Phantom Waves Series (2021) George Legrady

A series of still-images, printed on archival Hahnemühle paper (17" x 22") and on Chromaluxe Dye Sublimation aluminum panels (30" x 40")

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The November 1973 issue of Scientific American featured an article titled "The Recognition of Faces" by Bell Labs researcher Leon Harmon that explained how we perceive pixelated digital photographic images. Using a low-resolution, portrait of Lincoln to describe the phenomena, (which Salvador Dali later integrated into a painting), Harmon introduced a new set of terms by which to discuss how to process such images which he referred to as 'signals'. The processes included spatial frequency filtering and band-masking of selective parts of the noise spectrum to enhance recognition of low-resolution images.

The "Phantom Waves" series of still-images explores the challenges of our understanding of the digital photograph as fundamentally a sequence of numbers that can be manipulated mathematically to result in images that do not exist in the world but are produced algorithmically. The images were created by custom software which trigger oscillations of various frequencies that modulate each other resulting in complex patterns within the two-dimensional space of the image plane. The patterns emerge through phantom frequencies generated when the signals produce values beyond the tonal range of individual pixels.







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