

Why we see familiar-looking objects in Mars topology

March 2 2015, by Tim Reyes



Is she or isn't she, a face on the red planet Mars? Discovered in the thousands of photos transmitted to Earth by the Viking orbiter in the 1970s, the arrival of Mars Global Surveyor included Mars Orbiter Camera (MOC) which revealed details that put to rest the face of Cydonia. Actually, it is alive and well for many. Credit: NASA/JPL- Viking/MGS, GIF – Judy Schmidt

What is up with the fossils on Mars? Found – a dinosaur skull on Mars? Discovered – a rat, squirrel or gerbil on Mars? In background of images from Curiosity, vertebrae from some extinct Martian species? And the human skull, half buried in photos from Opportunity Rover. All the images are made of stone from the ancient past and this is also what is called Pareidolia. They are figments of our imaginations, and driven by our interest to be there – on Mars – and to know that we are not alone. Altogether, they make a multitude of web pages and threads across the

internet.

Rock-hounds and Martian paleontologists, if only amateur or retired, have found a bounty of fascinating rocks nestled among the rocks on Mars. There are impressive web sites dedicated to each's eureka moment, dissemination among enthusiasts and presentation for discussion.

NASA scientists have sent the most advanced robotic vehicles to the surface of Mars, to the most fascinating and diverse areas that are presently reachable with our technology and landing skills. The results have been astounding scientifically but also in terms of mysteries and fascination with the strange, alien formations. Some clearly not unlike our own and others that must be fossil remnants from a bygone era – so it seems.

The centerpiece of recent interest is the dinosaur skull protruding from the Martian regolith, teeth still embedded, sparkling effervescent white. There are no sockets for these teeth. Dinosaur dentures gave this senior citizen a few extra good years. The jaw line of the skull has no joint or connection point with the skull. So our minds make up the deficits, fill in the blanks and we agree with others and convince ourselves that this is a fossilized skull. Who knows how this animal could have evolved differently.



At left, MSL’s Curiosity landed not far from a sight hard to leave – Yellow Knife including sight “John Klein”. Inset: this authors speculative thought – mud chips? At right, is Mars enthusiasts’ Bone on Mars. Credit: NASA/JPL, Wikimedia

But evolve it did – within our minds. Referencing online dictionaries [ref], "Pareidolia is the imagined perception of a pattern (or meaning) where it does not actually exist, as in considering the moon to have human features." I must admit that I do not seek out these "discoveries" on Mars but I enjoy looking at them and there are many scientists at JPL that have the same bent. Mars never fails to deliver and caters to everyone, but when skulls and fossils are seen, it is actually us catering to the everyday images and wishes we hold in our minds.

The "Rat on Mars" (main figure, top center) is actually quite anatomically complete and hunkered down, having taken its final gasps of air, eons ago, as some cataclysmic event tore the final vestiges of Earth-like atmosphere off the surface. It died where it once roamed and foraged for ... nuts and berries? Surprisingly, no nuts have been found. Blueberries – yes – they are plentiful on Mars and could have been an excellent nutritional source for rats; high in iron and possibly like their Earthly counterpart, high in anti-oxidants.

The [blueberries](#) were popularized by Dr. Steve Squyres, the project scientist of the Mars Exploration Rover (MER) mission. Discovered in Eagle crater and across Meridiani Planum, "Blueberries" are spherules of concretions of iron rich minerals from water. It is a prime chapter in the follow-the-water story of Mars. And not far from the definition of Pareidolia, Eagle Crater refers to the incredible set of landing bounces that sent "Oppy" inside its capsule, surrounded by airbags on a hole-in-one landing into that little crater.



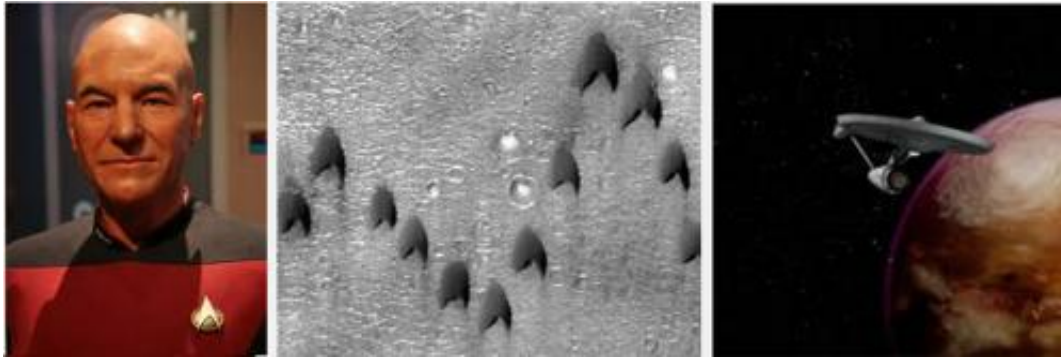
The Dinosaur skull on Mars is actually dated from Martian Sol 297 (June 7, 2013). The imager used to return this was the MASTCAM and an historic array of landscapes, close-ups and selfies has been produced by the Mars Hand Lens Imager (MAHLI). Other MSL Curiosity cameras are the NAVCAM, cameras for navigation, HAZCAM and MARDI camera. The array of images is historic and overwhelming raising more questions than answers including speculative and imaginative "discoveries." Credit: NASA/JPL

