

The Visual Style of "Legend of the Guardians: The Owls of Ga'Hoole"

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Animal Logic



Figure 1: *Operatic lighting and staging sells the drama of the world of Ga'Hoole.* ©Warner Bros. All rights reserved.

Abstract

Legend of the Guardians: The Owls of Ga'Hoole (LotG) is set in the nocturnal world of owls, mixing high fantasy, Campbellian mythology and cute fluffy birds. Eschewing a cartoon aesthetic in favour of a darker, more operatic style, *LotG's* lighting look was driven by the philosophy that the drama and emotion of the story was more important than maintaining a sense of realism or naturalism.

1 Ga'Hoolian Lighting Philosophy

Owls are nocturnal creatures, and most of *LotG* takes place at either night time or magic hour. Night time lighting needed to convey different moods depending on the scene, often without the benefit of secondary light sources such as candles or torches. A warm, cozy feeling had to be conveyed for the Family Hollow scenes using only moonlight. Conversely, the moon needed to be cold and harsh in the realm of the evil Pure Ones. Research of moonlit long exposure photography revealed that, contrary to typical cinema language (where the moon is almost always played cool), the moon bounces warm sunlight resulting in warm photographs with dense hard shadows.

The moon was deemed to be the Ga'Hoolian equivalent of our sun, with exposure levels pushed beyond what would be typical in conventional night time photography. By default, moonlight is portrayed as hot and warm, with dense shadows. Much use was made of material specular and reflective qualities in shadowed areas, so despite the density of the shadows there was always visual information within them. In night forest scenes emphasis was placed on capturing the over-exposed pings of moonlight on wet foliage. Similarly, moonlight gleams off reflective metal surfaces, and was often art directed to draw attention dramatically to an unsheathed blade or to lead the viewer's eye to a character of interest.

2 Ga'Hoolian Scale vs Reality

Scale choices were altered from reality for dramatic purposes. Although surfacing detail tended to imply our owls were small, the choice of lenses and subsequent depth of field was more akin to a human scale - as if Soren was 3 to 4 feet tall as opposed to the

real barn owl scale of 1 foot tall. Background effects and surfacing tended to imply the birds were larger than reality. Detailing that is perceptible in a macro world, such as fine scratches on metal or grains of dirt, were present, but were scaled down. When the world was designed and lensed with a realistic scale, the story tended to feel small, cute and quaint. When the world was designed and lensed with a more human scale, the story felt larger and more epic.

3 Ga'Hoolian Atmosphere

Atmospherics were considered vital to create a sense of depth and scale in the lighting of all environments, interior as well as exterior, and was conceived as either atmospheric dust, smoke, water vapour or free floating motes of dust, often a combination of these. Often atmosphere levels were exaggerated well beyond realistic levels - a macro shot of a bird's foot, which would cover about 5 cm in reality, still had a sense of atmospheric falloff to allow for a more dramatic silhouette. Additionally, the atmospheric effects provided speed markers against which to judge the motion of the owls and camera in flying sequences, and specific "speedmist" was generally added per shot to enhance this.

The atmospheric effects in conjunction with a general lighting scheme that embraced raking light also enhanced the stereoscopic viewing experience, with light often appearing to emanate from theater space into the scene, or conversely to enter theater space from within the scene.

4 Realization

Indirect diffuse lighting was used as a general rule for interiors, and though interiors were also lit "traditionally" with the addition of fill lights the indirect diffuse lighting nonetheless added much subtlety to those lighting schemes and helped visually sell the idea that a single light source was responsible for reflected/bounced light.

FX elements and associated lighting-related data types, such as point clouds generated by FX from their fluid simulations, were passed to lighting via our Shot Setup tools. In the case of the point clouds these could be used in point-based lighting setups to simulate light emitted in a physically convincing way from fluid volumes such as fire.

Compositing was critical, and a team of dedicated compositors supplemented the work of the lighting crew, not only assisting with overflow work on sequences but also acting essentially as Leads where shots required heavy FX integration. Depth of field was handled in comp to maximize flexibility. Deepimage technology enabled holdouts to be implemented in deep space, obviating the need for re-render of elements due to an animation change or alteration in an FX pass, since each element was rendered with deep data embedded. This helped increase the number of iterations that could be viewed of any particular shot and also assisted integration of characters with FX elements.

Grading was conceived for *LotG* not as a post process, but as an integral part of the lighting pipeline. This saved many comp iterations on a large number of shots at the smaller expense of setup time of grademattes by the artists and management of same by coordinators.

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