

# Tilting Time – An Exercise for the Mind

A German mathematician, Werner Große, has investigated, what happens, if the time axis and one spatial axis are exchanged in a coordinate system, where X and Y are spatial axes, and the Z-axis represents time. He uses video recordings to this purpose: A second of a film normally consists in 25 stills. 12 seconds thus give 300 images. If all these images are placed on the top of each other and slices of each 1 pixel wide are cut from the side of this block, a new kind of images will be the outcome. These images can be played one after each other in a new movie.

In the new film, every single still read from the left to the right, show everything that happens during these 12 seconds of movie in a specific vertical stripe of the movie. The more, something moves – that is; the more "stripes", the object appears in, the wider the object will appear in the manipulated film, and thus more recognizable. Something standing still, will be played through in exactly the same manner for each 1 pixel slice of the original movie, and appear as an abstract pattern. A still recording of the flag of Romania will be transformed into a movie, where the first third is all blue, then all yellow, and finally all red.

Werner Grosses selection of pixels and 1/25 seconds is of course coincidental. The starting point could have been a film of 48 stills/second. Or the slices could be only half a pixel wide. The more detailed, the more liquid and abstract images will appear.

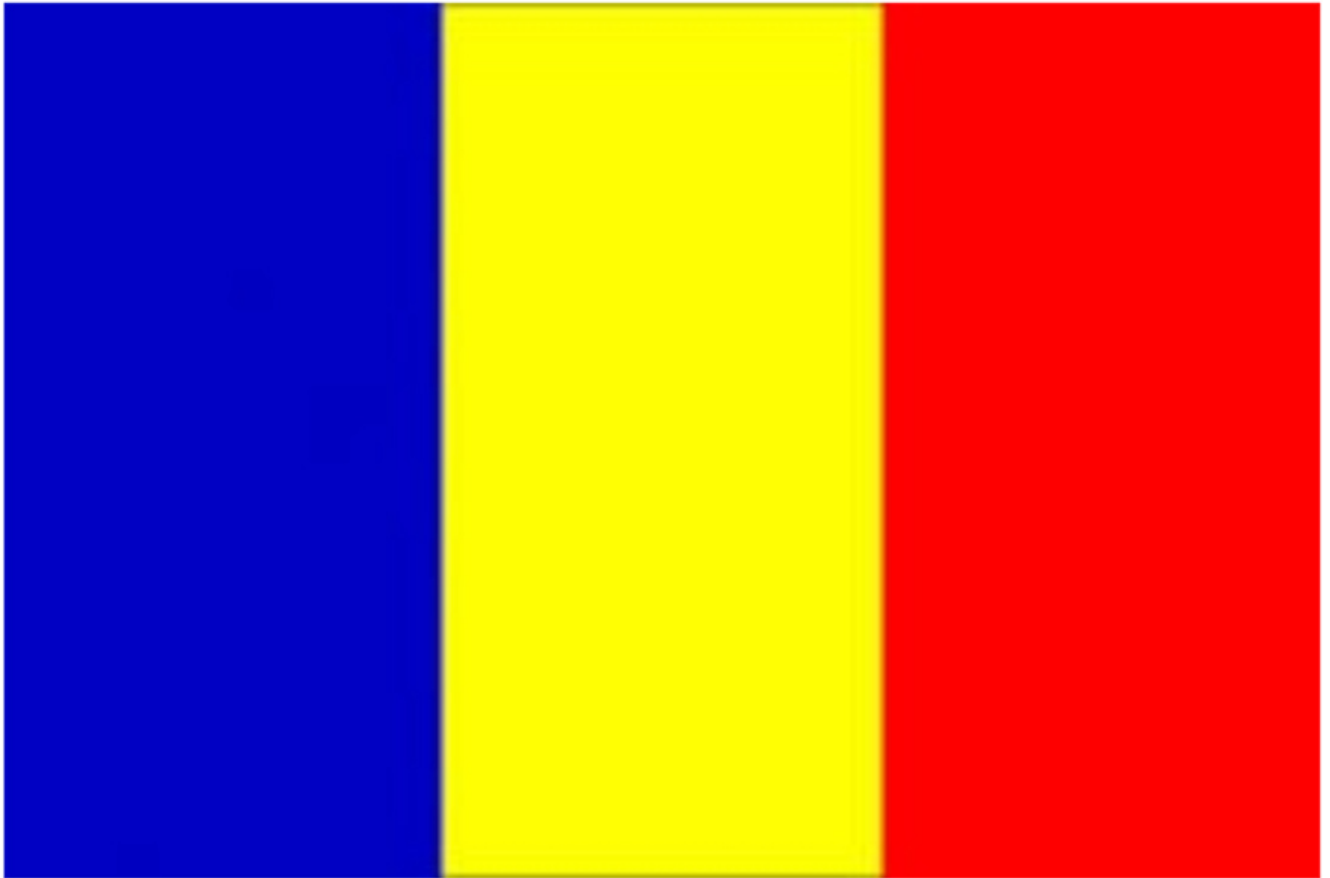
See examples in youtube.com by searching for "Werner Große" and "Zeitkippen".

<http://www.youtube.com/watch?v=3Vt4SBSF6M8>

<http://www.youtube.com/watch?v=uS6nYQKzv2U>

Please make this mental exercise!

Or imagine any other motif sliced up in very thin vertical stripes – and then played as a movie, where each slice corresponds to one frame of the movie (25 per second).



The exercise formed the basis for my work "SIX SAINTS: Tycho Brahe", which aimed at translating time into space – a recording of a dance choreography of 5 minutes into a physical installation of 5\*5 metres.