The Cloud

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This short essay combines storytelling with urban informatics and interactive architecture and it is an introduction to The Cloud, an unrealized architectural proposal for an observation deck as a monument to the London 2012 Olympics. The project has been presented by an interdisciplinary team of designers, urban planners, and futurists coordinated by Carlo Ratti, the Director of MIT’s SENSEable City Laboratory.

THE SWEEPER

Like a tightrope walker a shadowy figure moves above the roofs towards the clouds, against a background of atmospheric lighting: Turner’s misty canvases and Mondrian’s Broadway Boogie Woogie. Below his gaze, the commuters stream to work with their collars and umbrellas up. The trees drip with morning rain. From within a mesh of floating spiderwebs London appears as a cosmos of streams and imaginaries. Clusters of inflatable bubbles float up into the air, articulating an ethereal architecture of pixels, mirroring the city. Visitors move from one sphere to another like actors in a performance with no end, whose mise en scène offers the consistency of a gelatinous membrane.

EPHEMERALITY

Urban transformations driven by Olympic games are historically associated with heaviness, mass and monumentality, whereas our age is defined by a restless longing for lightness and ephemerality on one hand, and forced precariousness on the other. Responsive architecture enables dynamic reprogramming of the physical space: the same infrastructure can be used for different simultaneous and subsequent activities, given the right technological platform. The Cloud is a monument, an architectural concept that challenges the traditional canons of permanence and gravity, embracing the idea of ephemerality and layer shearing (Brand 1995).

FILIGREE
The structure comprises a filigree central array of columns, also serving as circulation systems. These spread and flower at high altitude into a series of lightweight grille decks within a dense aggregation of transparent inflated spheres, which in turn lead to a series of clustered perimeter observation decks where visitors can emerge from protected enclosures to walk above the clouds. Building on radical architectural experiences (Buckminster Fuller’s *Geoscope*, Archigram’s *Instant City*, Yona Friedman’s *Ville Spatiale*, Diller and Scofidio’s *Blur* projects among others) the Cloud rearticulates an interconnected digital interactive ecosystem over a light infrastructure that is transparent through its delicate tracery.

**BUBBLES**

The spheres are connected to each other and crossed by horizontal membranes to form an elastic environment that allows visitors to explore, walk, and jump in and out of these aerial structures. Each bubble has its own pump to control the pressure level, harmonizing it with that of nearby bubbles and with the surrounding weather conditions. Like multiple particles within a vast multi-dimensional array, the inflated spheres of air and light coordinate between themselves. At the very edges, small aggregates of cloud hover and disperse, their positions variable and controllable through the temperature of the inside air, enabling the overall form of the Cloud to recompose and reassemble at will.

**LIGHTS**

The inflatables are saturated with an LED information system, locally densified into lightweight info-screen hotspots where visitors navigate information about the immediate surroundings. The luminosity of each pixel, within each sphere, is independently controlled, giving rise to the networked, self-organizing Cloud. The traditional distinctions between architectural lighting design and computer graphics disappear: atoms that light up are addressed as programmable pixel (Mitchell 2005). The Cloud situates Internet data in space, precisely geolocating information feeds that include energy use, spectator numbers, decibel levels, medal updates, transport patterns, mobile phone activity, internet traffic: informational waves that expand beyond Stratford to the rest of the world (the CLOUD - www.raisethecloud.org).
References


the CLOUD - www.raisethecloud.org