

There has been a clear relationship between technological development over __ years and a fascination with “ghost” photography. Images of unexplained circles of __, ghostly mists and human-shaped images fill social media pages on the internet. __ explanation is simple: few people realise how digital cameras work. The fact that __ image only “appeared” in the photo, but not real life, is not a sign of its ghostly __. In fact, it is a perfectly normal part of digital photography. Scientists call __ “photographic artefacts”, because they show some things that only exist because it is __ photograph. Put simply, contrary to popular belief, things in photos look different __ real __.

The biggest cause of photographic artefacts is the contrast between how __ “depth of field” works in modern cameras and the human eye. This is because, __ it is now possible to take excellent pictures of things far away, the quality of photos __ objects that are very near is less accurate. Light causes these misrepresentations. __ level of light never changes when humans stare at objects. However, this is not __ happens with digital cameras. When a camera points at a light, the light __ stronger and stronger. Orbs, which are perfect circles of light, are the most __ photographic artefact and they are often the result of light reflecting off water or __ in the air near the __.

It is easy to see why humans see differently from digital cameras. __, digital cameras are also significantly different from old film cameras. In many __, digital cameras give less reliable results. For example, modern functions allow __ cameras to scan the image more than once over a period of less than a second, or __ automatically select how long the lens is open. Generally this produces better __, but if the camera moves during the photo, it may record multiple images, creating __ appearance of ghostly forms. Ghostly mists often appear when the camera picks up __ photographer’s own breath on a cold night when the lens is open for longer. This __ happened with film __.

Filming under certain conditions will often produce unusual light effects in __ prints. For instance, glass often makes objects such as a light source behind __ photographer appear in the printed photo. If the glass is clean, it may not be __ that there was a window and all you see is an object that “wasn’t there when I took __ photo”. A famous UFO photograph showed two clear bright saucer-shaped __ flying across a blue sky. Although very believable, it was, in fact, just a reflection __ some streetlights behind the __.

Most digital cameras come with a good zoom function, letting us take __ from far away. However, at some point, digital cameras can no longer produce __ images anymore. As you go nearer, instead of seeing the image as a __ picture, the digital image becomes pixelated, which means it appears as a group __ colored rectangles. What you see in print is very different from the object in real __, and the purest example of an aretefact is the pixellation __.

There has been a clear relationship between technological development over the years and a fascination with “ghost” photography. Images of unexplained circles of light, ghostly mists and human-shaped images fill social media pages on the internet. The explanation is simple: few people realise how digital cameras work. The fact that an image only “appeared” in the photo, but not real life, is not a sign of its ghostly origins. In fact, it is a perfectly normal part of digital photography. Scientists call them “photographic artefacts”, because they show some things that only exist because it is a photograph. Put simply, contrary to popular belief, things in photos look different from real life.

The biggest cause of photographic artefacts is the contrast between how the “depth of field” works in modern cameras and the human eye. This is because, although it is now possible to take excellent pictures of things far away, the quality of photos of objects that are very near is less accurate. Light causes these misrepresentations. The level of light never changes when humans stare at objects. However, this is not what happens with digital cameras. When a camera points at a light, the light becomes stronger and stronger. Orbs, which are perfect circles of light, are the most common photographic artefact and they are often the result of light reflecting off water or insects in the air near the camera.

It is easy to see why humans see differently from digital cameras. However, digital cameras are also significantly different from old film cameras. In many ways, digital cameras give less reliable results. For example, modern functions allow digital cameras to scan the image more than once over a period of less than a second, or to automatically select how long the lens is open. Generally this produces better photos, but if the camera moves during the photo, it may record multiple images, creating the appearance of ghostly forms. Ghostly mists often appear when the camera picks up the photographer’s own breath on a cold night when the lens is open for longer. This never happened with film cameras.

Filming under certain conditions will often produce unusual light effects in digital prints. For instance, glass often makes objects such as a light source behind the photographer appear in the printed photo. If the glass is clean, it may not be obvious that there was a window and all you see is an object that “wasn’t there when I took the photo”. A famous UFO photograph showed two clear bright saucer-shaped objects flying across a blue sky. Although very believable, it was, in fact, just a reflection of some streetlights behind the photographer.

Most digital cameras come with a good zoom function, letting us take photos from far away. However, at some point, digital cameras can no longer produce clear images anymore. As you go nearer, instead of seeing the image as a continuous picture, the digital image becomes pixelated, which means it appears as a group of colored rectangles. What you see in print is very different from the object in real life, and the purest example of an artefact is the pixellation process.