



Design and the Elastic Mind

Lightweeds Simon Heijdens

A living digital organism growing onto an indoor space, through which the space regains the natural daylight that it has yielded out. Unusually generated plant families that grow up, over- and behave slowly depending on actual weather, rainfall and wind as measured far outside. On passing human traffic they bend, lose their seeds and pollinate in other walls throughout the space, to make up a constantly evolving wallpaper that reveals the character of the space and it's use.

Growth



Silhouettes of plants growing onto several walls throughout a space.

Plant generation



Each plant is uniquely generated of hundreds of parts, that form and behave affected by spatial data and current outdoor weather conditions, creating families that never lose the same appearance.

Movement



Each of the parts that the plant is built up from is individually connected to the live monitoring of the outdoor weather, and has its own reaction to light intensity. Together they create a hyper-real, continuously live generated movement that changes throughout the day and year.

Human traffic



The plants slightly bend and hang over when someone passes, tracing the path of human traffic.

Pollination



After several passages, the plant loses its seeds which then tries to another wall to make a new plant grow there. The plants pollinate in the same direction as the traffic, therefore the increasing amount of flora reveals how the space has been used throughout the day.

Simon Heijdens (Dutch, born 1978)

Lightweeds wall installation 2006

Self-developed software, dimensions variable

As we spend most of the day in fixed spaces with regulated climates and artificial lighting, nature is becoming more and more scarce in our daily lives. Simon Heijdens's Lightweeds is a "living digital organism" that "grows" onto the walls and floors of an indoor space, restoring a natural cycle. The projected silhouettes of uniquely generated plant families grow, move, and behave according to current weather conditions and the way the space is used. Each plant is made of hundreds of parts, each with its own sensitivity and elasticity and individually connected to a live sensor outdoors that measures variables such as rainfall and sunshine. All parts together create a continuously evolving wallpaper that changes throughout the day and the seasons. The plants also trace the path of human traffic; they slightly bend and lose their seeds when someone passes, pollinating nearby walls in the direction of the movement and the breeze it generates. Over time, the proliferation of flora reveals how the space has been used, keeping track of our everyday activities and biorhythms.

