Experiential Design – Rethinking relations between people, objects and environments

• Paper / Proposal Title:
Organic indoor environments to support physical and psychological wellbeing

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• Abstract (300 words):
Air quality together with stimulation of our senses are important factors for human health and wellbeing. The indoor air is often more polluted than outdoor air. Rigid design with rectangular geometrics decreases indoor stimulation. In western world we spend 90% of our time indoors. Therefore, these aspects are important to the living environment.

This project is an application of the DEVA-concept (DEVA= Design, Energy, Vegetation and Atria) an aim to improve indoor environments by integrating plants inside the buildings.

The suggestion and experiment presented in this paper are to bring a considerable amount of plants and organic shapes to clean the air, provide visual stimulation and better acoustics. The idea is to provide a more natural environment that reflects the needs of human beings since ancient days. The project is applied in two conference-
study rooms at a science center in the north of Sweden. One room is traditional conference and study room while the other was developed by introducing plants and organic shaped furniture and interior design elements. The first findings show that the level of CO2, as an indicator of the air quality, was reduced by half after implementing plants to the room.

• Author(s) Biography (200 words each):

Lena Lorentzen has worked as an industrial designer for 31 years and as a professor in 10 years. Her research focuses on sustainable universal design believing that it is the interaction between humans and the artefacts that need to be unlocked to create sustainable behavior. The way she has worked is by finding ways to understand and describe the needs of the most demanding users, i.e. users with diverse kind of impairment.

She has also developed methods in how to evaluate the fulfilment of these needs, especially usability.

She also has a permaculture education that she is applying by growing vegetables, both indoor and outdoor in her forest garden.

Lars-Åke Mikaelsson is senior lecturer in Sustainable Building Engineering at Mid Sweden University. He has been active in research in the field since the middle of 1970 th. Since 1998 he has been responsible for research and education in Sustainable Building Engineering at Mid Sweden University. Together with Lena Lorentzen and other collegues has formulated the concept DEVA (Design, Energy, Vegetation and Atria) which is basic for this abstract.