Design of Trust. diss. University of Amsterdam

BIO Caroline Nevejan is a researcher and designer focusing on the implications of technology on society. Currently she collaborates with the Multi Actor Systems group at Delft Technical University in the Netherlands. Between 2004 and 2006 she was connected with the Amsterdam School for Communication Research of the University of Amsterdam (ASCOR) realizing the dissertation "Presence and the design of Trust" with prof. Cees Hamelink and Dr. Sally Wyatt. Originally she studied social sciences with a focus on the methodology of research in the communications domain.

Having been involved with interdisciplinary projects for over 20 years – former staff member of Paradiso, co-founding De Waag/Amsterdam, director of research group OrO and connected to Performing Arts Labs/UK and Doors of Perception - she speaks a variety of professional languages. She has been initiator, conceptualizer, producer, manager and director of local, national and international work. Current research is focused on Witnessed Presence and System Engineering. Caroline Nevejan is a crown member of the Dutch Council for Culture and the Arts.