There is an awesome quality about Yosemite Valley, a breathless scale that has been the basis for enduring attraction: the sheer granite cliffs rising so abruptly, the sudden height bowing from a serene floor, the hidden secret of a great space, the sliced shape of the domes.

All these visual, visceral, vital features appear in our minds and pull us into Yosemite for a first timed visit, then again for yet another view of its awesome space. This majestic scale, the specter of nature in grandeur unknown elsewhere in our experience, has given the Valley its magical power.

Not surprisingly, we openly question how this Valley was created. El Capitan and Half Dome beg the imagination of human logic to divine their sharp, vertical, perpendicular, sheer, immense granite forms. The rock itself seems to hold the story of its own creation and speaks to an inner voice of the human spirit. How could such a rock be so pure, so straight, so large, so high and still be of this common earth? How did Yosemite come to be so sheer, so abrupt, so sudden, so sliced? How did such a Valley come to be in place, or out of place, with our natural world? It baffles the mind.

Yosemite of Ice

We are told in official folders, if we ask, in colored brochures, if we read, that the glaciers created Yosemite—great ice flows scraping down from the high Sierra peaks, carving out the Valley below in some distant geologic age of heroic creation.

The Great Glaciers, hypothesized by John Muir in his sojourn of 1867, were first given as the natural force behind Yosemite’s creation. Now we are told the glaciers of John Muir are not the glaciers that carved the Valley. It was during some other ice age, before John Muir’s, before the Pleistocene, before the earliest ice age yet known, that glaciers created the great Valley of Yosemite. Of course, only faint traces of these glaciers remain, we are told, and a careful eye on the high plateau might see this great natural force evident.

We are told, as well, that before the great glaciers carved their “U’s” Yosemite was a valley “V,” a normal valley like others in the Sierra, like Hetch Hetchy or Kings. Deep “V” valleys carved by fast flowing streams down from the mountains. As the mountains were rising up, the streams dug deeper into the granite, carving their valley “V’s.”

And before these young valleys there was the molten rock, the
pluton of the Sierra Nevada, the magma of the batholith injected below the earth to create the granite domes. Erosion exposed the granite domes; some, like Half Dome, rose above the flow of the great glaciers, beyond the reach of the ice carving.

How deep was the Valley eroded from the pure granite pluton? Seismic radio waves tell us it is 2,000 feet through glacial debris to the rock floor buried below. El Capitan really rises 3,000 feet above our eyes and 2,000 more below, a mile of sheer granite wall.

The Great Glaciers in the upper plateau gave Yosemite to the American people by enticing John Muir to study them, to seek the origins of the Valley in the high basin. So it is the Ice Spirit that blessed the granite walls and helped put bounds around this great chasm of natural wonder. We should be thankful to the Spirit of Ice for such picturesque preservation of scenic beauty.

Yosemite of Fire

But how could such awesome height be carved by ice with hardly a trace? All these glaciers and granite seem uncertain in company, in creation, in logic. Yet this is the mythology that scientists say today formed the Valley?

How would we understand the meaning of Yosemite if, instead, the Great Glaciers were only a secondary force in its awesome creation?

Listen to the Miwok Indians, who lived in the Valley for a thousand years and more. Their stories tell of the Great Spirit who split Half Dome asunder with a terrible noise and awful sound, which ramified the earth and gave fire from the mountains, a natural force from underground causing sudden events to rift the land. Instinctively, the Miwoks knew the Valley had been created by a quick action of nature, which they explained as the bickering of a feeding couple, To-nach-utula and Tis-sa-uck.

Perhaps this is too remote a mythology for our rational age. Then listen to the voices of the Americans who first saw Yosemite in the Gold Rush years, to William Ahearn who saw the “mountain cliffs” rising 3,000 feet and thought the Valley had been “sliced with a knife.” J.M. Hutchings echoed their reactions: The “perpendicular mountain cliffs, deep gorges and awful chasms” of Yo-Semite “took away [his] power of thinking” when he first saw them.

Speak to the climbers on El Capitan who tie themselves to the big wall cliff-face as a challenge of life and endurance. Speak to the campers with strained necks who bend backwards to find the top of Half Dome. Watch tourists struggle to speak words in their eyes, see the scale of the Valley first from El Portal. The great granite rocks awe the eyes, step speech, pull during walks to danger. They all are under the spell of the Fire Spirit, who created Yosemite from his wrath of human anguish.

A Mythology of Forms

Today geologists tell us the granite of Yosemite was injected in a rapid event, in a series of sequences creating the Sierra Nevada pluton some hundred million years ago. As it cooled, as it coalesced, as it congealed, the granite fractured, cracked and fragmented in joints that created the geometry of its character.

From that point on, in a series of primal events, the form of Yosemite emerged: a crack, a chasm, a gorge, an abyss, split into the great granite batholith. A simple, sudden, sheer slicing along the lines of least resistance. It seems simple, it seems obvious, it seems logical, it seems practical to understand Yosemite in this direct granite origin.

Perhaps this too is granite mythology. Perhaps this too is child’s reasoning for reasonable thought, and it is easier to say the glacial gys carved Yosemite for our eyes. But what does it matter to the traffic horde to know anything of how the Valley came to be? The gridlocked roads and overbooked cabins will still be filled beyond capacity in any case.

Knowing granite is to seek the primary force in the Valley, the source of wonder and awe that draws us near, and to respect the great cliffs on their own terms as self-made faces that deserve our humble protection.

There are other meadows in mountain valley streams, other plateaus of high tundra moss, but nowhere else on earth yet known are there such great granite forms so sheer and immense of scale to dwarf human thought. Perhaps on the distant planes, perhaps during some future space probe, we might find such an awesome chasm. But here on earth, it is Yosemite that is the Incomparable Valley of granite walls and we should understand its unique spirits of Ice and Fire for our own preservation.