

The Socorro Magma Body

Portal to the D’ni Cavern

—Ainia, 2014—

Introduction

For part two of my presentation, we are proceeding into an overview of my New Mexico investigations of the Cleft caldera location. I will be speaking primarily from an In-Cavern perspective, though must start with a brief Out-of-Cavern introduction.

I began this project with a fairly simple premise, that the worlds and story of the D’ni were crafted by two master storytellers named Rand and Robyn Miller; and as a consequence, they ensured the storyline held together and made sense.

We know Rand in particular spent a good many years working on this. RAWA has stated that when he started at Cyan Worlds back in 1992, Rand already had a cohesive and detailed D’ni history and storyline laid out; and that RAWA peppered Rand with countless questions about the D’ni, their history and Ages, and their cavern here. I strongly suspect that this exercise is what earned RAWA his role as official D’ni historian and canon guard.

Rand has talked about and demonstrated his interest in blending the D’ni story with our “real life” world. Not only is this the premise of Uru, but it was further underscored when he had Jeff Zandi attempt to start the Preafter Alternate Reality Game at the 2001 Mysterium. This ARG was intended to be a lead-in to the Uru launch two years later, though wound up getting a late start and seems to have been

The Socorro Magma Body—Portal to the D'ni Cavern

only partially completed by Uru's launch date (according to Rand, there's still a missing Preafter spiral in the wilds of New Mexico).

Thus, I have been examining all the evidence we have at hand with a focus on gleaned any details that provide clues about the Cleft location. The tricky bit is in knowing where to draw the line between artistic license and evidence. RAWA has stated that the five Myst games are re-creations of historical events and so were limited by available game/computer technology and the need to tell a comprehensible story.

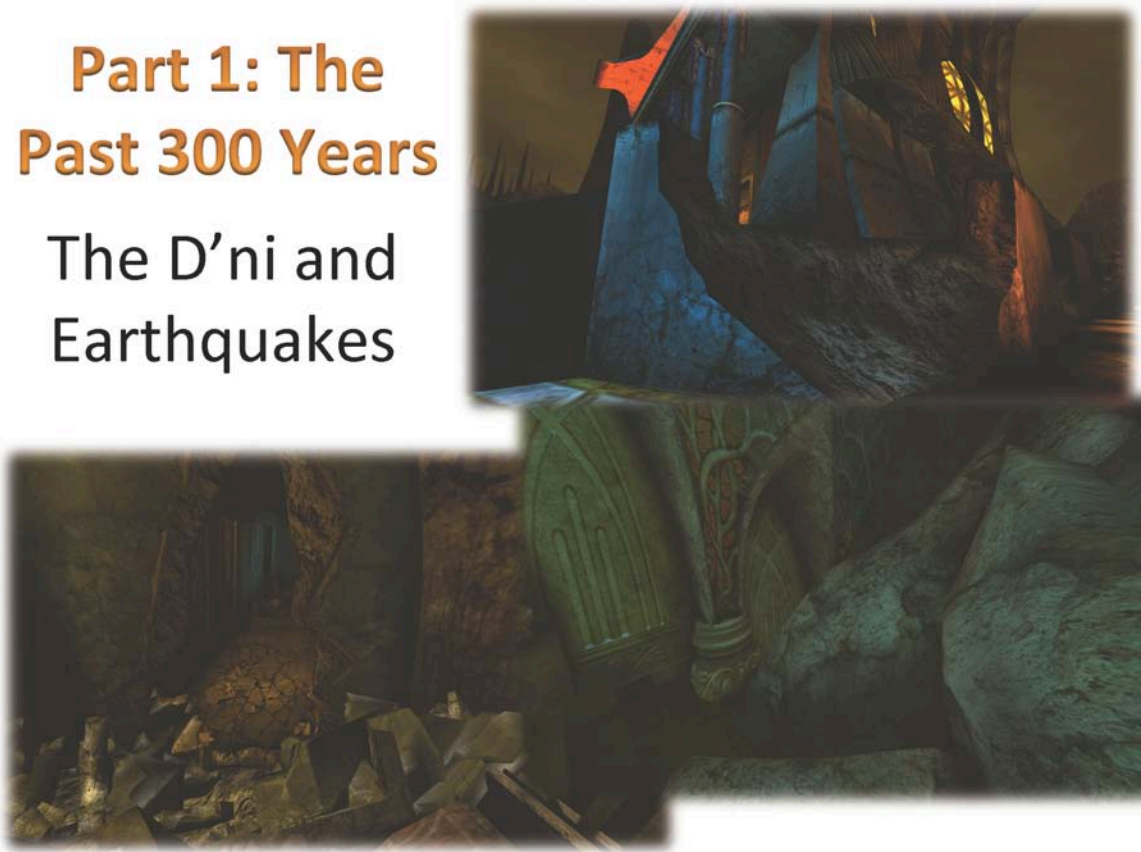
This is further complicated by the three books, which are brimming with inaccuracies known as Wingrovisms. This resulted primarily because David Wingrove was given only limited information and was expected to "fill in the blanks" on his own.

However, Uru is different and is intended to be canon in itself, which means that the only evidence we can rely upon at face value is what we see for ourselves in game. The slides that follow are my best attempt at sifting through all this information, using it to narrow down the potential locations for the Cleft in New Mexico and then conducting research road trips to those locales.

Part 1 The Past 300 Years

Part 1: The Past 300 Years

The D'ni and Earthquakes



As we can see for ourselves, there is plenty of major damage in the cavern today. [END OF AGES](#), while being a re-creation of Dr. Watson's quest, also provides ample evidence of damage, pinpointing it as quite probably caused by earthquakes. Dr. Watson documented mild tremors throughout his explorations of the Great Shaft and K'veer.

Cavern damage before DRC
rediscovery: Great Shaft,
the quakes of 1682



The damage we see in the Great Shaft was documented in the [BOOK OF TI'ANA](#) as caused in 1682 by a series of massive earthquakes, which resulted in severe structural damage just when the Surveyors were finishing their official passage up to the surface. The Five Lords had the Surveyors repair things as well as they could and then seal the shaft at the surface end.

What we see for ourselves in the [END OF AGES](#) Great Shaft is significantly different from what we see in Uru. Notably, the damage documented in this slide is absent in Uru, along with the interior superstructure with its firemarble lamps, implying that in Uru we are somehow seeing an instance of the Great Shaft during its construction instead of in present day.

