MONITOR

#61

LIVING SPECIAL

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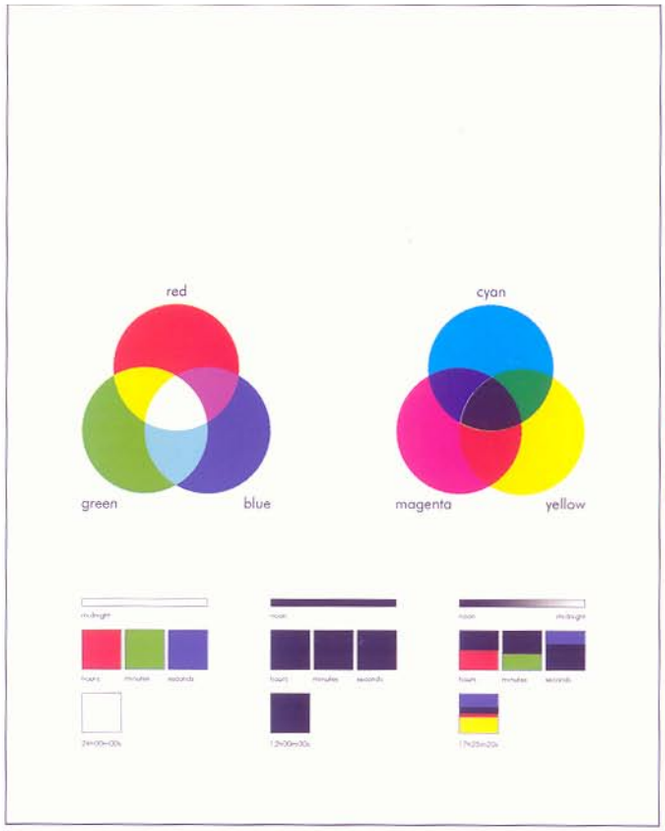
PRO.NAVIGATOR

THE CHRONO.PRINTS > CHROMATIC TEXTURES OF TIME AND SPACE
Using the crono.cycle method where the progression of hours, miuntes, and seconds is shown by growing and overlapping RGB colour fields, LAb[au] produced a set of 24 digital prints to visualize the 24 hours of a day. Each print represents one hour of a day, starting with its first second at the upper left corner, until the 3600th one, bottom right. Based on the 12-hour AM/PM system, the process adds colour between noon and midnight and subtracts it from midnight to noon. This creates a total white colour space at midnight, when all hours, minutes and seconds are completed, and a total black at noon, when all hours are reset to zero. The day/night division relates the chrono.prints to the 24 GMT zones of +/- 12 hours — adding a spatial dimension to the cross-language of time, light and colour, and thus emphasizing the global nature of the system.

PHOTO & GRAPHICS: COURTESY OF THE ARTISTS: LAb[au]

© lab[au] > chrono.cycle_The «chrono» series started with the chrono.tower project, itself part of a bigger story where the Belgian collective LAb[au] sought for an appropriate visual language to illuminate the facades of Brussel's 145m-high Dexia Tower. A powerful urban sign, the Tower has a facade lighting infrastructure based on RGB LEDs, and LAb[au]'s first thought was to create a graphic light clock. «Many architectural buildings have a strong conceptual relation to time, whether on the level of their orientation/implementation, or on the level of displaying time in form of clocks to astrological calendars,» explain the designers. «Many of such buildings are public or collective monuments marked through these signs.» Technically, this meant developing a system that would relate a conventional representation of time to light, doing it in such a way that the «partial» character of the clock (fully visible only after dark) would be justified by the system's inherent logic. The solution was found in the chrono.cycle — based on the RGB colour model, this process allowed mapping the time units to the primary colours of light, where hours = red, minutes = green and seconds = blue. Then the progression of time can be described by the increase of the respective colour field, continuously expanding from the bottom towards the top with every second, minute, or hour. According to the additive colour model, the resulting overlaps of the primary colour surfaces will create the secondary colours: yellow (red + green), cyan (green + blue), and magenta (blue + red). The growth of overlapping colour surfaces leads to an increasing brightness, culminating when the three colours overlap completely at midnight, thus producing the 100% white — and the 100% black when there is no colour overlap at noon. Seen from a certain angle, the chrono.cycle is all about tracing a relation between the basic elements of our visual language and the course of the Earth around the Sun, with its cyclic rhythm of days and nights.




```
SetColor 0,255,0
height = MM * Float ( rgbimgheight / 60 )
If morning = True
    DrawRect 100,100,rgbimgwidth rgbimgheight - hegt
Else
    DrawRect 100,100 + rgbimgheight - hegt, rgbimgwidth, hegt
```

THE DEXIA TOWER_BUILT IN 2004–2005

Measuring 145m, the Dexia Tower is Brussels' third tallest building, visible from several major traffic arteries. Each of its 6.000 windows is equipped with 72 RGB LEDs, creating a complete colour palette to display animated graphics with various effects. The light show starts after dark; LEDs are not strong enough to light up the windows on their own, hence the closed blinds act as reflectors. The data is sent through a rapid network to three distribution centres inside the tower, which translate it for groups of about 100 windows. The windows are controlled by individual processors that determine the proportion of red, green and blue necessary to obtain the colour wanted for this particular window.

CHRONO.CYCLE > THE CHRONO.TOWER_2007

The chrono.tower project uses the elementary codes of light to create a proper visual language for Dexia as an urban sign. From sunset to sunrise, the Tower displays time through the chrono.cycle logic. The facades are divided in sections of hours, minutes and seconds. Before midnight, the blue surface grows downwards every second, while green grows upwards every minute and red — upwards every hour, to achieve the ultimate combination: a white pulse at midnight. Then the process reverts from adding to subracting colour, while daylight gradually returns to the sky.