

Mischa Schaub

**acar2**

**Sustainable Design of a Cultivated Equilibrium**

*acar2* has existed since 2003. It's being carried out by a growing number of enterprises and educational institutions under the aegis of the HyperWerk Institute for Postindustrial Design at FHNW – University of Applied Sciences Northwestern Switzerland. *acar2* is typical of the network-linked, interdisciplinary and process-oriented design work being done at HyperWerk, and the R&D activities of the approximately 100 individuals associated with it.

### **Moving Target**

*acar2* is developing in response to its economic, technological and cultural environment; it seeks to understand and react to this dynamic process of change. Proceeding from the effort to set up a high-tech academy of handicrafts, the project's orientation has shifted in the direction of a research, production and marketing network fostering the production of individually customized pieces of hand-crafted technology. Close cooperation among colleges, the private sector and government agencies that subsidize economic development has brought forth *acar2* as an experimental launching pad for the mediation, marketing and implementation of creations by up-and-coming young designers who can use this facility as a base to explore the realities of post-industrial production.

### **In a Place Far, Far Away...**

In 2001, in a deserted abbey in Senones, a small town in the Vosges region of France that used to have a thriving textile industry, *acar2* found an appropriate facility in which to develop a seminar hotel and workspaces. Since then, *acar2* has organized workshops there for design schools, commercial associations and crafts and trades guilds on the future of handicrafts, CNC technologies and post-industrial forms of production. This paradigmatic example of what use an industrial facility can be put to after being written off as useless will continue to be the core component of *acar2*.

### **Just What We Were Waiting For!**

Recently, the Swiss Federal Railway approached us for advice on how they could adapt to post-industrial circumstances. This case is a matter of several hundred empty train stations, whereby the organization is seeking viable possibilities to convert these facilities for new uses, since their original functions (signal tower, warehouse, ticket office, waiting room) are no longer called for or have been automated out of existence. Indeed, trains still serve these stations, mostly on an hourly basis, but the future of the buildings themselves—many under landmark protection—is uncertain.

We want to convert these train depots into buildings for *acar2*. The potential is just as fabulous as it is overwhelming—after all, this amounts to a recycling project on an unprecedented scale. Trainstation facilities and infrastructure—the restaurants, storage space, kiosks and waiting rooms—are what opened our region up to the big, wide world 150 years ago, and we sure don't intend to let them sink into oblivion. Switzerland has more than 1,800 train stations, but only about 300 will be needed for commuter shops in the future. What's to become of the rest of them? This question faces every European railway system, and thus has a continental dimen-



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sion. But it's precisely a system's written-off peripheries that give rise to realms of undreamt-of possibilities in which innovation can thrive.

### The Plan

Recently, *acar2* selected the deserted vast restaurant in the Göschenen train station in the Canton of Uri as its first site. This high Alpine station situated near the entrance to the Gotthard Tunnel will be the first node in a network of several such remote facilities that will be set up as a prototype in May 2009. Together with regional and European colleges and private firms, *acar2* is investigating framework conditions and concepts for sustainable structures for the purposes of education, research, production and tourism, and then testing them in an actual train station setting.

### The Result

The planning and development work currently going on might possibly result in the conception of an *acar2* TechnoPark that, over the medium term, would utilize about 20 regional train stations as infrastructure for adventure tourism and experimental production. At these sites, entrepreneurially-disposed craftsmen will be able to deploy high-tech devices like laser cutters and CNC machines to custom-produce individual items to client specifications. These products will be distributed via a shared website, but could also be ordered right on site, produced just in time and on the spot as a one-of-a-kind piece and acquired directly from the person who made it.

This basic idea will be expanded through thematic exhibitions, campaigns and offers to advance the cause of sustainability in connection with transportation, energy, production, nutrition, recycling and sport. For each train depot, there's a clearly recognizable, substantive orientation and a regional network of sponsors and supporters consisting of enterprises and educational institutions.

The ultimate objective is to integrate these converted train stations into a European network for adventure tourism. Exploring and implementing regional, situational qualities constitute a process that *acar2* would like to orchestrate.



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### Transfer

In this initial phase, *acar2* consists more of bodies of rules developed to govern the design of processes than of tangible products. We want to give expression to this project character with a seemingly light-as-air installation to be set in the spacious AFO exhibition hall. Despite its substantial dimensions (17 x 8.5 x 3.8 meters), this installation weighs less than 10 kilos. As an additional challenge, we decided to construct this installation within two weeks and to spend no more than 1,000 Swiss Francs on it.

Four electric stepper motors move a robotic system that makes it possible to proceed to every point in the installation space. The motors allow for the precisely controlled rolling up of four diagonally-running lengths of cord that are attached to a CONNECT metal clip. This system has been executed by Andreas Krach and Adrian Keller.

On each run, the flying metal clip removes one of our freebie newspapers from its pile and then proceed along its algorithmically controlled, silent flight path to then gently set the paper down before the reader.

Translated from German by Mel Greenwald.