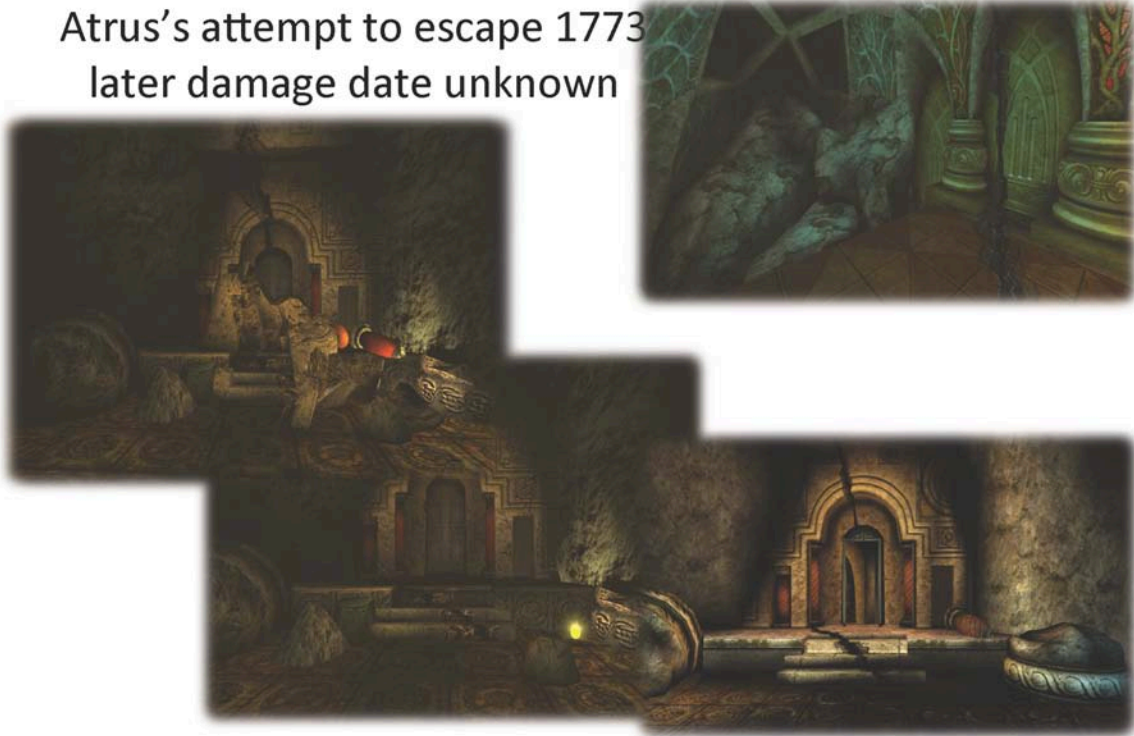
In examining the [END OF AGES](#) damage not repaired by the Surveyors, it appears that a huge chunk of the ceiling broke away at the shaft top and fell downward at a slight angle, destroying the spiral stone pathway in several places. My theory is that rather than repair the pathway, the Surveyors simply altered their elevator installation work in progress. They had begun with plans for a single elevator spanning the entire three-mile shaft length; in D'ni Tiwah, we can see the rails already installed to the left of the tomahn doorway. The Surveyors instead installed a new elevator landing floor as a means to repair the topmost damaged path and used it as the new end-point for the major length of the elevator path, installing a new set of rails there. They then shortened the existing elevator rails and continued using that set for the final short stretch to the shaft bottom.

Cavern damage before DRC
rediscovery: Ae'gura,
quakes at the fall, 1744



There is dramatic damage throughout the portions of the cavern to which we have access. The [BOOK OF TI'ANA](#) documents this happening on the day of the fall, in 1744. The first two earthquakes presumably were the result of bombs used by A'gaeris and Veovis to open a great crack in the cavern wall through which they pumped their poison gas. The third was by far the most powerful and damaging and, I believe, was the result of their tampering with the nearby magma chamber. As we'll see later in this presentation, triggering activity there would have potentially devastating consequences in the cavern and beyond.

Cavern damage before DRC
rediscovery: K'veer,
Atrus's attempt to escape 1773
later damage date unknown



According to the [BOOK OF ATRUS](#), when Atrus was imprisoned in the K'veer chamber in 1773, he attempted to escape using a small hand-held D'ni rock-cutter he found in a corner there. This had disastrous results, causing the small crack he was exploiting to become massive, running across the ceiling, compromising another doorway opposite, permanently jamming its doors. The ceiling collapsed partially, felling the two large columns at the doorway Atrus was attempting to open.

We see this rockfall and damage in several subsequent states. Yeesha's Path of the Shell journeys brings us to two different versions of this K'veer room. The first version, shown in the upper left, we see only briefly before Yeesha links us to the cavern and shows us Kerath's arch aglow. Afterward, she links us back to K'veer, but to a later version shown in the middle.

The version we see in [END OF AGES](#) is the lower right, where the rubble is cleared away completely and the doorway is opened. This activity is documented in the [BOOK OF D'NI](#), happening a few years before Yeesha is born. This is the first time since Atrus's earlier disaster that other parts of K'veer become accessible from this chamber.

The [BOOK OF D'NI](#) makes it clear that K'veer as a whole was easily accessible to Atrus and his companions, which means that the rockfall we see today which blocks off the staircase at both ends, must have happened at a later date, most probably the result of another major earthquake. The likeliest ones we have on record from more modern times is the series in 1906.

Part 2 The Past 150 Years

Part 2: The Past 150 Years

Life in Socorro



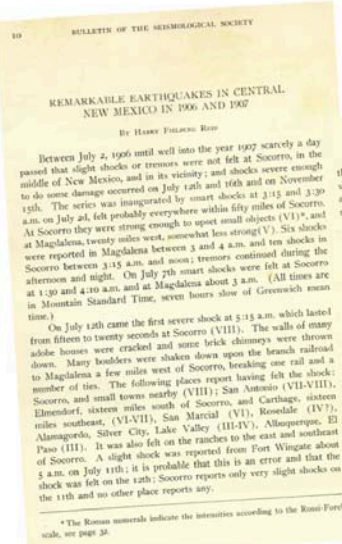
Earthquakes weren't recorded by surface dwellers in New Mexico until the middle 1800s. The first such recording was an entry in a soldier's journal, dated 1855. The ones afterward were documented officially, using an outdated magnitude measuring system. The data on the following pages has converted these old magnitudes to the system we use today.

Socorro began as a Piro pueblo named Teypana. When its residents kindly provided food and water to a group of starving Spanish settlers traveling northward out of the Jornada del Muerto, the Spanish referred to the pueblo as Socorro, meaning succor or help.

By the middle 1800s, New Mexico was witness to armed conflict aplenty. The Mexican-American war, 1846-1848, was the tail end of the long process of New Spain territories successfully declaring themselves sovereign states. California, Arizona, New Mexico and Texas all were claimed by Mexico, whereas American troops declared them to be American territory. Shortly after this was settled, the American Civil War reached New Mexico in the 1860s, punctuated then and later by the Apache wars.

The Socorro area during those times saw troop movements and two forts built and occupied; and prospectors mining for silver, gold and copper.

Socorro documented earthquake history since the fall



EARTHQUAKES IN CENTRAL NEW MEXICO IN 1906 AND 1907

In seeking the origin of this series of shocks we naturally examine the geology of the region. The Rio Grande flows in a broad flat valley on old river deposits hundreds, and in places perhaps more than a thousand, feet thick. The valley is limited a few miles from the river on both sides, by a series of mountain ranges. The whole region



Map of New Mexico showing the localities of the earthquakes of 1906 and 1907. Intensities (R.F. scale) are indicated by Roman numerals. Towns marked with a cross reported the shock of July 4 or July 12.

is cut by many faults. Flows of eruptive rock have taken place since the Tertiary Period; the Socorro Mountains, immediately west of Socorro, are eruptive; and very recent flows have occurred near Socorro, near San Marcial and elsewhere.

TOWN BEING SHAKEN DOWN. Almost Continuous Earthquake Shocks at Socorro.

SIL. PAGO, TEXAS, July 14.—Shaken continually for two days by earthquake shocks, which were counted up to fifty-two, practically two-thirds of the town of Socorro is falling down. The Court House is in ruins and the people of the town are in terror. Monday the shocks began in earnest, and since then the town has hardly been three hours without a tremor of some sort. Walls are cracking and falling. Women and children are being taken out of the town on horse cars which have been sent by officials of the Santa Fe Road. The railroad service has been stopped, however, on account of the fact that the trestles of bridges have been damaged and bridges from the mountains have been rolled down on to the tracks, and trains have been compelled to stop until the large stones could be removed. The water in the warm springs at Socorro has risen 10 degrees in temperature since the quake began. Near the town is a reported extinct volcano. Socorro is 100 miles north of El Paso and has a population of nearly 2,000.

