

SKY EAR – AN OVERVIEW

Electromagnetic waves exist just about everywhere in our atmosphere. While we have been concerned about the health effects of electromagnetic radiation (from power lines or mobile phone handsets), these waves often exist as natural phenomena in the form of radio waves emanating from distant stars, gamma rays coming from elements here on earth or even electrical waves from inside our own skulls. Humans have recently begun contributing to the cacophony with pagers, medical devices, television broadcasts and mobile phones. Electromagnetic space, also called *hertzian space* by industrial design theorist Anthony Dunne, is physical and non-virtual: it consists of a ghostly poetic ecology that exists just beyond our familiar perceptual limits. Urban locations in particular have a diverse and vibrant hertzian culture, with mobile phone calls overlapping text messages, combining television broadcasts with garage door openers that interfere with radio transmissions which transmit from wireless laptops, etc.

To chart this unexplored territory, shortly before dusk in Spring 2004 the Sky Ear structure will be released from its ground moorings and slowly float up into the sky sampling the electromagnetic spectrum as it rises, rather like a vertical radar sweep. This non-rigid "cloud", made up of several hundred glowing helium balloons will be embedded with mobile phones. The balloons will contain miniature sensor circuits (simple gaussmeters) that detect levels of electromagnetic radiation at a variety of frequencies. When activated, the sensor circuits will cause ultra-bright coloured LEDs to illuminate. The cloud will glow and flicker brightly as it passes through varying radio and microwave spaces.

As visitors to the event call into the cloud to listen to the distant electromagnetic sounds of the sky (including whistlers and spherics), their mobile phone calls will change the local hertzian topography; these disturbances in the electromagnetic fields inside the cloud will alter the glow intensity of that part of the balloon cloud. Feedback within the sensor network will create ripples of light reminiscent of rumbling thunder and flashes of lightning. People may find that they are in the process collaborating with others to create patterns of light activity across the surface of the cloud.

The cloud will show both how a natural invisible electromagnetism pervades our environment and also how our mobile phone calls and text messages delicately affect the new and existing electromagnetic fields. As an art project, Sky Ear encourages people to become creative participants in a hertzian performance; as an architecture project, Sky Ear makes visible our daily interactions with the invisible topographies of hertzian space.

Sky Ear will be open to the public and is financially assisted by the Daniel Langlois Foundation for Art, Science and Technology.

HAQUE

design+research

90 Surr Street
London N7 9EN

020 7697 9965

www.haque.co.uk
info@haque.co.uk

