

3d Techniques

Day 1

Introduction:

- the history of 3d (photography, film);
- theory (optics, types of three-dimensional images);
- methods for obtaining and viewing stereo pairs (development of technology and the development of 3D, the latest innovations such as 3D printing, 3D screens);
- advantages and disadvantages of stereoscopy;
- interesting examples of the use of 3D.

The practical part:

1. Photography
 - rules for the efficient capture of individual objects;
 - analogues (presentation of the most interesting models, shooting technique);
 - digital cameras (3d caps and lenses, modern stereoscopic cameras, the set consisting of two synchronized digital cameras — the preparation of such a construction).
2. Viewing 3d images
 - stereopairs — stereoscope (making own stereoscope with ready-prepared template and slides);
 - stereo anaglyph — the preparation of the image in special programs and in Photoshop;
 - printing (preparing an image for printing, examples).
3. Phantogram
 - tutorial (preparing a phantogram “step by step”):
 - object and scene preparation;
 - setting cameras in the adequate distances;
 - preparing photographs in Photoshop;
 - anaglyph printing;
 - participants are preparing their own phantogram by photographing the selected object.

Day 2 — „2d in 3d”

Introduction:

- converting two-dimensional image in three-dimensional;
- presentation of the available programs and their capabilities based on a sample image;
- After Effects;
- examples.

The practical part:

1. A simple two-component 3d (object + background)
 - participant is preparing the image in Photoshop;
 - importing and setting elements in After Effects;
 - cameras setting;
 - rendering;
 - making an anaglyph in Photoshop.
2. Multi-element 3d
 - composing the image in Photoshop with prepared cut elements;
 - importing and setting elements in After Effects;
 - cameras setting;
 - adding effects (such as lighting, shadows, fog etc.)
 - rendering;
 - making an anaglyph in Photoshop.
3. Phantogram in After Effects
 - tutorial (preparing a phantogram “step by step”):
 - object and scene preparation;
 - setting cameras in the adequate distances;
 - making an anaglyph in Photoshop.

Day 3 — 3d graphics

Introduction:

- presentation of the available programs and opportunities offered to us by three-dimensional graphics;
- rules for creating three-dimensional images based on 3ds Max;
- examples.

The practical part:

1. Simple 3d
 - importing and setting elements in 3ds Max;
 - setting cameras in the adequate distances;
 - rendering;
 - making an anaglyph in 3ds Max or in Photoshop.
2. 3d typography
 - setting elements in 3ds Max;
 - cameras setting;
 - rendering;
 - making an anaglyph in 3ds Max or in Photoshop.
3. 3d animation
 - animating object in the scene;
 - rendering;
 - making an anaglyph movie.
4. Participant prepares graphic design using skills acquired at the workshop (3ds Max, After Effects) — 3d illustration or typography illustrating a short text, then creates a postcard.

Workshops syllabus

Things at the workshops:

- lectures will cover on three dimensional techniques and the ways they can be used in graphic design;
- participants will get acquainted with stereoscopic photography and modern software allowing to create 3D images.

Things at the lab:

- computers with programs:
 - 3ds Max 2011;
 - After Effects CS4 or later;
 - Photoshop CS4 or later.
 - InDesign CS4 or later.
- printer.

Things to bring (participants):

- object to photograph, at least 15 cm height (not required);
- scissors and glue.