Next, is the face of Mars of the Cydonia region (Images of Cydonia, Mars, NSSDC). As seen in the morphed images, above, the lower resolution Viking orbiter images presented Mars-o-phies clear evidence

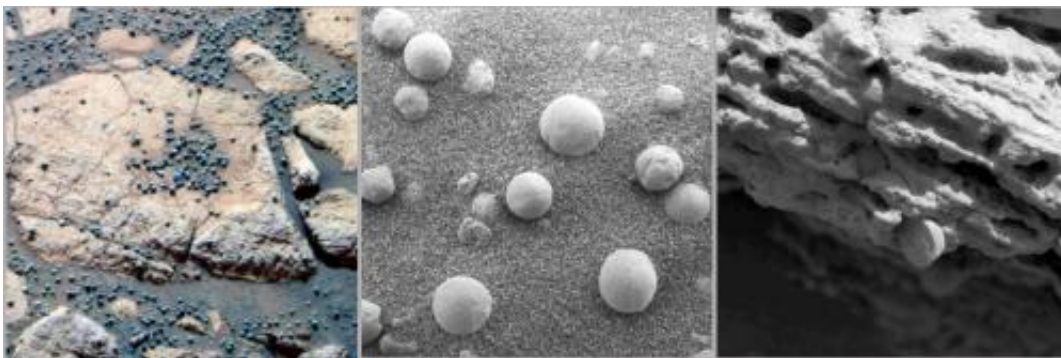
of a lost civilization. Then, Washington handed NASA several years of scant funding for planetary science, and not until Mars Global Surveyor, was the Face of Cydonia photographed again. The Mars Orbiter Camera from the University of Arizona delivered high resolution images that dismissed the notion of a mountain-sized carving. Nonetheless, this region of Mars is truly fascinating geologically and does not disappoint those in search of past civilizations.

And long before the face on Mars in Cydonia, there were the canals of Mars. Spotted by the Mars observer Schiaparelli, the astronomer described them as "channels" in his native language of Italian. The translation of the word turned to "Canals" in English which led the World to imagine that an advanced civilization existed on Mars. Imagine if you can for a moment, this world without Internet or TV or radio and even seldom a newspaper to read. When news arrived, people took it verbatim. Canals, civilizations – imagine how imaginations could run with this and all that actually came from it. It turns out that the canals or channels of Mars as seen with the naked eye were optical illusions and a form of Pareidolia.

So, as our imagery from Mars continues to return in ever greater detail and depth, scenes of pareidolia will fall to reason and we are left with understanding. It might seem sterile and clinical but its not. We can continue to enjoy these fascinating rocks – dinosaurs, rats, skulls, human figures – just as we enjoy a good episode of Saturday Night Live. And neither the science or the pareidolia should rob us of our ability to see the sheer beauty of Mars, the fourth rock from the Sun.



No one is left out of the imagery returned from the array of NASA's Martian assets in orbit. Mars exhibits an incredible display of wind swept sand dunes (center photo). Credit: NASA, Paramount Pictures



The Blueberries of Mars are actually concretions of iron rich minerals from water – ground or standing pools – created over thousands of years during periodic epochs of wet climates on Mars. Credit: NASA/JPL/Cornell



*Phoenix
Discovers
Hostess Twinkie
on Mars.*

*Chief Scientist
dismisses object as
possible focus in the
search for organic material.*

*But may hold clues to
effects of long-term
radiation exposure
on materials for future
Mars missions.*

Having supported Mars Phoenix software development including the final reviews of the EDL command sequence, I was keen to watch images arrive from the lander. The image was on an office wall entertaining the appearance of a not-so-tasty junk food item on Mars. Credit: NASA/JPL/Univ. Arizona, Illustration – T.Reyes

Source: [Universe Today](#)

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