The Otaniemi Campus Development and Ecological Sustainability: Perceiving the Environment of a Complex Adaptive System

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ABSTRACT

No building or neighbourhood is an island but a constantly changing complex adaptive system produced by many contemporaneous, mostly interconnected and parallel but sometimes also conflicting processes. By using the development of Aalto University Campus, Finland, as an example of such a complex adaptive system in the course of change processes, the article demonstrates the challenge of transforming the production of our urban environment to truly meet the goals of sustainable development. Ecological sustainability is here understood as the need for regeneration, which is proposed as necessary in the current state of the planet. The article uses the concept of the perceived systemic environment and argues for its paradigmatic role in this context. Perceptions of the systemic environment affect and steer the actual goal setting of the stakeholders/actors in the system and can either enhance or even override the transition towards sustainability. The article suggests a way to steer the change towards a more regenerative perception of the systemic environment.

Keywords: Campus Development, Change Process, Ecological Sustainability, Paradigm Change, Perceived Systemic Environment, Regeneration, Transition to Sustainability

INTRODUCTION

This paper is based on observations of the current change processes of the Aalto University’s Otaniemi campus area, made during research work for the development of future learning environments. Otaniemi, now on its way to becoming the new main campus of Aalto University, is going through a systemic change where some of the users of the campus will be new and the accessibility of the area will change and increase its commercial attraction. At the

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same time, Aalto University as a merger of three traditional Finnish universities (technology, business and art and design), is still building its new identity and image.

Sustainability is one of Aalto’s main goals: “Aalto University will be incorporating sustainability and responsibility perspectives into all our research and teaching by 2015” (Teeri, 2012). Also, the Aalto campus area has a goal to be the leading sustainable university campus in Finland by 2020 (Aalto University, 2014).

This study has risen from the problem that there seems to be some discrepancy between the aims and the actual processes in Otaniemi. It seems that even though discussion about ecological sustainability is mentioned in many levels of the future aims of Aalto University, it is hard to recognize in the course of change of the learning environment. It seems somehow unfitting to the complex processes that are shaping the future Otaniemi.

In this paper, we will first introduce three interacting change processes that are shaping the future Otaniemi campus area, studying some aspects of sustainability in relation to each of them. This is furthered by studying the system of architectural competition and its possibilities to produce ecological sustainability. The article then discusses ecological sustainability as a need for regeneration, which leads to the argument that the current change processes in Otaniemi appear to happen in a systemic environment that does not seem to support change processes that would produce regenerative sustainability. We will conclude by suggesting a way to bridge the processes to sustainability.

NEW STUDENTS COMING: DOES THE IDENTITY OF THE AREA CHANGE?

The traditional campus of Helsinki University of Technology, built in 1960’s, was chosen to be the main campus area of Aalto University and all of the bachelor level students will be studying in Otaniemi campus area starting from 2015. This means that the traditional campus of technology students will have to host and be home also for business and art & design students.

The student unions did oppose the transition - business students would have preferred to stay in the center of Helsinki, and the art & design students in their current location in Arabia, also in Helsinki. One of the main reasons for opposing the move was that the Otaniemi campus has been experienced as a rather boring area and closed from others than the technology students. Otaniemi campus has to find a way to welcome and be hospitable to the new student groups. This is a challenge to the area as the identity has been built so strongly on the image of home of the “tech geeks”. If the new students experience the identity of their new university location as negative, the efforts to brand the area as an innovative campus area would result in “bad press” and thus negative image.

The art & design and business students, at the moment, are still looking at the image of Otaniemi as outsiders. There is a risk that they
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