

Generative Skin

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In recent years the design projects undertaken in the context of our Masters Programme in Environment & Energy Studies have sought to qualify the environmental attributes and performance of built form under a number of different guises. In 2002 our design brief called for a *Magical* skin that would bend and shape itself to suit building programmes on three challenging sites in central Lisbon. In 2003 we began by analysing the relationship between form and performance to inform proposals for the design of a shelter for a village school in Ghana, subsequently continuing with building programmes for a site in Central London. In 2004 the project brief drew attention to the *adaptive* nature of human comfort in response to urban microclimatic conditions, prompting design proposals for London sites that were followed by a built prototype that was erected on the island of Santorini, Greece. In 2005 our focus on *generative* skin takes these preoccupations a step further by extending both the programmatic and climatic ranges of the proposed design investigations. Etymologically, *generative* refers to an ability to produce or originate. On this project we understand this to assume two distinct, but complementary, expressions:

- the skin as generator of built form and “passive” climatic modulator;
- the skin as “active” collector, store, distributor or dissipator of energy.

The building programme is that of a mixed-use development. There are six project teams working on urban briefs for the following locations: Manaus, Brazil (Latitude: 3S);

Karon Beach, Phuket Island, Thailand (Latitude: 8N); Dhaka, Bangladesh (Latitude: 24N); Tempe, Arizona, USA (Latitude: 33N); Embarcadero Area, San Francisco, USA (Latitude: 38N); Innsbruck, Austria (Latitude: 47N).