SANTA FE, N. M., July 15.—All night long the tremor after another passed over the lower Rio Grande Valley, keeping the people at the highest tension. But few have slept in houses for the past three nights. Observers reported this morning of smoke in the lava fields in the direction of Alamo Garcia, probably from hot springs or other volcanic manifestations. A dreadful fire raged over the valley during the night, adding to the discomfort of campers.

The 1906 earthquake near Socorro was the cause of a sequence of 100 tremors from January of 1904 through November of 1906, with the strongest earthquake occurring on July 12 and 13, and November 15. Although the quakes were very strongly felt and caused significant structural damage, no reports in the western press (N.Y. Times, July 15, p. 1, above) were highly sensational. The report of Socorro quickly found its way to the papers that the city had not actually been destroyed (N.Y. Times, July 20, p. 2, right). Presumably there were no reported fatalities or serious injuries.

EARTHQUAKES IN TEXAS MAY GO ON FOR YEARS

Prof. F. A. Jones's View of Shocks at Socorro.

DAMAGE SLIGHT, MAYOR SAYS

Refugees Tell Different Story—Woman's Graphic Description of the Earthquakes.

SIL. PAGO, TEXAS, July 20.—Earthquakes have continued at Socorro, although the town is quieting from the panic which has prevailed since Monday night. The people continue to live out of doors, very few spending the nights inside their homes. The immediate area is largely of Indian blood and of the Chiricahua tribe, and during the first night of the earthquake were seen in large groups on their knees in the streets, praying for life.

The Colorado Telephone Company's building is said to have suffered the most damage. The shocks have not almost over, houses in the town in a dangerous condition.

Prof. F. A. Jones of the New Mexico University at Albuquerque attributes the cause of the earthquakes to the slipping of a great mountain mass in the Mogollon range, resting upon a bed of eroded clay, and says the quakes may spread over the entire Rio Grande Valley and continue for several years.

A Santa Fe train arriving four hours late, having been delayed by landslides thrown on the track by the earthquakes near Socorro, today brought a number of refugees from that region.

SANTA FE, N. M., July 18.—Mayor Bureau of Socorro this afternoon issued the following signed statement:

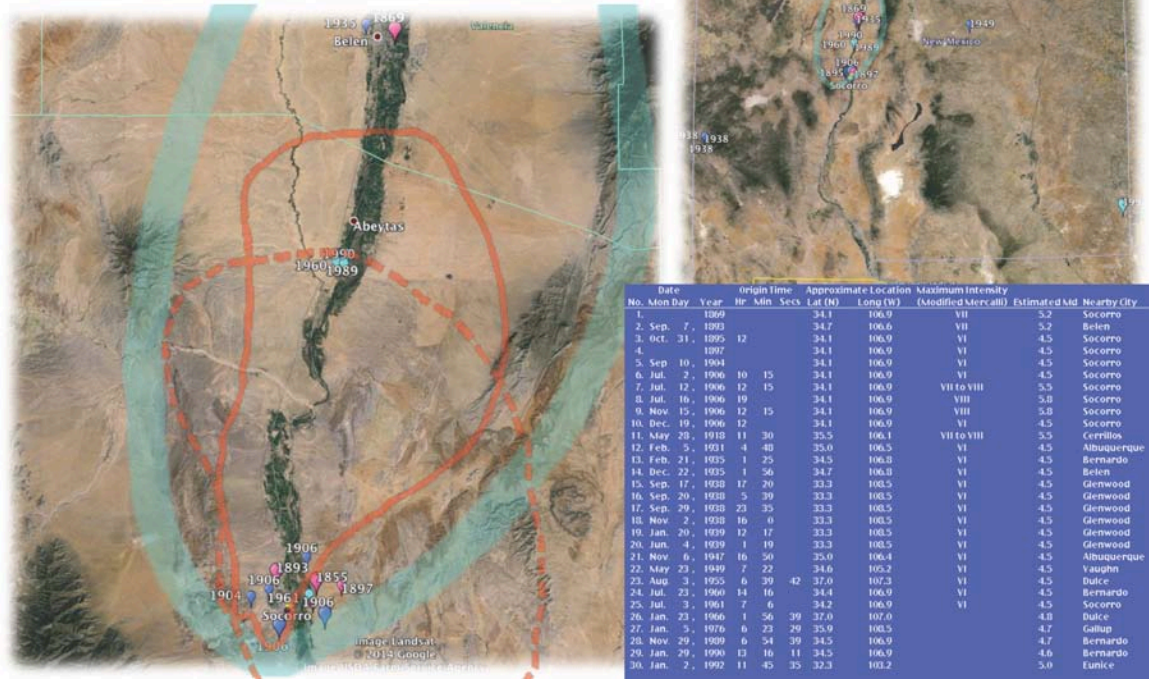
"The reports regarding the earthquakes at Socorro have been exaggerated. The damage to date being limited to the falling and toppling over of some chimneys and shaking of some of the walls of buildings not of a substantial character. The Court House is not injured, except by the falling of plaster from the ceiling and the toppling over of old chimneys. The Wheeler House, which is an old adobe building, has not been injured by the latest."



The series of Socorro earthquakes in late 1906 made sensational national headlines. Press accounts were greatly exaggerated by journalists who assumed that surely the earthquake's effects were on a par with the devastation wreaked in San Francisco only a few months earlier.

In actuality, the Socorro earthquakes caused only moderate structural damage and nobody was killed, though a few families chose to sleep outside in their yards until things settled down again.

Major earthquakes since 1855

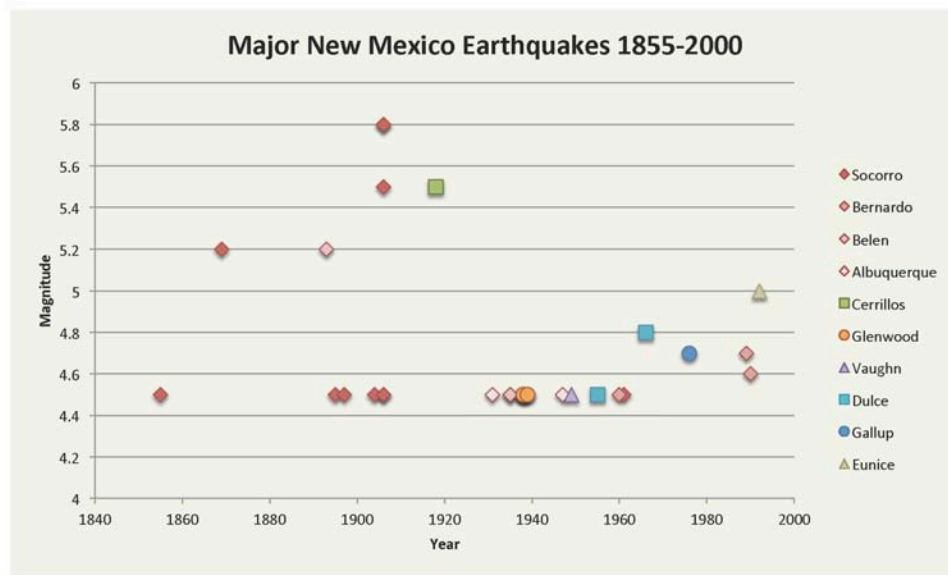


The major earthquakes (magnitude 4.5 and higher) for New Mexico are displayed on the upper right map. The plotted data is shown in the blue inset; I've added the 1855 earthquake to that data and plotted it here accordingly.

