In optics, a virtual image is an image formed when the outgoing rays from a point on an object always diverge. The image appears to be located at the point of apparent divergence. Because the rays never really converge, a virtual image cannot be projected onto a screen. In diagrams of optical systems, virtual rays are conventionally represented by dotted lines. Virtual images are located by tracing the real rays that emerge from an optical device (lens, mirror, or some combination) backward to a perceived point of origin.