Offered Title: Is It Real Or An Illusion?

As you read this I will have just attended the 90th birthday party for one of the twentieth century's great magicians, Walter "Zaney" Blaney. I am fortunate to have a wife who, as an adult competitive figure skater became friends at the ice rink with one of Walter's daughters. I first saw Walter at a corporate party and was floored by his ability to make illusions real! We all became close friends and continue to get together when possible.

OK, that's nice you say...where is he going with this? I'll tell you, it's called "I swear it's real", but it's really an illusion.

Ever since humans could wonder about the night sky and what was going on up there, we saw things that seemed so real, but are not. In these cases, we didn't need a magician to fool us, we fooled ourselves. I am going to ignore myths and UFOs and focus on observational mistakes, some made by very famous astronomers. Here are some of our best self-inflicted illusions.

<u>Martian Canals</u> – This one is part illusion, part mis-interpretation. Way back in 1877 Giovanni Schiaparelli described what he thought were "canali", natural channels, maybe of water. Well, someone later called them canals (by mistake?) making it more interesting and it went viral. The meme of intelligent life on Mars had begun. Another astronomer, Percival Lowell, continued this meme until 1909 when astronomers using a sixty-inch telescope on Mount Wilson determined the 'canals' were an illusion.

<u>Bridge on the Moon</u> – Like Martian 'canals', this one became bigger than originally intended. In 1953 New York Tribune science editor (and amateur astronomer) reported observing a bridge of natural makeup spanning about 12 miles in the Moon's Crisium Basin. Taking it a step too far, British astronomer and Moon Mapper H. Percy Wilkins hinted was artificial, causing all kinds of speculation. The British Astronomical Association did not support Wilkins and eventually the illusion was confirmed photographically during Apollo missions. It was caused by lighting conditions and perspective.

<u>Face on Mars</u> – This was possibly the most startling and far-reaching illusion. A 1970s Viking spacecraft photograph of Mars Cydonia region contained what appeared to be a giant face! Eyes, nose, mouth, even what looked like hair or a headpiece. Was it something constructed to welcome or maybe warn space travelers? The ensuing frenzy and conspiracy accusations were quieted after Mars Global Surveyor took high resolution photos... it was just an eroded mesa. Light and shadow.

<u>Incan City on Mars</u> – Yet another Mars freak-out. A Mariner 9 photo showed what look like structures built in a semi-circle, walls and all. The scientist team jokingly called it "Inca City". It does look like a ruin, but later images by Mars Orbiter helped identify it as remains of an ancient impact crater.

What's in the Sky?

February 16; Dusk: A slim waxing crescent Moon joins Venus in the southwest.