

HACKING KULMLAND

[Intervention, Videoinstallation by Klaus Schafler]
[Main Square Pischelsdorf, 2011]

In a participative action and performative intervention on *October 1, 2011*, the 1,400 square meter surface of the main square of the Austrian remote town Pischelsdorf was painted white by more than 50 volunteers and inhabitants from the town, especially from people living in the neighbourhood surrounding the main square.

Referring to the scientific term *Albedo effect*, Schafler collaborated with Prof. Dr. Reinhold Steinacker, head of the Department of *Meteorology and Geophysics, University of Vienna*, to measure the change of temperature at the square resulting from the white- painting of the square.



[Main square Pischelsdorf, during and after the painting]
[View from the church tower, 2011]

The square was closed for traffic for one day to realize the painting-action. The action was filmed from a church tower close by as well as on the square itself. Afterwards, monitors showing these videos documenting the action were placed in shop-windows of stores located at the square.



[Hacking Kulmland, October 1, 2011, shots+stills]

The video Hacking Kulmland documents one such intervention in the Styrian town of Pischelsdorf, where Klaus worked with the townspeople to paint the central square white. A tactical approach to local climate change mediation, painting a large area of land white causes solar radiation to reflect off the surface, thereby lowering the temperature on the ground. In this intervention it is not solely the change to local climate that is the remarkable outcome, it is also the transformation of an area normally governed by auto traffic into a social space as the people of Pischelsdorf occupy the newly repurposed town center.

[Marc Ganzglass, text on the show at Space for Art and Industry, New York, 2011]



[Hacking Kulmland, October 1, 2011, shots+stills, images by courtesy of CC Trink]

Text-excerpt from:

Maren Richter, *Could we or should we make it work?*¹ *Art between Science and Research*, 2010:

Klaus Schafler's project is situated precisely in the borderzones of weather research between empiricism, speculation, utopia, fantasies of omnipotence, poetry, risks and potentials of climate and weather manipulation – and in a way it poses the crucial question of ecology: Who can and must make which decisions and when? Above all, Schafler takes up one recurring challenge: to perceive the connection between art and science, art and society, where it has long since entered: in the real world. Therewith, he advocates something that visionaries like Richard Buckminster Fuller already called for in the 1960s: the dissolution of disciplinary boundaries and thus the ivory towers of specialization. According to the architect, philosopher, and utopian, one of the fundamental problems of the ecological development of our planet is that society wrongly believes that specialization is the key to success.

(...)

In a situationist manner, Schafler creates scenarios that illustrate what would happen if we were to follow the simple formula of politics. In artistic pseudo-laboratory situations, he explores societal realities, futurology, false prognoses and failed experiments, fictions, science, and responsibility and knowledge mainstreams. Piece by piece, he processes the individual aspects that dissect the historical contingency of a possible end of our world. In the juxtaposition and sometimes the combination of dangers, chances, and their protagonists, he wants to capture more than just a reciprocity in an unstable equilibrium. In self-experiments, his work on climate research and weather manipulation tests – perhaps even more elaborately than in previous projects – new connections between art, science, and technology for the development and representation of new cognitive patterns regarding communication and interaction in the ecological system.



[Hacking Kulmland, Video 2min / projection + video 4 min / monitor+ painting tools, 2011]

[Shown at *Space for Art and Industry*, Brooklyn Navy Yard, New York, 2011]

Text-excerpt from:
Wenzel Mraček; *The Art of Weather-Making*, 2011:

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At a meeting of Noble Prize winners in London in 2009, the US Energy Secretary Dr. Steven Chu suggested that house roofs in the States and potentially around the entire globe should be painted white. In this way, up to four fifths of the solar radiation would be reflected and buildings, especially in cities, wouldn't need to be climatized so much. It would lead to a reduction in CO2 emissions equivalent to the amount produced globally by cars in eleven years. Urban climate is at the top of the list in a related study initiated by a team of scientists at the National Center for Atmospheric Research around Keith Oleson. On the basis of computer simulations, Oleson suspects that the heat effect in cities could be decreased by 0.4 degrees on average simply by painting roofs white.⁽²⁾ On a summer day in New York, this would correspond to a 1.1-degree decrease in temperature. The New York citizens' initiatives *Cool Roofs* and *White Roof Project* ⁽³⁾ want to employ the so-called albedo effect ⁽⁴⁾ and call for community whitening actions.

