A Perspective on 3-D Illusions

It is a fact of neuroscience that everything we experience is actually a figment of our imagination. Although our sensations feel accurate and truthful, they do not necessarily reproduce the physical reality of the outside world. Of course, many experiences in daily life reflect the physical stimuli that enter the brain. But the same neural machinery that interprets actual sensory inputs is also responsible for our dreams, delusions and failings of memory. In other words, the real and the imagined share a physical source in the brain. So take a lesson from Socrates: “All I know is that I know nothing.” One of the most important tools neuroscientists use to understand how the brain creates its sense of reality is the illusion. Historically, artists as well as illusionists have used illusions to develop deep insights into the inner workings of the visual system. Long before scientists were studying the properties of neurons, artists had devised a series of techniques to “trick” the brain into thinking that a flat canvas was three-dimensional or that a series of brushstrokes was actually a still life. Applied to architecture, their work continues to astound. Read Article

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