The earthquakes are color- and size-coded, with big pins showing magnitude 5.0 and higher. Pink pins show the years 1851-1900, blue pins show 1901-1950 and cyan pins show 1951-2000.

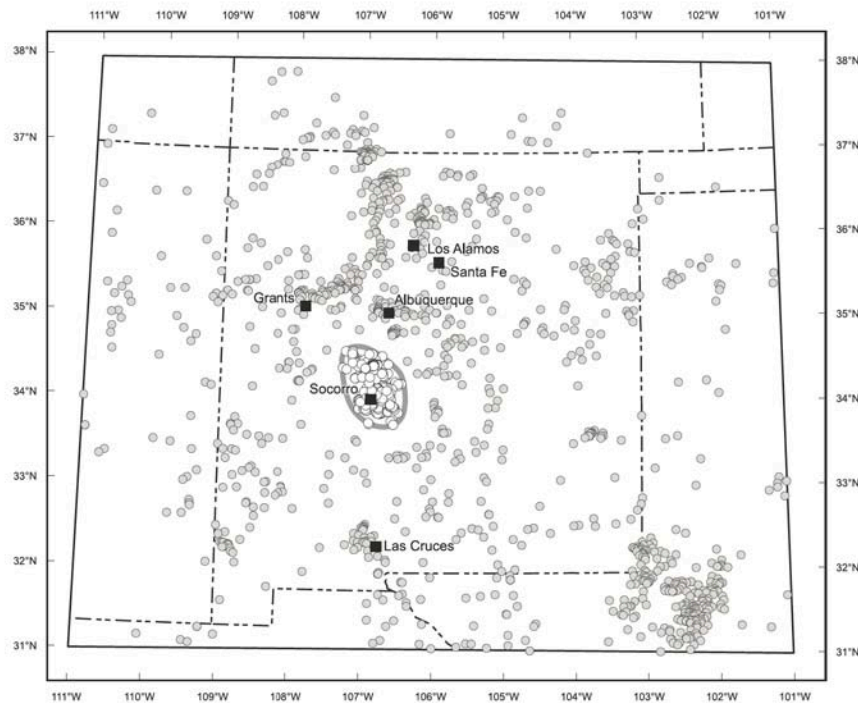
The left map shows a close-up of the Socorro/Albuquerque Basin area. In contrast to the rest of the map, there's an obvious long-term clustering of significant earthquakes in this zone.

Major earthquakes 1855-2000



Here's a scatter plot of those same earthquakes mapped on the last slide. The diamonds show all the earthquakes which occurred within the Albuquerque basin.

All earthquakes 1961-1995

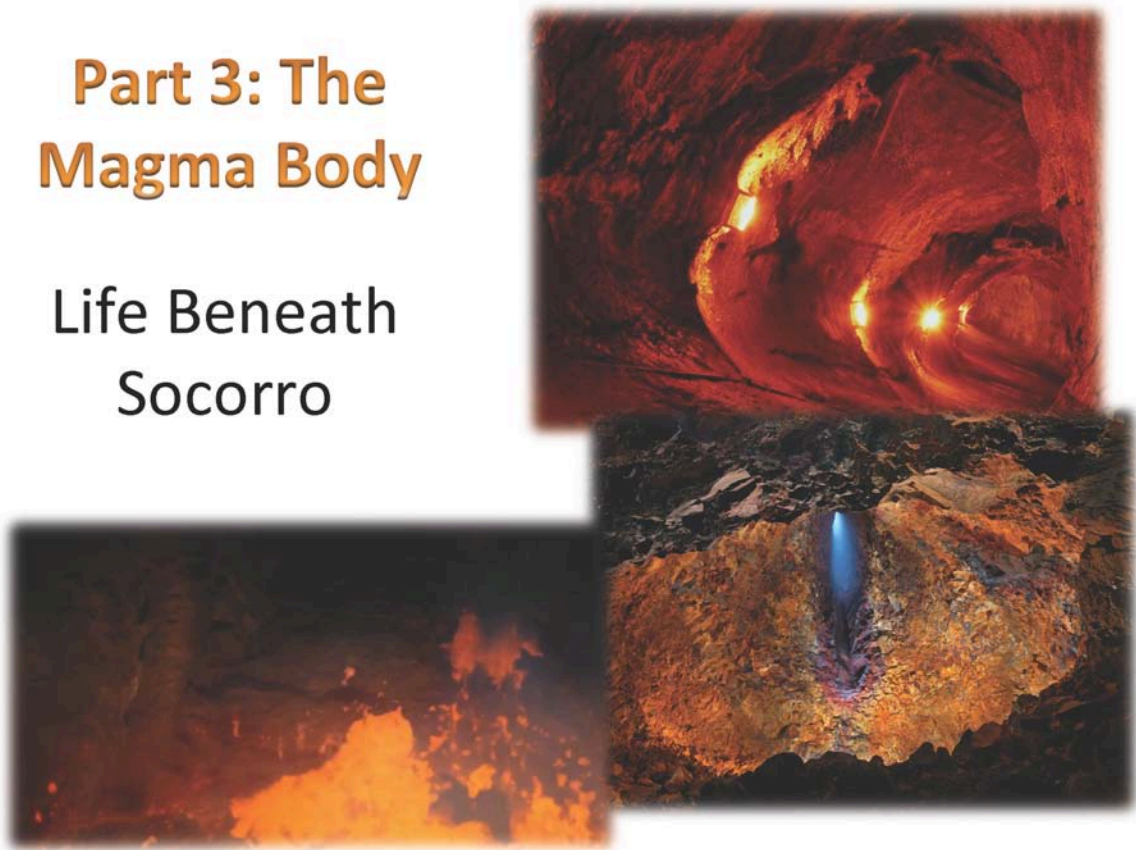


The New Mexico Institute of Mining and Technology was established in Socorro back in 1889 to foster mining education in the region. They began monitoring region-wide earthquake activity in the 1960s, at which point hard data about micro-quakes became available. As a result of this extensive data, in 1965 Allan R. Sanford first published the theory that an extensive magma body exists within a few miles of the surface in the Socorro area.

Part 3 The Magma Body

Part 3: The Magma Body

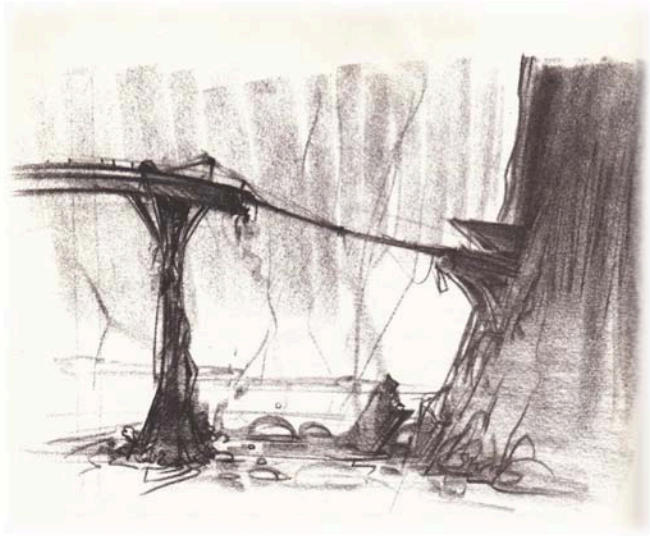
Life Beneath Socorro



So far as I've been able to learn, there are no existing photographs of the Socorro Magma Body itself. The images above show a lava tube in Hawaii in the upper right; a dormant magma chamber in Iceland in the lower right; and a CGI artist's conception of an active magma chamber, developed for Discovery Channel's Curiosity program.

