



(Frei Otto, Apparatus for computing minimal path systems, Institute for Lightweight Structures (ILEK), Stuttgart, 1988)

Thesis: DS10 is obsessed with analogue experiments combined with digital tools, with daring to be naïve, curious and optimistic. The studio is passionate about nature's structural systems and ability to adapt and thrive in areas of scarce resources, and believe that sustainable design is a given, not an option. They believe architects should also be entrepreneurs, and value combinations of architectural quality with social responsibility. DS10 will spend the year exploring the relationship between synergy and autonomy, between temporary self reliant urban conglomerations and autonomous buildings. Through the use of digital tools, for analysis, formal generation and fabrication, we will propose autonomous self reliant structures which respond intelligently to their environment, and sit within a wider cultural context.

LEARNING: (October) Taking the work of Frei Otto and Buckminster Fuller as precedent we will begin an intensive period of digitising their analogue experiments. Accompanied by software training sessions we will explore techniques and develop skills in parametric design (Rhino3D and Grasshopper), environmental analysis (Geco, Autodesk Ecotect) and physics modelling (ANSYS Workbench, GSI, Karamba, Kangaroo), with each student developing an arsenal of digital skills to incorporate in later work.

BURNING: (November) We will continue with a short project based in the Nevada desert, exploring the unique cultural event that is Burning Man Festival, a lesson in radical self reliance in an extreme environment. Temporary structures dealing with issues of economy of materials, rapid deployment and self sufficiency will be encouraged, against a backdrop of alternative culture and a unique urban planning experiment students will design small programmatic interventions and develop large scale physical models.

REALISING: (January-May) The main thesis will evolve from earlier work, combining alternative social models, and autonomous structures, with students free to propose their individual sites and programs. We will encourage exploration of closed loop systems, financial, social and programmatic, and designing for a changing world within existing urban environments.

Website: Students and tutors will become authors of wewanttolearn.net, the DS10 blog and forum, where we will post our progress, resources, links and pictures with the aim of developing a concise record of our constructive, connected and collaborative thinking.

Trip: DS10 will visit Stuttgart University's Institute of Lightweight Structures and Institute of Computational Geometry with Achim Menges, as well as the Weissenhof Estate, one of the most important modernist social experiments in Germany, and Ferdinand Ludwig will show us his Botanic Structures where trees are used as living architectural material.

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