chrono.cycle

including following projects by LAb[au]:

chrono.tower 2007 chrono.prints 2009

Chronos

In Greek mythology, Chronos is the personification of time. In today's languages, "chronos" is found as an etymological root for words like "chronology", "chronic" and "chronicle", "chronology".

the Red Green Blue = RGB colour model

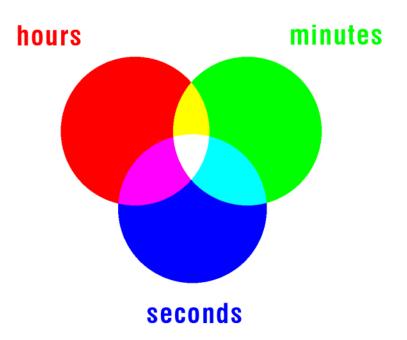
A colour model is a model describing the way colours can be represented by numbers, typically as three or four values or colour components. When this model is associated with a precise description of how the components are to be interpreted the resulting set of colours is called a colour model.

The RGB colour model is an additive colour model based on light emitting media such as computer and TV screens or any electric light source in which red, green, and blue light are added together in various ways to reproduce a broad array of colours. Combining one of these additive primary colours with another in equal amounts produces the secondary colours cyan, magenta, and yellow. Combining all three primary colours produces white whereas the absence of any rgb light emitting source is black.

The RGB colour model is the most common way to encode coloured light. Its main characteristic is the quantification of the possible values per component by using only integer numbers within the range of 0 to 255. In this range of 255 red, 255 green and 255 blue values the palette of 16 million colours (255 x 255 x 255) known from computer and TV screens is defined.

This leads to the following description

	red	green	blue
BLACK	000	000	000
WHITE	255	255	255
RED	255	000	000
GREEN	000	255	000
BLUE	000	000	255
Cyan	000	255	255
Magenta	255	000	255
Yellow	255	255	000



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This is why colour television or colour computer monitors need only to produce mixtures of red, green and blue light, from where names such as Trinitron besides others are derived.

The additive colour model is in opposition to subtractive colour systems such as the CMYK printing model or the red, blue and yellow one of painting. A subtractive colour model explains the mixing of paints, dyes, inks, and natural colorants to create a range of colours, where each of such colours is caused by the mixture absorbing some wavelengths of light and reflecting others. The main difference in between the additive and subtractive model lies in the manner to produce any colour for example: the mixing of the primary colours in an additive colour model results in white whereas in the subtractive model becomes grey or black. In the same manner yellow being a primary colour in painting in light yellow is achieved by adding red and green light.

As such the RGB colour model describes the fundamental rules of colour mixing within light-emitting devices as opposed to painting or printed media.

The chrono.cycle

The cycle is based on the principle of mapping the basic units of time to the primary colours of light, where hours = red, minutes = green and seconds = blue.

Following this set of rules the progression of time leads to the increase of the corresponding colour filling continuously, starting from the bottom to the top, the render plane. In this manner each second leads to the increase of the blue surface, each minute increases the green and each hour the red. The resulting overlaps of these primary colour surfaces creates the secondary colours, according to the additive colour model, yellow (red plus green), cyan (green plus blue), purple (blue plus red). In this manner the progression of time, the increase of overlapping colour surfaces, leads to an increasing brightness culminating when the three colours overlap completely at midnight, thus becoming white.

This time-based system founded on the parametric relation between time and light creates a periodic rhythm comparable to the course of the earth around the sun with its circadian rhythm of days and nights.

The description of this time and light relation in form of an abstract, geometric an elementary process relates the works conceived within the 'chrono.cycle' to the researches and aesthetics of the conceptual and minimal movement of the 60's hard edge painting while confronting it to the systematic approach of programmed, parametric, art.

