

Occlusion Shadow

BEGINNER

Occlusion shadows are the dark areas where two surfaces meet or where one surface blocks ambient light from reaching another. The darkest shadow under a box sitting on a table, the dark crease where a chin meets a neck, the shadow deep in an eye socket — these are occlusion shadows. They are darkest right at the contact or crease point and soften as you move away. Without occlusion shadows, objects appear to float above surfaces rather than resting on them.

HOBBYIST

Occlusion shadows exist because in complex environments, light bounces from multiple sources — the overhead key light, windows, floor bounce, wall bounce. As surfaces get closer together, fewer of these light sources can see into the crevice between them, and the area becomes progressively darker. You are adding it when you darken the bottom of a cloth fold, the underside of a stone on the ground, or the eyelid margin on the upper lid. Getting occlusion shadows right creates convincing spatial depth even in drawings with minimal shading elsewhere.

PROFESSIONAL

Ambient occlusion as a concept was formalized in 3D computer graphics but describes a phenomenon classical painters have always intuited. In oil painting, the glazing technique — applying thin, transparent dark glazes into recesses — is the traditional tool for building occlusion depth. In van Eyck's painted drapery, the darkest areas are in compressed folds, with value progressively lightening as surfaces open up. For contemporary illustrators and concept artists, building in a strong occlusion pass unifies a complex scene by establishing the spatial relationships between all elements before any directional lighting is applied.