These images should give us a rough idea of what the D'ni magma chamber most probably looks like.

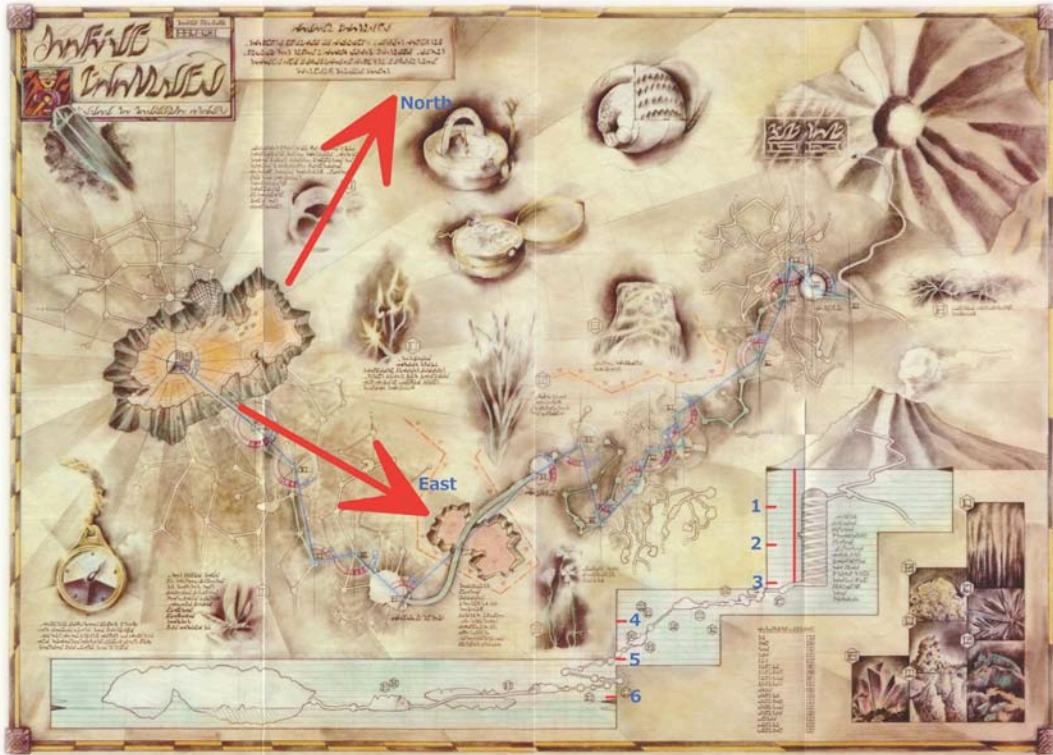
D'ni records



The known D'ni records of the magma chamber are from Atrus the younger's journal drawing, included in the [BOOK OF ATRUS](#), and Aitrus the elder's map, showing its depth and relation to the other cavern features.

I'm theorizing that not only were the D'ni exploiting the magma for its energy, but they had its management down to a refined science. I would guess the chamber was monitored by specialists constantly; and that A'gaeris and Veovis must have assassinated those on duty the day of the fall, so they could freely meddle with the magma.

D'ni records



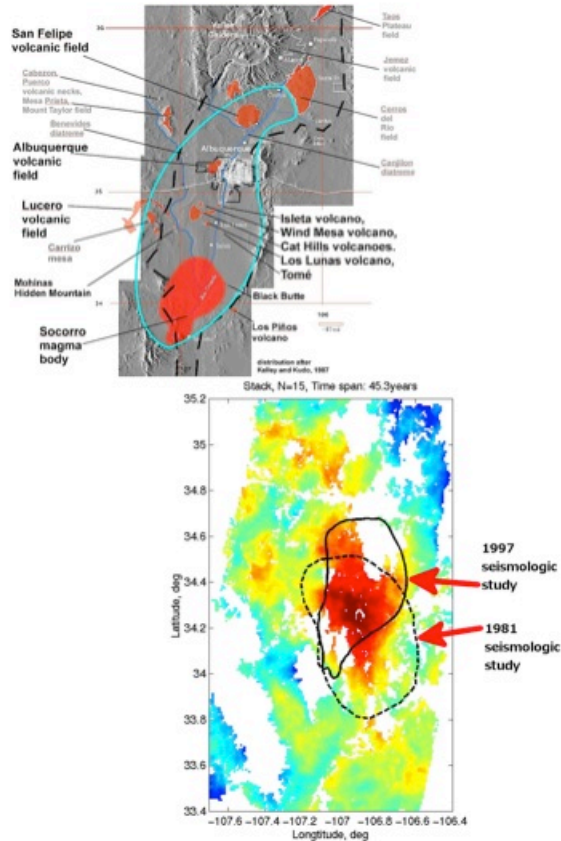
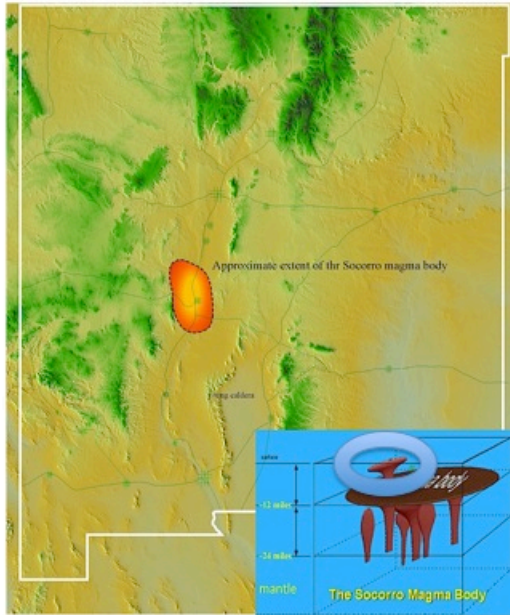
Aitrus's old map obviously is not drawn to scale except for the cross-section portions where he provided a vertical scale. So although the map isn't helpful for determining sizes and distances on the surface, it provides a relational layout of the various features as well as relative depths between the various features.

If we believe Esher was accurate, then we know that the shaft bottom is three miles beneath the surface, which then enables us to scale the depths of the other features. This translates to the magma chamber being just over six miles beneath the surface and the cavern being a bit deeper.

"It had long been a standing joke that the D'ni would never excavate to the east of the main cavern, lest they had to redesign the Guild House, but the truth was that the rock to the east was home to a stable reservoir of magma, slowly cooling over the millennia, from which they had long tapped energy." -Book of Ti'ana

If we trust Wingrove's above prose, then the directions drawn on the map above are roughly accurate.

