

The HiRISE Face

by George J. Haas and William R. Saunders
September 2007 (Revised February 2020)

MRO & JPEG 2000

The Mars Reconnaissance Orbiter (MRO) launched successfully from Cape Canaveral Air Force Station on August 12, 2005 on its seven-month voyage to the Red Planet. The orbiter carries a new High Resolution Imaging Science Experiment camera, known as HiRISE. This new camera has the capability of photographing the surface of Mars in unprecedented detail, allowing researchers and the public to view objects as small as one meter. Although the HiRISE camera commenced its mapping orbit around Mars on September 29, 2006, we wouldn't get a look at the first full, high resolution portrait of the Cydonia Face until the following year.

On April 5, 2007 the University of Arizona Team posted the first MRO HiRISE image of the Face on their public web site. The image (PSP_003234_2210) was aptly titled "Popular Landform in Cydonia Region"¹ (Figure 1).

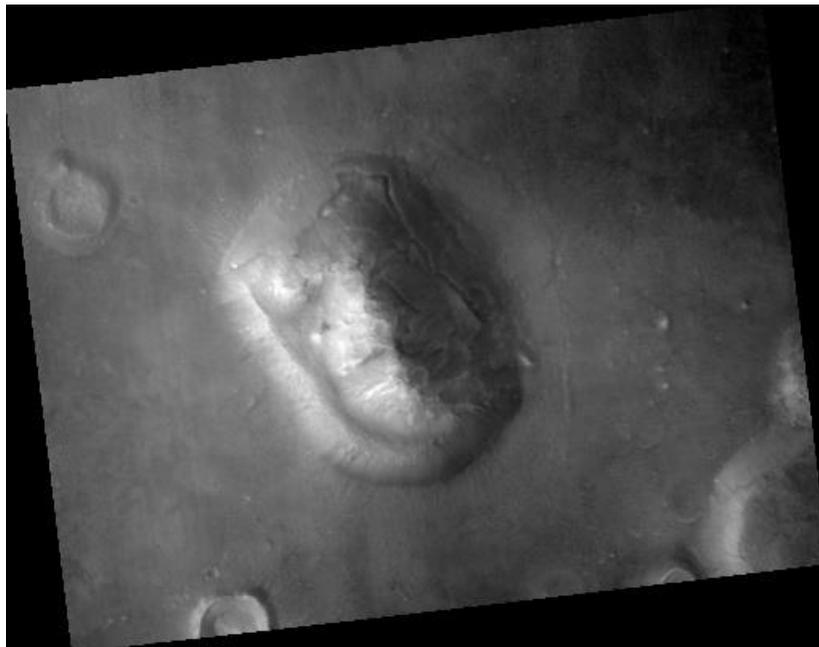


Figure 1

The Cydonia Face
MRO HiRISE PSP_003234_2210 (2007)
Credit: NASA/JPL/University of Arizona

Unlike previously released image files, like those of the Mars Global Surveyor and THEMIS sites they due offer Tif, Gif, Jpeg and raw versions of each image. However the full HiRISE strip is so large, weighing in at 300 MB, that you must upload a special imaging program called JPEG2000 just to view the raw data. To access all this data, you might also want to also buy a new computer with a lot of memory. Contrary to NASA's commitment of easy access, there is nothing user friendly about this new MRO high-tech format. The initial image that was provided for most viewers to access from their web site is just a small crop of a much larger image that shows the Cydonia Face - a little on the dark side (Figure 1). But...don't worry, this image didn't last long.

It's An Up-Side Down World

A few days after its release a member of the University of Arizona team, Richard Leis posted his personal thoughts about the new image on the official HiRISE Team Blog.² After belying the "pseudo-science" of the Art Bell show and calling Richard Hoagland a charlatan, Leis made the following remarks about the Cydonia Face:

"This then is the real face of Mars, a boulder-strewn mesa carved not by imaginary entities but by the slow yet steady erosion caused by winds, impacts, physical failure of rocks, and perhaps temperature variations."³

Keep in mind, that this is the mind-set of an "Operations Specialist" at the University of Arizona. This is an official - in charge of what we see from the MRO and one of the people in control of how it is presented.

