Anime-Pers Additional Materials

1. [Anime-Pers deformer] Comparison with hand-drawn images

In this sketch, the anime-perspective view means to be a view which is commonly found in traditional hand-drawn animation. Figure 1 demonstrates the difference between one-point perspective and anime-perspective. The top left line-drawing image shows the one-perspective projection, where the vanishing point is indicated as the crossing point of many auxiliary lines. The top right image is an anime-perspective view, where we cannot find the vanishing point. However, this can be considered as an image that we feel is an actual view through our eyes. The bottom two images also show the difference between these perspectives, using 3D in-room model: the left image is a standard perspective view (left) and right image is made with the Anime-Pers deformer (right).

Figure 1. Comparison images between standard perspective and Anime-Pers.
2. [Anime-Lens] Difference between Anime-Lens and fisheye

Figure 2 shows comparison images between Anime-Lens and fisheye lens, and differences between Anime-Lens and fisheye lens are listed below.

1. Fisheye modifies only ray direction, and Anime-Lens can modify both eye position and ray direction and view angle.

2. Anime-Lens can generate a variety of distorted images (see Figure 3) by editing its parameters, whereas the fisheye lens can only generate radially distorted images.

![Figure 2. Left: Anime-Lens, Right: fisheye lens](image1)

![Figure 3. Left: Rotate along Y-axis in camera coordinate, Center: Rotate along Z-axis in camera coordinate, Right: Translate eye point](image2)

3. Movie

In this movie, at first we show workflow and interface of Anime-Pers deformer by applying the deformer to a cylinder. Next, we show editing process with a simple scene, and then we show the result movie. This simple scene contains a car running away, and we exaggerated speed of the car.