

C - chapter THREE - Astronomy

Sights, Experience and Discoveries advance on

Artwork, class, the desert, and a total eclipse!

It's the 90s, and I graduate from the Academy of Art in San Francisco. Strong, active, creative years for me. Painting and drawing every day, enjoying fun counterculture events with the San Francisco Cacophony Society, local attractions, tons of music, and my occasional interest in Astronomy. In 1990 a group of us Cacophony Society members went to the Black Rock desert in Nevada to help launch the first Burning Man event out there, and the rest is history. And oh my, the Moon and stars!

Black Rock desert 1990

It was the first Burning Man to date in the desert, and under a completely full moon. There were around 80 of us camped in a place that may as well have been *on* the moon or further.

[Enough has been written elsewhere about this legendary event, so for the sake of the context...]

By dark it was cool enough to comfortably move around and look at the stars, as spontaneous revelry thrived through the encampment. I took long walks into the desert night, which became spiritually charged as the cosmos were too fantastically apparent to ignore... like lanterns of vivid light you could almost reach up and touch. It wasn't easy to navigate the heavens out there; the Dippers, Cassiopeia, and all major familiar constellations are drowned in a sea of

more minor stars that are usually indiscernible in urban light pollution.

And later I got out of the tent and walked toward the sunrise, dressed in layers (with the white “sheik” clothes), wailing freely into the cool air... when the sun’s first spark rose above the horizon, its rays illuminated the playa with golden highlights... ah, but highlighting every little minute bump in the playa, with cool blue shadows on the other side of each glint of gold. The painter in me looked with amazement at this complex display.

Great way to appreciate this cosmic environment!

Tools

I received a good quality camera tripod as a graduation gift that Brian picked up at Costco. The intention is to help me take better slides of paintings, which was always a problem to get professional results. It was tricky to line up a camera lens with the center of a painting, resulting in skewed trapezoidal images. This tripod definitely helped overcome bad image taking (and years later into the much more manageable digital camera age.)

Meanwhile I found a more enjoyable use for it at the family house over in Concord. Remember the refractor telescope my dad acquired a few years back, with the crappy little tripod? I tooled around with Brian's garage shop, cutting a U shaped piece of hard oak wood, to insert metal thread for the telescope bolt, precision fit to the new sturdy tripod. Now the neglected telescope is steady enough for outdoor

viewing! Adjustable for height too. It now is good for the Moon (far from being as sharp as Dobson's handmade reflector 'scope) and Saturn's rings were visible! I was stoked! A significant amount of chromatic aberration showed through the cheap lenses, and targeting on objects was difficult to do with this low power, but I still enjoyed working to find these new views. I found the Orion nebula and the Andromeda galaxy, as faint, undefined patches, and like the dim Halley's Comet years previous, I was excited to find something so many light years away, and to read about how enormous they are!

The telescope remained mounted on my tripod, until I would occasionally need it for art documentation photography.

It stood near the front window inside of the Concord house for years. I never had it in my city flat, though I did take it to the desert in 1993. When brother Gary visited he took to it, out in the front or backyard. It was fair for a beginners 'scope, that I discovered years later just how incredibly vastly superior a good handmade reflector telescope is by comparison! [more about that in subsequent chapters ahead.]

Paintings get cosmic

Rising stars began showing up in the skies of norse ship series in the spring of 1990; a trend that I continue to develop for years. In early 1991 I did this painting, based on a stunningly cosmic dream I had, of these astronomical spheres converging to create an opening to another dimension. The millennia sped by, with a circulating phase

of moons changing as the years flew, as if riding a time machine in the sky!

It was epic. No doubt influenced by my astronomy studies, and thoughts of the upcoming total solar eclipse! [more on that soon]

Astronomy class at City College

Finally taking an Astronomy course for the winter / spring semester at CCSF, where I knew most of the content already, with the exception of studying distance via parallax.

It was okay, even though the instructor was a bit dry. We had a few good nights with Saturn seen through CCSF's large refractor telescope, and we studied parallax, and had the homework of tracking the visible planets that season — by drawing them as dots on grid paper. But not me, I made an oil painting!

I was daring back then. Bicycling across the hills of San Francisco while carrying a painting under my arm with one hand. The wind nearly pulling it and me into traffic! Well I brought it in, and the teacher didn't even know how to react. The class was outdone here, and reacted passively.

I always wanted to see a total solar eclipse.

Intensely so. I'd seen a few partials, but now was the year of one of the longest solar eclipses in duration would be over this continent. This is too irresistible to miss. Mexico was the center of the greatest totality. I thought of possibly traveling down there solo, but the better idea was to rally the Cacophony Society to potentially turn this into a

group “zone trip”! I must make sure this happens, or I will always regret it.

