NPR Lenses

Local Effect Control for Non-Photorealistic Line Drawings

NPR Lenses are a new non-photorealistic rendering tool, that allows integrated distortions in 3D with common 2D interaction techniques. A number of localized effects can be combined and applied to models from many different application domains.



Effect Types

O Hidden Lines Lens

Interaction

• Place lens on viewplane



Spatial Distortion



O Line-Style Lens

- O Spatial-Distortion Lens
- Object-Space Constraints
- **O** Combinations

O Choose lens parameters

- O Choose type of effect
- Move lens on view-plane;
 - see effects applied in 3D
- **O** Move scene independently



point NPR Lens 2D Manifestation 3D Manifestation plane/ bling e ne cts



NPR Lenses resemble hand-held magnifying glasses in the physical world. NPR Lenses are view-aligned and support the adjustment of the three-dimensional scene and its parameters independent from the other common 3D manipulations.













All Styles Combined