Then sometime during the summer college break, of 2007, the University of Arizona Team quietly replaced their original full-faced image of the Cydonia Face on the Photojournal page with a new "raw" washed-out version that was not only tightly cropped at the edges but it was also inverted (Figure 2).

Although the inverted orientation of the new image is not acknowledged in the available caption for the image, if had bothered to read on – down into the second paragraph of the provided text, one would finally realize that the image was indeed presented up-side down with North pointing down. But why would you do that?

After an extensive e-mail inquiry with the HiRISE Team at the University of Arizona in to why the new image was inverted; they told me that - the current image was posted up-side down because of the fact the HiRISE image was not processed. It was released in its raw format, which has an inverted orientation, which is caused by a combination of the push-broom imager and the South to North polar orbit of the HiRISE camera.⁴ Bla Bla Bla.



Figure 2

The Cydonia Face (cropped and inverted “raw” version).
MRO HiRISE PSP_003234_2210
Credit: NASA/JPL/University of Arizona/Photojournal

In short, the representative said that all raw HiRISE images are unprocessed and inverted when released. This explanation was interesting, considering that every other HiRISE image posted on the Arizona University web site are processed and presented with North up. For some reason it appears that the researchers at Arizona University thought it was better to view the Cydonia Face in the “raw” with a reversed orientation – with North down.

Now, if you go over to the NASA/JPL Photojournal web site you will find the 2001 MRO HiRISE image of the Cydonia Face was not treated any differently (Figure 3). Yes, the new high resolution image is the highest resolution image ever taken of the Cydonia Face, by a camera capable of distinguishing objects only 1-meter-size,⁵ is presented up-side down. And it is still presented up-side down to this very day.

Here is a link to the NASA/JPL Photojournal site:

<https://photojournal.jpl.nasa.gov/feature/cydonia>. Check it out for yourself.

PIA09654: Popular Landform in Cydonia Region



Target Name:	Mars
Is a satellite of:	Sol (our sun)
Mission:	Mars Reconnaissance Orbiter (MRO)
Spacecraft:	Mars Reconnaissance Orbiter (MRO)
Instrument:	HiRISE
Product Size:	2048 x 1532 pixels (width x height)
Produced By:	University of Arizona/HiRISE-LPL
Full-Res TIFF:	PIA09654.tif (3.141 MB)
Full-Res JPEG:	PIA09654.jpg (386.7 kB)

Click on the image above to download a moderately sized image in JPEG format (possibly reduced in size from original)

Original Caption Released with Image:

Figure 3
 NASA/JPL Photojournal (Screen capture)
 The Cydonia Face – Inverted
 MRO HiRISE (PSP_003234_2210)
 Credit: Credit: NASA/JPL/University of Arizona/Photojournal

As a result of downloading and examining this enormous MRO HiRISE photograph of the Cydonia Face we became confident that this new image did indeed supported all of the bifurcated facial aspects we have previously identified. To document the constancy of these facial features we will begin our review with the western humanoid side of the current HiRISE image of the Cydonia Face (Figure 5).

Starting with the overall rectangular shape of the formation, notice the flanged headdress that frames the image and the tri-leaf insignia that appears at the center of the forehead. This is the exact diagnostic feature that directed our original investigation towards Mesoamerican iconography. This tri-leaf insignia depicts a sprouting maize seed, which was utilized as a symbol of kingship among the Maya and Olmec.⁶ The facial features include an almond-shaped eye, a brow with a deer effigy and the famous “tear-drop” feature placed on the cheek. Also present are the elaborate nose and mouth ornaments that adorn the face.