I also consider advertising for a ride share. Then Brian gets interested! I break out the atlas and we consider driving to Baja as the most direct route, but recognised that traffic might back up. I brought it up at the next Cacophony Society meeting at one of our favourite urban eccentric watering holes — Edinburgh Castle. John Law, Cacophony organiser and spirited motivator extraordinaire, suggests taking the cheap train to center line of peak totality on the mainland.

John Law indeed had the better idea — to take the cheap train from Mexicali to Tepic, where the peak eclipse would reach maximum of 7 minutes — one of the lengthiest eclipses of the century! John had good experience traveling that way, and his idea appealed. So we teamed up for meetings over my atlas, planning our route. Drive in Brians Jeep to San Diego, to stay at Bri’s good friend Dale’s apartment. The next day we’d drive to Calexico. Dale takes the Jeep, while we catch the train.

While planning, good Minneapolis friend Anthony became highly interested in our approach, and decided to fly out and join the party!

So before summer began, we had a plan mapped out for a zone trip of five participants! Here are notes of that truly amazing trek to the Moon covered Sun:

July —The great total eclipse of 1991. Recalling Zone Trip #5

“The Dark Side of El Zono Loco” [an anecdotal summary]

We drove off from Concord in good spirits at 2am in Brians Jeep to the Allman Bros on KFOG.

Hours later on I-5, we passed through LA briefly after sunrise, saw the smog, the Capitol records building and the Bullwinkle sculpture.

Waited at the San Diego airport for Tony who needed to get on a suit to re-board from Minneapolis with his special business ticket supplied by his brother who worked for the airlines. (why the dress code!?)

We drove to Mexicali to check it out for train access, then returned to get Tony. Stayed at Dales in San Diego and had a nice visit.

The next day.

Listened to Lawrence of Arabia soundtrack & Dead Can Dance 'Within the realm of a dying sun' while driving through the vast Yuba desert. We passed by many impressive boulders along the way.

In Mexicali, gave Dale the Jeep. We entered a new foreign zone! We got in line for the train, waiting for hours.

The price? 42,600 pesos = about 8 dollars!

Intrigued that there were drums illustrated on the paper money!

Was unable to board the train in time for decent seats.

Suffered a sleepless night with stench and discomfort, with my bag as the chair... what an experience!

Getting up to look out from between the train cars. Desert stars over saguaros. The waning Moon, Scorpius looking big, the Milky Way.

Next day was better... felt in a dream, with cerveza flowing and cactuses seen for miles in desert heat.

Reading Arthur C. Clarkes 2061 on the ride.

Shared seats with a kind family, grandma, young mom, son and little baby.

Ate only trail mix, loaded in my bag.

In the town of Benjamin Hill on a stop, a local guy with a boombox and guitar gets on and plays some jolly tunes for us.. I only had a small handful of pesos to give.

*At a night stop at a station (Vespugio?) for over an hour, kids directed us to an iron crank faucet between the trains and doused with refreshing water.. aaah ! so nice after riding the stink train for a day and a half. (memory like a dream)
Braved my first taco at this stop.*

Next day, more jungle, less desert, the landscape became more interesting and the train cleared out some.

George Washingtons profile likeness was spotted in the distant mountains. (Jon A spotted this first, we had a good laugh!)

Laughs have kept this train ride bearable! (and Tecate)

The train slowed down in these parts. Thatched huts with satellite dishes, and some not so luxurious quarters in abandoned trains along the way.

Mangos picked along the way by locals and handed out!

In Mazatlan, braved some local shrimp with plenty of hot

sauce. A local gave a wild laugh when I poured it on. A Zone trip moment!

Rode into Tepic very very slowly.

Arrive in Tepic! The locals bid us heartfelt 'Adios' with handshakes and smiles.

5 unwashed grungy gringos with diverse hair styles unloaded their weary selves off of the stink train.

Locals yelled 'Hey peace, man' in lighthearted jest at some of our hippie style.

Tepic El Centro a short walk away.. a gorgeous square! The Spanish plateresque style catholic cathedral was beautiful. We enjoyed wandering the town.

Found a hotel, split the rooms and slept marvelously well.

Tony had some Moody Blues, Floyd and Donovan on a tape player.

There was some calm rain that first night.

Next day of exploring Tepic and research for the trip to the eclipse..a VW bus was rented and a trip to the ocean was had! to the town of San Blas, met up with 2 guys from Colorado, and a Belgian eclipse chaser. Swam in the warm waters, drank plenty of Pacifica cerveza, having a great time! it was a vacation resort town feeling.

Found a different hotel in Tepic.

7/11/91

Tony got us up to a Donovan tape..groovy!

Went to the 'Wendas' (?) cafe for breakfast, hanging around with US expatriate, Jeff, who we met there. He was once in the Patty Duke show, and loved his photos of young local girls.

Off to the highways in search of the dark side of the zone. Leaning towards the coast, we began early in a burned area clearing , with another eclipse chaser (Paul, a Texan) with telescope and photography setup. The family who apparently owned the land, passively let us go up the hill.