Surface records



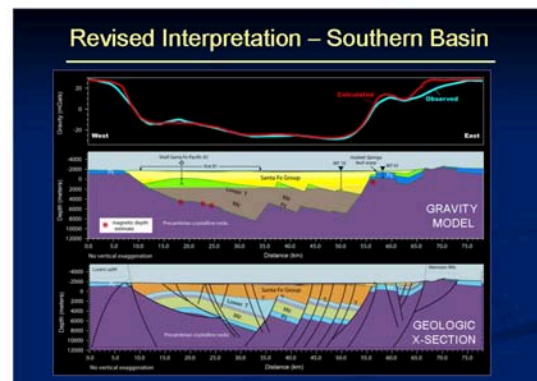
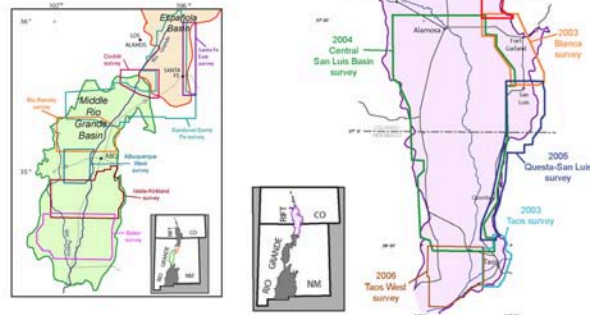
The surface records we have of the magma chamber are much less sparse than the D’ni. The map on the left shows both the magma body extent in relation to the surface but also a depth mapping on the inset, with the main magma body 12 miles deep. The entire body consists of a series of magma bubbles pooling at the main body 12 miles deep. But of particular note is the small bubble above that, which is at about 6 miles depth. I believe this bubble is the magma chamber recorded by the D’ni. And in seeing that it’s a small part of a much larger and broader magma body, it becomes clearer why tampering with the D’ni magma chamber would trigger a devastating earthquake.

Sadly, I haven’t been able to find the data source for the inset, nor determine the orientation of the upper chamber relative to the cardinal directions.

The upper right image shows the magma body and its relation to the Albuquerque basin and other nearby volcanic features. The lower right image shows two different shapes and extents for the magma body, measured 16 years apart. You will note that the other two images each use different magma body shapes, the left map using the older and the upper right using the newer.

So it appears that the magma body is extremely active, changing shape and location rapidly.

Rio Grande rift basins

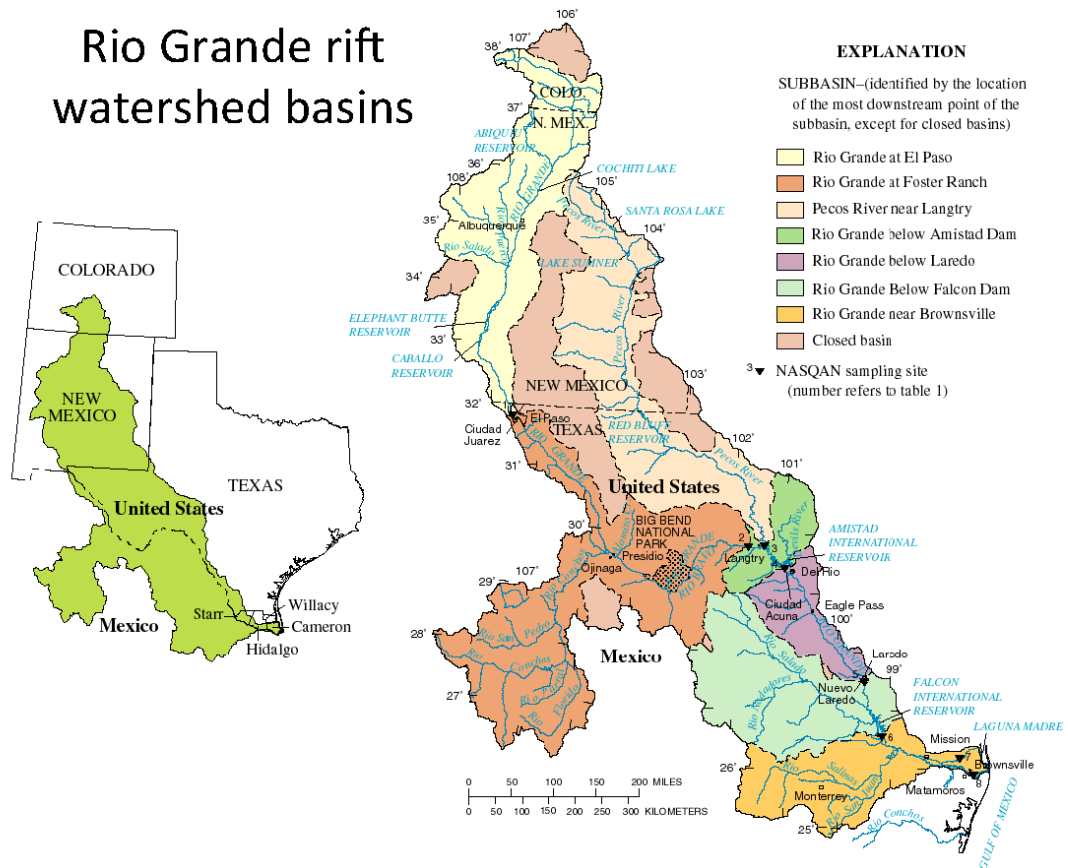


In looking at the Rio Grande Rift data, there are several basins associated with it. The northernmost, correlates with the San Luis valley, which spans southern Colorado and a portion of northern New Mexico. This will come into play again in this presentation.

The Middle Rio Grande Basin is also known as the Albuquerque Basin. Its cross-section is shown on the lower right. It's believed to have a depth of about six miles.

This would place the cavern at the bottom of the Albuquerque Basin and would illustrate the geologic phenomena that created the cavern and provides it with its water.

Rio Grande rift watershed basins



Building upon this, the known hydrogeology for this region shows a large interconnected network. It's important to note that this map shows data for much shallower depths than the cavern's location. But the data on this map will come into play again later in this presentation.

Part 4 Research Road Trips

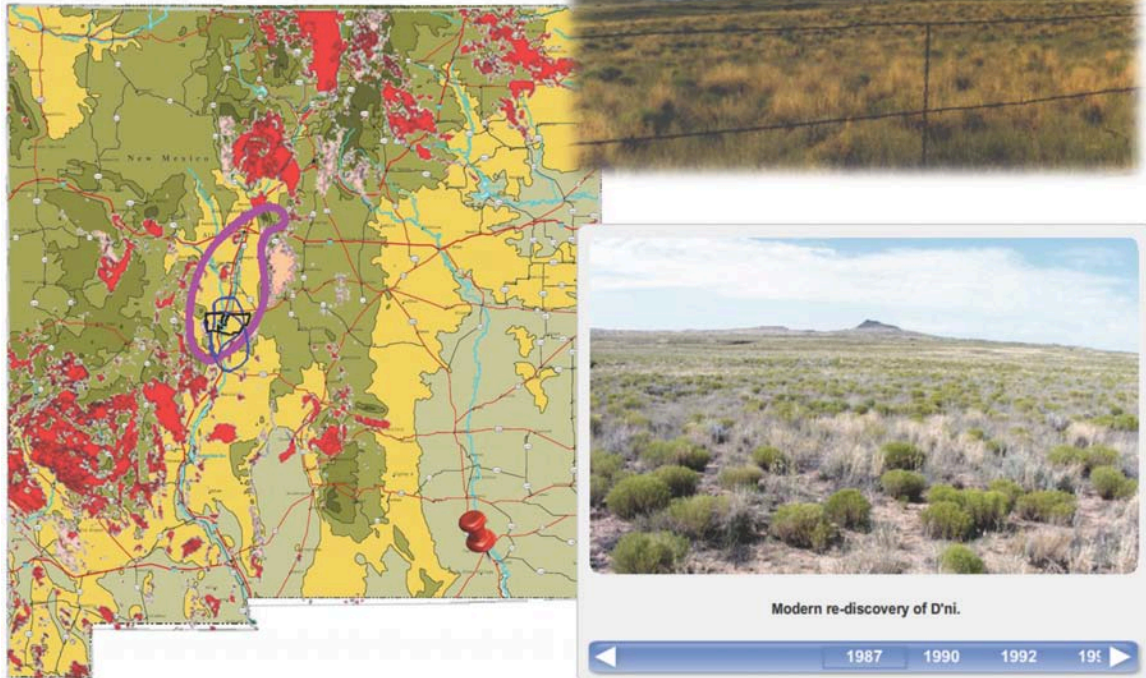
Part 4: Research Road Trips

The Hunt So Far



Based on all the data above, I've been able to narrow down a fairly tight region where all the data points converge. Above are a few photos of the best candidate calderas I've found thus far. Note that the upper right photo doesn't show a volcanic feature; however, its shape is a fairly good match for the caldera.

