FIRST CALL FOR CASE STUDIES: PRODIGIOUS WISDOM AND APPROPRIATE TECHNOLOGY IN AN ERA OF TRANSITION

INTRODUCTION

The Institute of Soil Science at the University of Natural Resources and Life Sciences in Vienna is preparing an Erasmus Intensive program in the new Town of Aspern Seestadt this year. We intend to work in a **permaculture design course** – PDC - with students from Danube and Western European countries on facts and trends about social, ecological, technical, and economic structures in the existing built up and open space areas for developing sustainable multi- functional land-use within Aspern Seestadt and its environment. Finally we will elaborate several proposals for representatives of the universities and the city council in Vienna. This will be an open space concept with regard to community gardens, municipal composting, edible landscape, ecological design that works with whole systems, greening architectural details, solidarity economic projects to improve multifunctional land-use systems responding to the bioregion to cooperate with biological farmers.

In Vienna there will be a change of course for an intelligent city, Mrs. Homeier-Mendes says, with new forms of governance to integrate increasingly different interests of heterogeneous urban societies establishing a stakeholder process with members of economy, energy, mobility, administration for a masterplan "Smart City Wien 2012-2015".[1] The idea of a **smart city** can be seen in connexion with the initiative of ´Low carbon Technologies´, energy and resources.[2] "We believe a city to be smart when investments in human and social capital and traditional (transport) and modern (ICT) communication infrastructure fuel sustainable economic growth and a high quality of life, with a wise management of natural resources, through participatory governance."[3]

METHODOLOGY – JOINT PROBLEM SOLVING AMONG VARIOUS DISCIPLINES

An increase of as little as two degrees Celsius in average global temperature would heat global politics to a boiling point and trigger massive conflicts over scarce food and water. We have to decarbonise our economies wholesale, and if we havent´ reached zero greenhouse - gas emissions globally by 2050 then the second half of this century will not be a time you would choose to live in.[4] A world in transition needs new ways of strategic thinking, says Hans Peter Dürr. For implementing mental activities into innovative concerted action, we have to drop mechanistic strategy patterns, and substitute openness and empathy for enabling new ways of thinking.[5] Therefore we need new educational methods, cooperation, participation and cultivating creativity.

Until recent times the prevailing architectural design and spatial planning epistemology considered built up and geographical areas as technical, social and economic entities for classifying, profitable use and exploiting. "For our purposes, let us define **design** as the intentional shaping of matter, energy, and process to meet a perceived need or desire. Design is a hinge that inevitable connects culture and nature through exchanges of materials, flows of energy, and choices of land use." (Van der RYN)

Therefore we invite all of you to be designers in shaping the physical details of your profession and daily experience, aggregating your ideas for human purposes. For being an important player with smart-city technologies today, we have to take into account our common prodigious wisdom with accepted knowledge of appropriate technologies. Prodigious built up structures of former times "goes to the roots of human experience and is thus of more than technical and aesthetic interest. Moreover, it is architecture without a dogma".[6]

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[1] LENOBLE, Christian(2012): Smart Cities. Energieeffizienz, Mobilität, soziale Konzepte: Wie nachhaltige urbane Lebensräume funktionieren könnten. Und warum Wiens Ausgangslage recht gut ist. In Die Presse: Samstag/Sonntag, 10./11.März 2012 (Immobilien – p.11,12)

[2] http://ec.europa.eu/energy/technology/set_plan/set_plan_en.htm

[3] GIFFINGER, Rudolf et al (2007): Smart Cities. Ranking of European medium seized cities. Vienna University of Technology – Centre of Regional Science (SRF). University of Ljubljana – Department of Geography. Delft University of Technology – Research Institute for housing, Urban and mobility Studies (OTB). http://www.smartcities. eu/download/smart_cities_final_report.pdf

[4] DYER, Gwynne (2010): Climate Wars. The fight for survival as the world overheats. One World Publ. Oxford, N.Y.

[5] DÜRR, Hans-Peter (2009): Warum es ums Ganze geht. Neues Denken für eine Welt im Umbruch. München, oekom. p.167

[6] RUDOFSKY, Bernard (1977): The Prodigious Builders. London: Secker&Warburg.

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Vernacular architecture of torrid zones were rich in ingenious cooling devices, windscoopes were cooling the breeze in the street, vertical green architecture, unfurling sun sails in the atrium, and finally unlike an awning the pergola is a three dimensional pavilion without walls and ceiling. Let us consider the characteristics of **conventional and ecological design** that illustrates the necessity of knowledge integration. Conventional design relies on fossil fuels or nuclear power, the design consumes natural capital and standard templates are replicated all over the planet with little regard to culture or place. On the other hand ecological design lives of ´solar income´, responds to the bioregion and solutions grow from place.[7]

This comparison of energy and the ecological context can be considered from different perspectives, such as impacts over the entire life-cycle of the project, maintains biodiversity and a commitment for joining the design process. "If problem solving is to be organized in this particular case, different compartments such as pollution, materials use and energy sources must be integrated, as well as various disciplines that embody knowledge about the compartments." (Van der RYN)

WHAT DO WE WANT TO ACHIEVE ?
The main **aim of the project** generally, is to raise awareness of sustainable living. Communities are encouraged to seek out methods for reducing energy usage as well as reducing their reliance on long supply chains that are totally dependent on fossil fuels for essential items. Initiatives so far have included creating community gardens to grow food – "Food feet, not food miles".

To receive examples, projects and results from various institutes, we are asking the professors and students to send us a **paper or case study** about their personal practical or theoretical work, related to Ecological design, permaculture, smart cities, wise management of natural resources etc.

    Guidelines for writing the case study:
- Define your TOPIC in relation to the ´Permaculture Design Course´
- Formulate the PROBLEMS and define the main questions
- Define GOALS and OBJECTIVES to understand the topic
- Explain what kind of METHODS you are using in your work.
- Generate PROPOSALS and MEASURES for explaining your ideas

    Requirements for paper submissions:
- 2000 characters for a case study (students)
- Max. 5000 characters for a paper (professors)
- We are asking you to write your paper until **end of May 2012**.

We are accepting the heterogeneity of all the participants work and will aggregate the content of the papers and case studies within the first week of the design course. During the time of the course we will prepare a first draft version for the publication "Permaculture Design Course- Aspern Seestadt". The results of the design course, the case studies and papers will be summarized in a final publication.

By the end of this course students will be able to: Have a broad overview of permaculture design principles, have a stab at choosing suitable methods for a particular design task, state how the key planning tools can be used in garden and open space design, begin developing a strategy for integrated land use and resource management, in co-operation with bioregion´s inhabitants in the Marchfeld.

The **output of the project** will be a publication "Permaculture Design Course- Aspern Seestadt". We will translate from the source language English into other language versions of Slovak, Slowenian, Hungarian, Croatian and also Serbian. The electronic storage of material (audiovisual texts, books, working papers). It will be a summary of the Intensive Program in the Aspern Seestad and proposals for multifunctional land-use systems, permaculture principles and open space design.

FINAL REMARK: Please send your preliminary paper until end of May 2012!

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[7] VAN DER RYN, Sim / COWAN, Stuart (1996): Ecological design. Washington D.C. * Covelo, Cal.: Island press. p.26
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