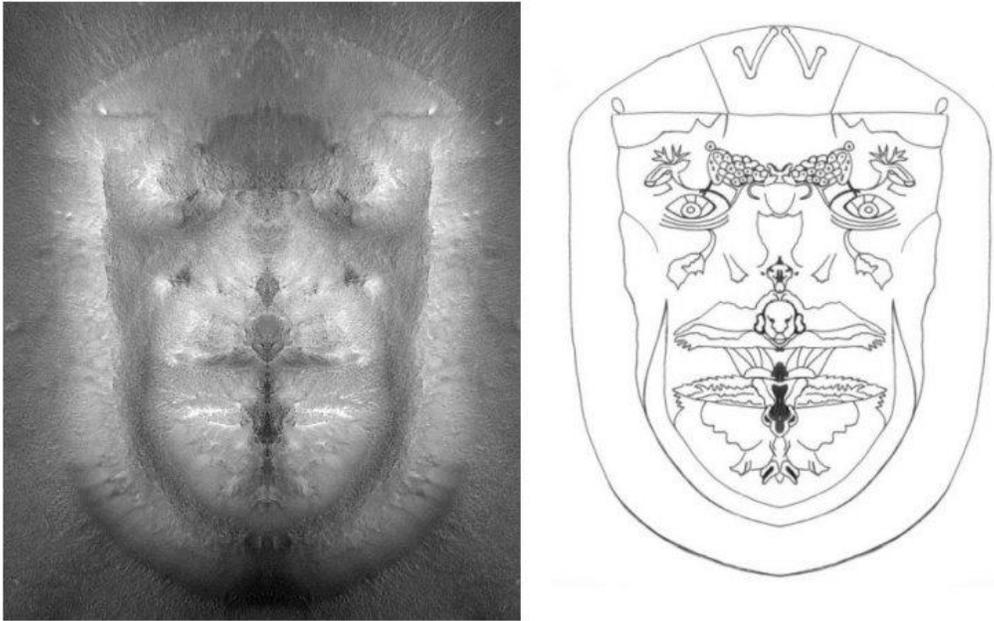


Figure 5
Humanoid side of the Cydonia Face (duplicated perspective with analytical drawing)
MRO PSP-003234-2210 (2007)
Image enhancement courtesy The Cydonia Institute

Turning our attention to the feline side of the Cydonia Face (Figure 6), we are able to see the crowned headdress with central cleft and the rectangular, squinting eye. The new image also provides further evidence of the zigzag-shaped beard (or mane), a mouth, fang and flailing tongue. Again all of these facial features observed on the feline side maintain their sculpted integrity and are shown to be permanent formations that are consistent throughout the previous collection of the over 20 images that either NASA or the ESA has taken of the Face on Mars.