Narrowing down destinations



In scrutinizing the two DRC photos we have of the caldera, there are several noteworthy features. There are power lines stretching across the top of the upper right photo. The visible vegetation in both photos show it's within the Upper Sonoran vegetation zone at an elevation between 4500-6000 feet ASL. That elevation zone is marked in yellow on the left map.

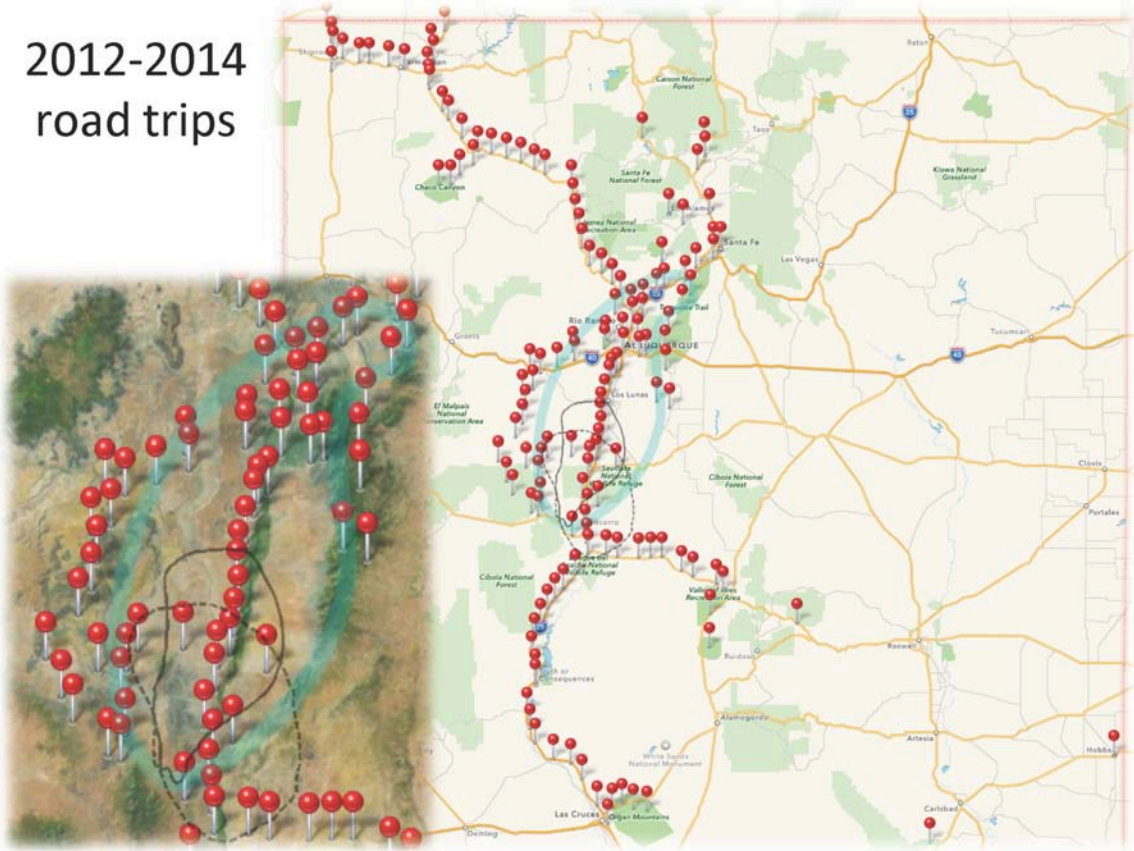
The next overlay shows the volcanic features throughout the state in red and pink. Here's the Albuquerque Basin shown in purple and the two magma body outlines in blue.

This last overlay shows the boundaries for the Sevilleta National Wildlife Refuge. I will talk more about this location in a bit.

And the final pin shows the location of Carlsbad Caverns, as a reference.

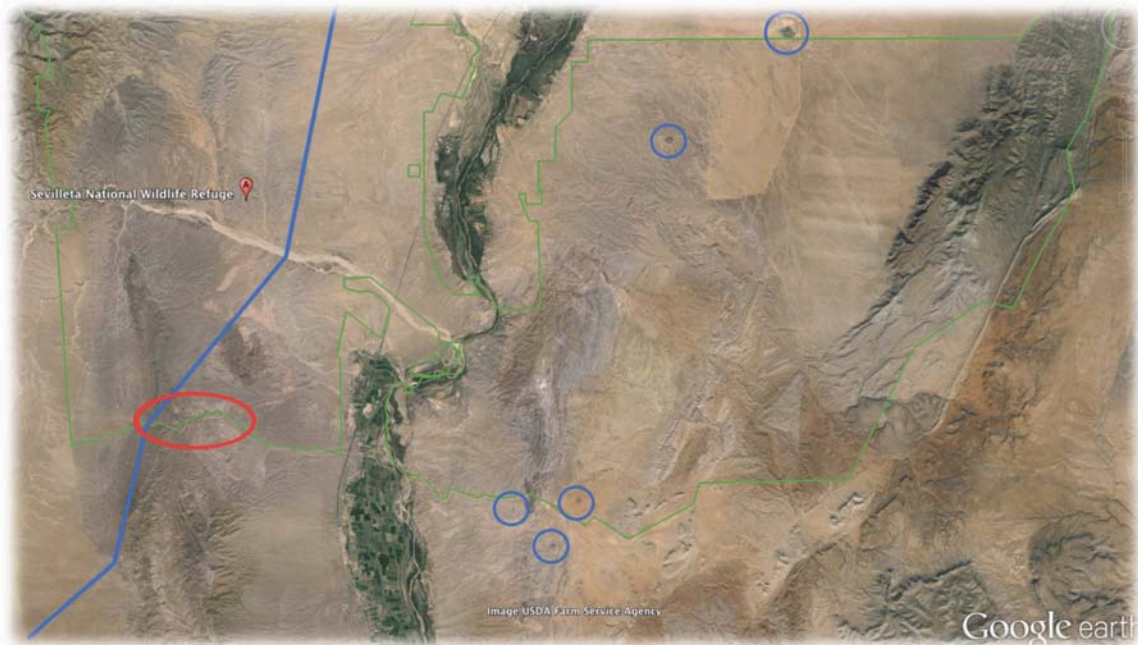
The Socorro Magma Body—Portal to the D'ni Cavern

2012-2014
road trips



This map shows the locales of all my research road trips, with a few oddball outliers for pre-research photos taken many years ago. The inset on the left shows a close-up of the Albuquerque Basin and Socorro Magma Body regions from the larger map.

