

Michael Hansmeyer (CAAD ETH) - Platonic Solid Subdivision

DS10 is obsessed with analogue experiments combined with digital tools, while daring to be naïve, curious and optimistic. The studio is passionate about natural structural systems 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. Through the use of digital tools, for analysis, formal generation and fabrication, we seek an architecture of beauty which responds intelligently to its environment, and sits within a wider cultural context.

**TEST:** (October) We will begin with an intensive period of analysis of generative systems, chosen by the student with a distinct emphasis on beauty. Systems may be natural, structural, geometrical, physical or mathematical, aiming to understand the underlying rules through intensive cross testing and documentation of physical and digital experimentation. This will be accompanied by regular parametric software training sessions (Rhino3D and Grasshopper), environmental analysis (Geco, Diva, Ecotect and Vasari), physics modelling (Karamba, Kangaroo, Millipede), recursion (C#, Python, Processing and Hoopsnake) and rendering classes (Maxwell and V-Ray) with each student developing an arsenal of digital skills to incorporate in later work.

**TEMPLATE**: (November) We will continue with two options, both exploring buildability and delivering a 1:1 prototype (possibly at Grymsdike farm in Buckinghamshire).

Option 1) Burning Man - Continuing our exploration of the unique cultural event that is Burning Man Festival, a lesson in radical self-reliance in an extreme environment, students will propose beautiful and programmatically responsible low cost temporary structures with the aim of inspiring awe, against the dramatic backdrop of alternative culture and unique urban planning experimentation.

Option 2) Open-Source Construction Set - Inspired by the Wikihouse project by 00:/ Architect, students choosing this option will also develop a low cost small scale structure based on their previous experiment but with an open site and programme. The fabrication and assembly process will be documented in a downloadable manual which should be accessible and could be improved by anyone.

**TEMPLE:** (January-May) We are looking for a modern reinterpretation of the 'temple' archetype, relevant to our age, building on earlier work, with students free to propose individual sites. Students will question what activities or social rituals take place today (i.e. cult of celebrity, media, brands, Internet, ecology, science, finance) and through what collaborations and working relationships may these rituals sporn contemporary temples. Similarly to last year, students will also be able to propose their own programme if their project requires a different path. DS10 is interested in feedback loops, both in terms of design and programme and is therefore looking for realistic financial models, creating dynamic relationships with other organisations or companies.

**Website:** New students will join the WeWantToLearn.net community and become authors of our lively blog, posting progress, resources, links and pictures.

**Unit Trip:** DS10 will visit the CAAD laboratory at ETH Zurich and meet the teams of Michael Hansmeyer and Gramazio and Koelher.

Tutors: Toby Burgess and Arthur Mamou-Mani