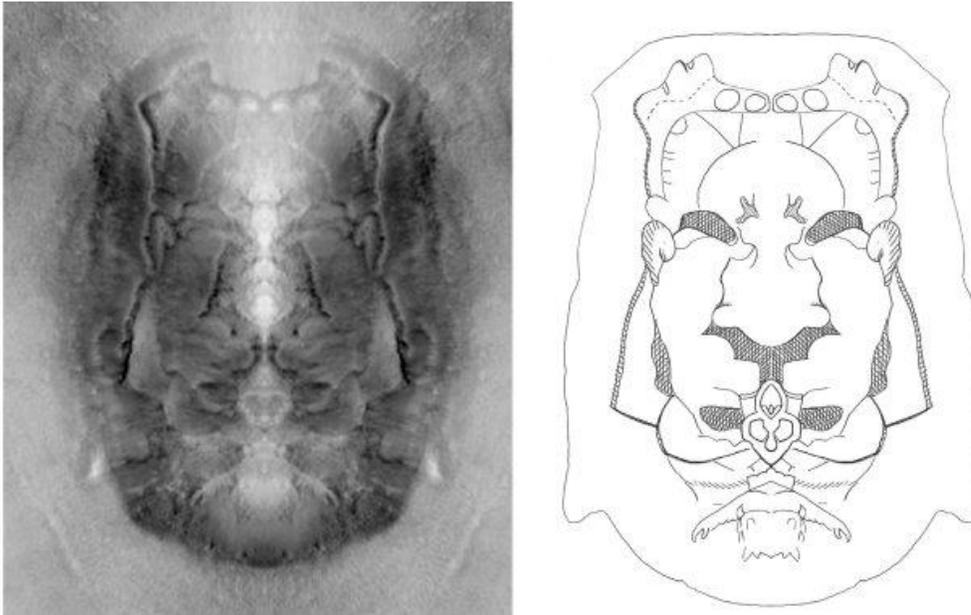


Figure 6
Feline side of the Cydonia Face (mirrored perspective with key)
MRO PSP-003234-2210 (2007)
Image enhancement courtesy The Cydonia Institute

While the highly reflective western side of the Cydonia Face appears relatively cohesive, the eastern side of the structure appears fragmented with a distinct linear quality. These lines and cracks project a compartmentalized design often seen in jade masks produced by the Maya. The composite jade feline mask in figure 7 demonstrates the puzzle-like aspect of these composite faces. Notice the crowned forehead, the rectangular-shaped eye sockets, the muzzle, mane, and flailing tongue. These same compartmentalized features are also seen on the feline side of the Cydonia Face (Figure 7).

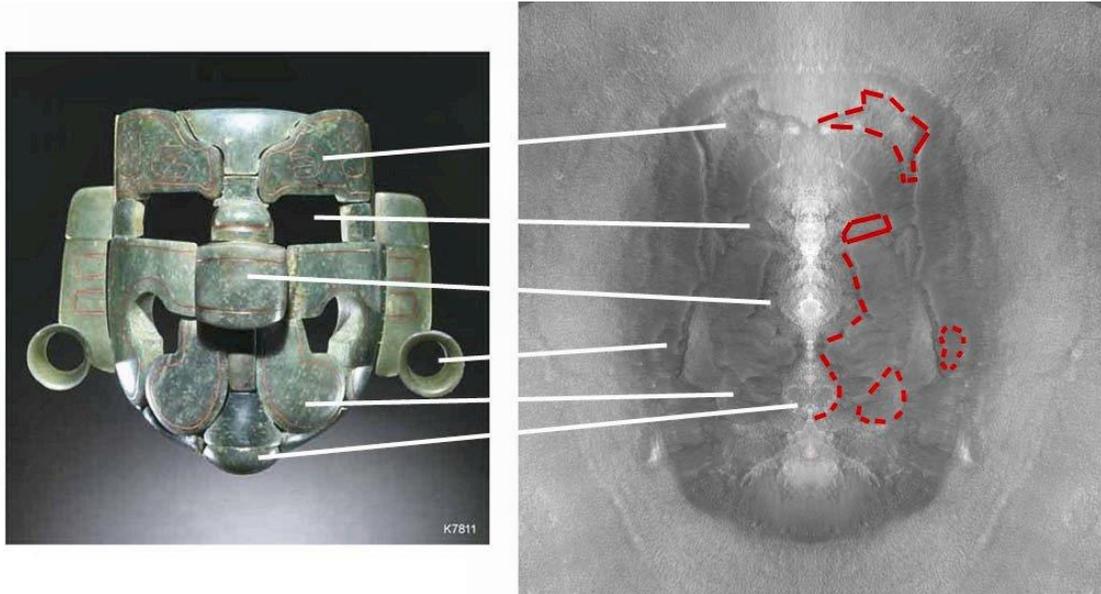


Figure 7
 Composite Mask Comparison
 Left: Jaguar - Jade Composite Mask (Maya)
 (Image source: Justin Kerr Photo K 7811)
 Right: Feline side of the Cydonia Face (duplicated)
 (Notated by William R. Saunders)

The Eyes Have It

Of all the facial features, it is the eyes of both the eastern and western sides of the Cydonia Face that have caused constant debate. The main reason for this dispute is that the eyes don't match. After the release of the 2001 MGS narrow swath (M16-00184) that photographed a portion of the Face at 1.7 meters (or 5.6 feet per pixel), which verified the eye formation as structurally identical to a human eye, the research community has patiently awaited a comparable image of the eastern feline eye. At last the MRO HiRISE camera provided us with just such an image.

