

THE SUBJECTIVITY OF THE LENS:

PERCIVAL LOWELL AND THE CANALS OF VENUS

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Around the turn of the last century, many open-minded astronomers believed they had seen what they called *canali* (Italian for canals or channels) on Mars. The claims were as controversial as exciting. Planets appeared as tiny spheres in the telescopes of that time, leaving much to interpretation. Photographic technology had not yet advanced to allow for clear images of the shimmering little discs. Nevertheless, straight intersecting lines were sketched in drawings by more than a few observers of the Red Planet. It would not be until 1972 when the possibility of such features on Mars was conclusively refuted by photographs from the Mariner 9 spacecraft.

But canals on Venus? Of all the prominent astronomers of the era, only one—Percival Lowell (1855-1916) made claim and was sure he could see canals on Venus through his advanced 24-inch refracting telescope. Moreover, the lines were essentially consistent in appearance over time, unlike those on Mars that appeared more transient. (Astronomers' changing perceptions resulted in newspaper bylines such as, "Martians Build Two Immense Canals in Two Years" (NY Times, August 27, 1911)). Buoyed by the apparent permanence of his observations of a network of channels on Venus, Lowell was able to produce detailed drawings of a Venusian canal system that featured spokes emanating from a central location, variously connected by diagonals.

Lowell was a Harvard-trained mathematician as well as expansive astronomer. Through his computations, he predicted the existence of a Planet X, later to be discovered and named Pluto. Yet history shows that Lowell was insufficiently concerned why no other astronomer had seen anything like the canal system he observed on Venus. Only recently has the episode been explained, by astronomers and ophthalmologists, as reported in *Sky and Telescope* (July 2002).

The telescope used by Lowell for his planetary observations had considerable magnifying power of 144X. He appears to have been so intent on extracting detail out of the white haze of Venus that he stopped the lens down to an extreme—the equivalent of f/125—blocking out most light. As a result, the blood vessels of his retina reflected off the eyepiece, which Lowell mistook for canals on the planet.

Lowell was apparently so enamored or excited by his perceptions that he disregarded scientific method, and was not put off when others questioned his findings. In other words, the astronomer was too subjective.

Emotional Biases Affect Perception

The case of Percival Lowell and his Venusian canals is an extreme example of an intent observer seeing or feeling something basically different from others. Similarly, it is normal for photographers to attach a high value to particular images of their creation, only to become frustrated or unaccepting when other viewers do not share the appreciation.

Take an image of mine that I have repeatedly entered in competitions without success. It's a black-and-white photograph of a statue of a buffalo on the Dumbarton Bridge in Washington DC. To me, the photograph is a powerful, emotive image. Yet no judge has ever agreed; at best, it has been called a technically correct photograph of a statue on a bridge that might do for a post card. Moreover, a close friend has discretely discouraged me from taking it to future competitions. What is at play?

I regard almost any photograph of a statue on a bridge as utterly romantic. It took me some time to realize that most people do not share this affectation.

We all have certain emotional biases, or quirks if you will. Or we may believe an image is wonderful because we have devoted great effort to produce it. Yet photographs of our making that we consider special may not have similar impact on others. A truism, but photographers can save themselves unnecessary frustration by being open to and accepting this possibility early on when their favorite creations are not accorded the appreciation and recognition expected.

Artists' Self-Deprecation

While our perceptions of our own images occasionally enthuse us more than others, causing minor perplexity, the literature of photography indicates a more serious problem of self-image. Some prominent as well as budding photographers chronically undervalue their work as a whole, focusing on could haves or should haves in their images, and seriously believe they are not achieving their potential.

The critic John Banville articulated his observations of this tendency in a review of the recent retrospective, *Henri Cartier-Bresson: The Man, the Image and the World*:

“Most artists maintain an attitude of healthy disrespect toward their own work. They know, better and with more bitterness than any critic, how far short of their ambitions their art inevitably falls. *What, the artist would demand of his admirer, do you really think this is the best I am capable of? Do you really imagine I am satisfied with these botched results of my transcendent intentions?*”

It's difficult for me to fathom that the majority of photographers have such a negative self-image, but Banville makes a case in point. Many consider Henri Cartier-Bresson, born in 1908, the greatest living photographer. Decade after decade, he created powerful imagery in ever-evolving styles to the most exacting technical specifications. Not only was he exceptionally creative and spontaneous, but his technique was so refined

that his compositions did not have to be cropped or modified in the darkroom. To have had such a flair for artistic design together with unfailing, near-perfect perspective and exposure assessments—years before automatic exposure and relatively flexible emulsions were introduced—is truly amazing.

Despite his universally recognized achievements, Cartier-Bresson has long been known as at best ambivalent and often dismissive of his photography. Now celebrating his 95th birthday, Cartier-Bresson recently reiterated that he has little regard for his camera work.

It may be in our genetic makeup to take for granted or undervalue what we have done, never to be satisfied for long, for such impatience is a driver of human progress.

Lessons: From time to time your cherished works will not be appreciated by others because they do not share your emotional biases. More important, your overall creativity and impact may be greater than you imagine. If you have serious doubts about the images you are producing, ask yourself if you are chasing phantoms or focusing on nits no one else sees. And seek the advice of others.

Ultimately we learn more about ourselves by considering and narrowing differences in what we and others perceive and appreciate. To quote Henri Cartier-Bresson:

“I believe that through the act of living, the discovery of oneself is made concurrently with the discovery of the world around us which can mold us, but which can also be affected by us. As a result of a single reciprocal process, both these worlds come to form a single one. And it is this world we must communicate.”

Indeed, it was Cartier-Bresson’s expressed objective in portraiture to accurately capture the essence of a person, to bare their soul at a moment and perspective so clearly obvious it could not be subjective.

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