

# Rotorelief Interactief

A Laboratory for Exploring Marcel Duchamp's Optical Works  
Created by Stephen Lewis, Architectronics, Inc.  
Java coding by Carl Muckenhaupt.

click to enlarge



Figure 1  
Marcel Duchamp, *Rotoreliefs*  
(1 of 12), 1935



Figure  
Marcel Duchamp, *Rotoreliefs*  
(1 of 12), 1935

This project provides an active virtual laboratory for the exploration of the optical ideas and works of Marcel Duchamp. Duchamp's *Rotoreliefs* (Fig. 1 and 2) are painted disks which were meant to be displayed while rotating, generating the illusion of three-dimensional dynamic objects. Art is exhaustively described, critiqued and reproduced, but rarely is a viewer given the chance to "become" the artist. The Rotorelief Interactief project attempts to provide viewers

with the tools to experiment with the same ideas which Duchamp worked with in the *Rotoreliefs*.

In Rotorelief Interactief, viewers can design, place and modify objects on a rotating turntable. Two versions have been created in Java, best viewed using Internet Explorer on a PC. Click on these links to run the programs:

<http://www.elasticmind.com/arch/roto/>

This version provides tools which constrain the activities only to those which Duchamp had the ability to control—colored objects drawn upon a colored circular field whose speed of revolution can be adjusted.

<http://www.elasticmind.com/ElasticMind/Roto/rotorelief.php>

This second version implements an extension of the original idea where objects “painted” on the turntable can be given individual movements and characteristics which physical painted disks could not permit. This second version envisions a laboratory for the development of Duchamp’s ideas making use of the virtual digital medium. In this version, it’s possible to create and email a Rotorelief Interactief composition. The [www.elasticmind.com](http://www.elasticmind.com) website, created by Architectronics, Inc., hosts a number of customizable and emailable activities.

This is a work in progress. The interface is experimental; the code may be a bit buggy, and the documentation is not adequate. Architectronics, Inc. invites collaborators who might want to work to develop this into a robust online activity, CD or kiosk project. In addition to the Rotorelief Interactief software laboratory for viewer experimentation, the project might include onscreen replicas of Duchamp’s *Rotoreliefs* so that viewers could see these objects as they might appear spinning on a turntable. These artworks are rarely seen in this fashion, as they were meant to be viewed. A CD version might also include physical replicas of the artworks and a spinning mechanism to view them in motion. An

accompanying text from a Duchamp scholar might be appropriate.  
The project can be hosted from an Internet location, a CD, or  
a site installation

Figs. 1,2

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