To begin, when the 2001 M16-00184 image of the western humanoid eye is compared to the current MRO HiRISE version of the same area, the almond-shaped eye maintains all its human form (Figure 8). Notice the projecting edge of the "brow," the almond-shaped eye socket and lid creases that meet at the medial canthus. The pronounced orbit of the eyeball also includes an "iris." Both images document that the eye has actual structure as opposed to a chance projection.

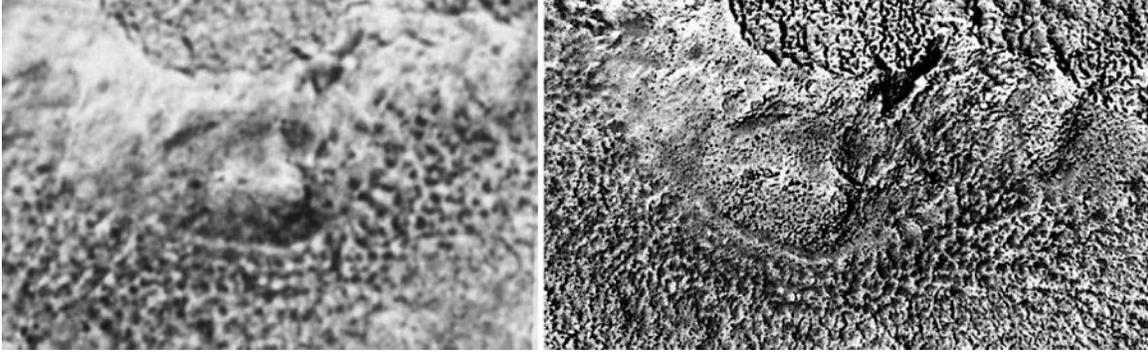


Figure 8

Eye Formation Comparison – Humanoid Side of Cydonia Face

Left: Detail M16-00184 (2001)

Right: Detail of MRO PSP-003234-2210 (2007)

Image enhancement courtesy The Cydonia Institute

Looking at the eastern feline eye, we see an empty rectangular, organic form. One can't help but notice that this eye formation is not carved as a human, almond-shaped eye (Figure 9). The feline eye form takes the shape of a serpent head with a flailing tongue.

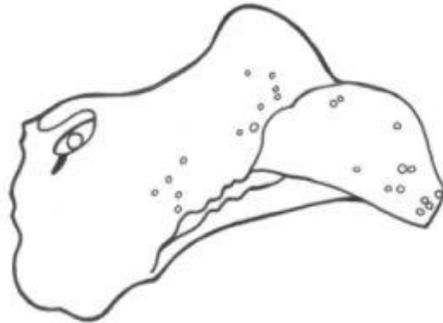
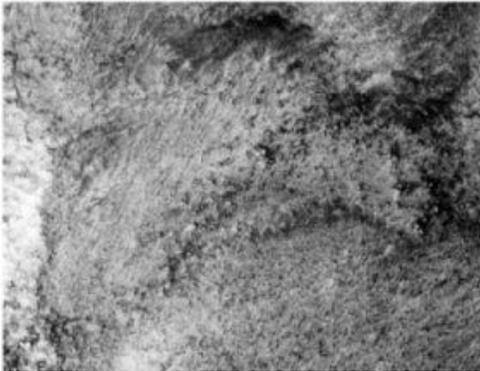


Figure 9

Serpentine eye formation - feline side of the Cydonia Face

Detail MRO PSP-003234-2210 (2007)

Image enhancement courtesy The Cydonia Institute

The overall shape of the feline's serpentine eye conforms to the flanged eye ridge and flaming eye brow form often seen on snarling, were-jaguar masks produced by the Olmec of Mesoamerica⁷ (Figure 10).