*Through the #14 welders glasses, we began to notice with pure joy; first contact!
Also noticed invading clouds from all directions. (can you say Heavy Cumulous Thunderheads?!)
We wisely left.*

*In high hopes, we wished for a miracle of speed and direction, Brian asks what was the ancient Aztec chant that calls up the Quetzalcoatl? I responded incorrectly with “Cal Cal Coon!” *
So we all began chanting the chant.....
”CAL CAL COON, CAL CAL COON, CAL CAL COON”*

*Just then, the omen bird flies in front of us for about 50 yards: a raptor with a 6 foot wing span! realized in total visceral expression of our loud voices raised in united surprise!
[* We were discussing this with Jeff in the restaurant the day before, but actual chant was “Koo Kool Kahn”, that I recalled it incorrectly as “Kal Kal Koon” during those moments in the VW.]*

Zooming through the jungle and onto the main highways, dissing our San Blas plan, we headed north towards Tuxpan, the exact center line of the eclipse.

Racing the clouds, high anticipations by us all and expert driving by Melmoth.

I looking out of the VW window, up through protective lenses watching the eclipse build. Moon slowly covering the Sun. Many minds working on a rapid plan of direction, successfully!

*Careening down the road, the VW bus door handle is broken off by Jon A in tense anticipation! **We all laugh!***

*Surreal lighting as we veered to the tiny jungle town of Yago, stopping along the way for some pre-eclipse pics, then decided to go forward yet, to the train tracks.. **The point of arrival was made!***

Kids on a stack of railroad ties, darkened skies, and one New Yorker was already there. We had minutes to go for totality! Merely a thin crescent of the Sun left visible.

*Welders glasses about to be temporarily jettisoned, as the diamond ring effect gives way....! sparkly sunlight shines off of the side of the moon; **beautiful!***

A rapid blinding spot in my eyes as that occurred, then quickly readjusted to view the total eclipse of the sun.

Dusk had become dark, as the stars and planets Mercury, Jupiter and Venus appeared in a fine line to the east.

A 360 degree glow around the horizon under the dark noon sky.

Pigs squealed, birds chirped, crickets sounded.

We were in the room the size of the sky, and some one turned a light off.

The corona around the moon ! Words fail to properly depict.

7 minutes of astronomical bliss. A miniature eternity for an eclipse.

I drew a sketch of the eclipse live, watched the horizon, saw the amazed faces of others, Tony played a snippet of Eclipse from Pink Floyd's Dark Side of the Moon, We examined the corona, pondering the phenomenon as it occurred. Heck, I drew a live sketch of the eclipse! Amazing how there was enough time to do these things in one eclipse!

A GRAND SUCCESS!

As the eclipse waned, we followed this by going to the swimming hole nearby, with the gang of kids we'd just had the extraordinary cosmic with. Arriving at the water, we were suddenly in a massive downpour, and excellently timed! We had clear skies for the eclipse, and now two hours later it was pouring like a monsoon. The dozen or so local teens were showing off their diving prowess from the trees, and John Law joined them in being a daredevil.

Soaked in the rain, Brian and I shared a moment of exotic wonder, while eating freshly picked mangoes – as if we were starring in an adventure movie with a happy conclusion.

When the rain stopped, we had a little parade to the small town center of Yago, where the adults were now out of their hiding.

What a great day – one of my [and everyone else's who was there] best ever !

*We took a bus from Tepic back to the border, spending a bit more, but very worth it for the added comfort and time.
Met Dale in San Diego after enjoying Tijuana. After staying at Dales, we found out that one of us brought in a stowaway scorpion !*

When home, I immediately began a painting of the eclipse.

Burning Man 1991

Returning to the playa after a year of anticipation!
Arriving at dusk, to a stunning waning Moon rise on the playa, that resembled a nuclear explosion while low across the playa. It was a cosmic first night out there on the empty vastness of the playa, with only a few of us present. A great start to a magic week.

The evening of the burn after being there for a few days was a perfect desert night, the party went into the wee small hours, and the burning man embers glowed on the ground for hours.

I took some quality solo time in, by walking way out on the playa under a thousand stars you felt you could reach up and touch. Then the rising of the waning Moon, in still, windless silence...and the occasional haunting sound of a distant train horn/whistle.

That was only 1990-91

My knowledge of the visible Northern hemisphere night sky is strong and steady by this point. Years of looking up at stunning western skies,, checking constellation maps and

the annual orreries gracing my wall, an Astronomy course, and experiencing totality of the longest solar eclipse of the century! I didn't call myself an astronomer — or even an amateur — just a curious artist deeply fascinated by the observable universe.

This interest lived on throughout the 90s, deserving a brief chapter before getting on with the big stuff in the 21st Century!

Dean Gustafson, March 2021