This inspired a module in the framework of Schafner's 2050 project called *HACKING KULMLAND*. With the participation of the inhabitants of the East Styrian municipality of Pischelsdorf, the 1,400 square meter surface of the main square was painted with white distemper paint. The main objective of this art intervention in public space was to evidence an actual increase in albedo. The Department of Meteorology and Geophysics at the University of Vienna built a weather observation station to document changes in the microclimate in the area around the main square. Given its concept involving work methods from natural sciences, this temporary intervention as artwork – where only a few hours passed before its completion – can be assigned to a tendency that has been referred to as “art-based research” since several years, named after a publication by Shaun McNiff. *HACKING KULMLAND* can be equally interpreted as a natural as well as a social scientific experiment. In any case, the attempt to manipulate weather/climate on a local level – even with such comparatively simple means – is already geoengineering.

Inhabitants of Pischelsdorf who were interested in the process and the foreseeable results stated in advance their willingness to participate in cooperation with the artist in order to realize a temporary work in their community. In the event that the environmentally friendly and water soluble color didn't disappear on the same or following day due to rain as originally planned, it would be removed with the local fire department's water hoses. But upon completion of the project, the inhabitants of Pischelsdorf decided to keep the white main square for the coming four days. Hence, it was a temporally limited intervention that now only endures in photographic and video documentation and in meteorological data. In the two months thereafter, a video of the action could be viewed in a shop window on the main square.

² Cf. Renate Bader, “Gegen die Hitze der Stadt,” 7 May 2010, <http://www.wissenschaft-online.de/artikel/1031003&z=859070>.

³ NYC Cool Roofs, <http://www.nyc.gov/html/coolroofs/html/home/home.shtml>.

⁴ The albedo (from L. albedo, lit. “whiteness”; L. albus “white”) is the reflective capacity of diffuse reflective, hence non-self-illuminating surfaces. Albedo is of importance, above all, in meteorology, where it provides information about the temperature change above different surfaces. In climatology, ice-albedo feedback is a significant factor that influences radiative forcing and thereby the radiation balance of the Earth, which is important in the preservation of the global climate.

Needless to say, the white main square also induced an aesthetic change in the image of the place, which in an art context might remind one of a white canvas. One obvious effect was that the buildings and objects on the square stood in a stark contrast to the ground. New attention was drawn to objects, which due to their familiarity had disappeared from some people's view. (...)

Klaus Schafler's *HACKING KULMLAND* – indeed a materially and visually ephemeral project – could be successfully realized as the artist managed to mobilize the inhabitants of Pischelsdorf to collectively influence the climate. With the brilliant sunshine on 1 October 2011, the best imaginable conditions for this experiment were on hand – hence, large-scale climatic conditions that he couldn't have controlled (yet).(…)



[Hacking Kulmland, video-doc placed in storefronts at Main Square Pischelsdorf, 2011]
[Cold War.m, exhibition view, JAUS, Los Angeles, 2012]

This action and temporary intervention in public space at *Hauptplatz Pischelsdorf, AT*, on October 1, 2011 was produced by K.U.L.M.

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HACKING KULMLAND documentation was produced by Art Media, Graz

This work was shown at following exhibitions:

Space for Art and Industry, New York, 2011 / *Johnson Design Center, Parsons The New School for Design*, New York, 2011 / *Regionale12*, Murau, 2012 / *JAUS Gallery*, Los Angeles, 2012

[Elements of these presentations:]

[Video 2min + video 4 min + painting buckets + painting tools, 2011/2012]