Figure 10
Olmec Were-Jaguar with Flaming Eyebrow
(stone)
Image Source: American Museum of
Natural History

When the overall shape of the were-jaguar's flaming eye is compared to the eastern eye formation on the feline side of the Cydonia Face, a common serpentine motif appears quite plausible (Figure 11).

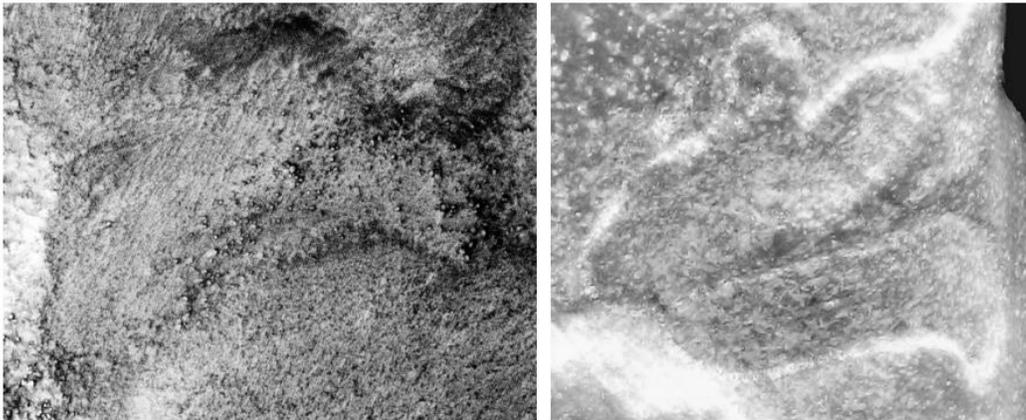


Figure 11
Eye Comparisons of Eastern Feline Eye
Left: Detail MRO PSP-003234-2210 (2007)
Image enhancement courtesy The Cydonia Institute
Right: Olmec Were-Jaguar flaming eyebrow (detail)
Image Source: American Museum of Natural History

As a result of this new evidence provided by the MRO HiRISE camera, in regards to the viability of both the eastern and western facial formations observed on the Cydonia Face, it is now beyond any reasonable doubt that the Face on Mars is an artificially produced edifice that demonstrates a common iconography and bifurcated design – uniquely produced throughout cultures of Mesoamerica.

.....

Footnotes:

1. Mars Viewer, MRO HiRISE, PSP_003234_2210, Popular Landform in Cydonia Region, Dated April 5, 2007.
2. Richard Leis is a thirty three year old Operations Specialist (Downlink) - The Downlink team runs automated processes to download the HiRISE camera raw image products to the Operations Center. They clean them up and stitch them together into nice mosaics, prior to releasing them to the scientific community and public. His daily tasks include: making sure the software is running correctly, validating the images, testing changes to the processes and new software, keeping the procedures up to date, writing scripts, and attending meetings.
<http://hirise.lpl.arizona.edu/HiBlog/?author=3>
3. Richard Leis, HiRISE Blog, Face, Friday April 1. <http://hirise.lpl.arizona.edu/HiBlog/>.
4. Personal e-mail communication between George J. Haas with HiRISE Team member Joe Plassmann on 8/30/2007.
5. Alfred McEwen, MRO HiRISE Instruments,
<https://mars.nasa.gov/mro/mission/instruments/hirise/>
6. David Freidel, Linda Schele, and Joy Parker, *Maya Cosmos: Three Thousand Years on the Shaman's Path* (New York: Quill, 1993), 431.
7. The term were-jaguar refers to facial features often seen in Olmec iconography that combines human and feline aspects. The most distinguishing design characteristic is the mouth, which displays a wide flaring upper lip that is turned down at the corners.