

Work Session 11

presented by outstanding contributors to the student competition

The Power of Appropriate Design – Tapping Neglected Re-Sources

CV: Joel Roszmann

Born in 1983. Joel Roszmann is currently finishing a Bachelor of Arts in social sciences at the University College of Maastricht. During his studies, he has focused on economics, sociology and sustainability sciences and geared his self-guided study towards issues in development. Born and raised in Canada, Joel has also studied in Hong Kong and Tokyo.

Working for the Maastricht based NGO *Demotech – Design for Self Reliance*, Joel's work with alternative solutions to problems in development has evolved over several years. Working with technical designs for sanitation, access to water, home work and political activism, he was central in founding the Student Workforce for Sustainability and Development, an active student organisation and partner of Demotech. He has been active with both organisations ever since.

Besides, he has been chief editor of the economics faculty magazine *Eloquent*, directed several theatre plays, and was a board member for the 2005 Rag Week in Maastricht. Currently writing his Bachelor Thesis in the field of social theories of technology, his current project is a media campaign promoting independent home work as a means of development.

Joel Roszmann was selected to present his views as a result of the innovative ideas put forward in his contribution Something that Comes from Nothing – The Power of Appropriate Design to the St. Gallen Wings of Excellence Award. The essay is available for download on our homepage at www.stgallen-symposium.org.

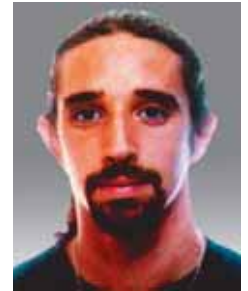
CV: Andreas Ulbig

Born in 1981. Andreas Ulbig studied general engineering science at the Technical University of Hamburg-Harburg, later he went to the University of Stuttgart, studying engineering cybernetics with a focus on energy systems. Since 2005, he has participated in a French-German double degree programme in electrical and power engineering, studying at *SUPÉLEC* in Paris.

Andreas Ulbig has been involved in two research projects at the University of Stuttgart and the *SUPÉLEC*. In addition, he worked for the French transmission system operator *Réseau de Transport d'Électricité (RTE)*, conducting security checks and developing mathematical forecasting methods for fault events. Starting in June, he will work on a research project on multi-agent systems at the California Institute of Technology.

He holds scholarships of the German Business Foundation (sdw), where he is engaged in various projects, including the sustainability initiative *zukunftmachen* and the German Academic Exchange Service. Andreas Ulbig also co-organised the *dipl.-ing. Ikarus* cycle of lectures at the University of Stuttgart, dealing with the topics of sustainability, innovation and social responsibility.

Andreas Ulbig was selected to present his views as a result of the innovative ideas put forward in his contribution I am not stupid! – A ReSource-Strategy for Entrepreneurs to the St. Gallen Wings of Excellence Award. The essay is available for download on our homepage at www.stgallen-symposium.org.



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The Power of Appropriate Design – Tapping Neglected Re-Sources

Abstract of Joel Roszmann's Essay Contribution to the St. Gallen Wings of Excellence Award

Something that Comes from Nothing – The Power of Appropriate Design

Cycles of poverty are present throughout the world and cast a dark shadow on future prospects for both the developed and developing world. There is hope within Appropriate Design, a concept which combines a novel understanding of technology, knowledge and culture to mobilise the resources within the reach of the world's most poor. By studying and engaging technology within poverty, new technologies can be designed specifically for use by people in poverty. By limiting resource inputs to technical systems to those things already available to the world's most poor, new and unexpected resources get mobilised; this technology can engage the hands of billions of poor people around the world.

Abstract of Andreas Ulbig's Essay Contribution to the St. Gallen Wings of Excellence Award

I am not stupid! – A ReSource-Strategy for Entrepreneurs

Having increasing prices for raw materials and, at the same time, growing landfills as well is a paradox and dilemma of our economic system. Extensively extracted and expensively imported, hence originally valuable raw materials are being manufactured to end as products, being used by consumers and finally being thrown into a dump as worthless waste. This dumped garbage then eventually even creates further costs.

Unfortunately, conventional recycling is not an effective solution to this problem, since the basic raw material often cannot be recaptured at the same quality. Most products simply have not been designed for an effective recycling. When considering the entire product cycle, it can be seen that valuable raw materials are being transformed into worthless waste. Enormous economic values are being lost.

How these economic values can be preserved and made available for companies will be pointed out in this essay.