Caldera candidates: Sevilleta National Wildlife Refuge and surrounding areas

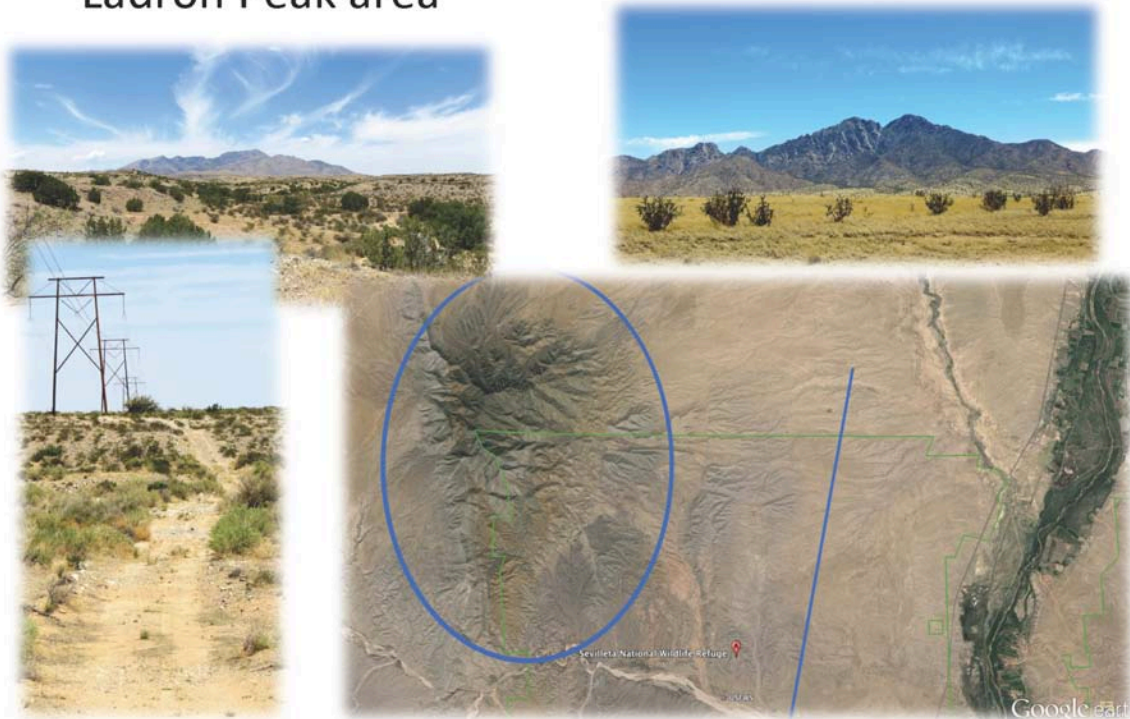


The Sevilleta National Wildlife Refuge is comprised of 230,000 acres of land stretching across the 30-mile width of the Albuquerque Basin and is right in the heart of magma body country. Unfortunately, it is not open to the general public except for a small visitor center and a few short hiking trails nearby.

The Refuge boundaries are marked in green on the map above. Lone volcanoes are marked with blue circles. San Lorenzo Canyon is marked with a red oval. And the major power lines through the region are marked with the blue line.

My recent road trips have been focusing on this area in particular; more about that in the next few slides.

Caldera candidates:
Ladron Peak area

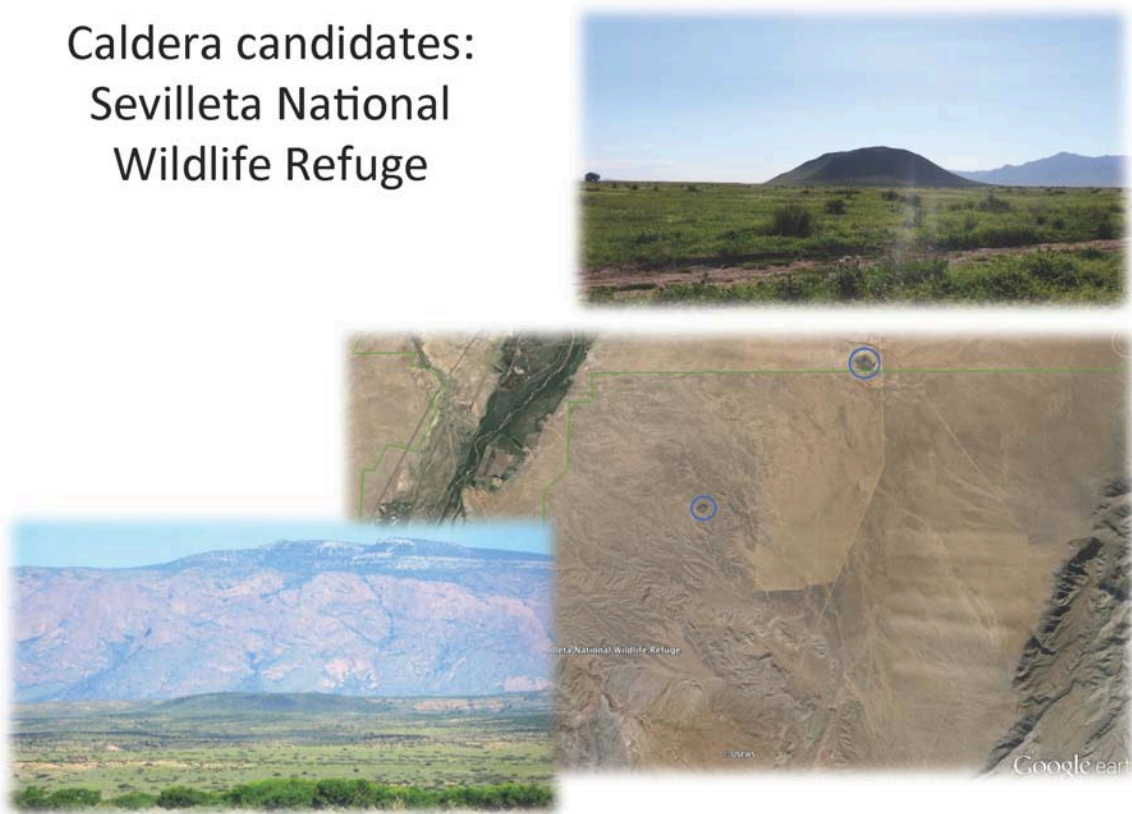


The map here shows the northwest quadrant of the Sevilleta area. My most recent road trip focused on researching the major power lines running north-south through this region. There are no major power lines east of the Rio Grande River, which implies that the caldera must be on the west side of the river.

The two upper photos show Ladron Peak from the east side and west side; Ladron Peak is circled in blue on the map.

I was able to follow the crude power line maintenance road south to the Sevilleta northern fence line; a locked gate prevented me going any farther.

Caldera candidates:
Sevilleta National
Wildlife Refuge



The map here shows the northeast quadrant of the Sevilleta area. There are two obvious volcanoes here. The largest, Black Butte, is just north of the Sevilleta boundary. The smaller is deep inside the bounds of the Refuge and has no known name.

The photos of each do not show the characteristic shape from the DRC images. But many other factors make them excellent candidates:

- They are in the right vegetation zone
- They are lone features in an otherwise flat landscape
- They are bounded by distant mountain ranges
- They are within reasonable walking distance of the old Camino Real
- They are near the Rio Grande Valley, the habitation area of the Zone-Tailed Hawk

Caldera candidates: Veranito Wilderness Study Area



The map here shows the southeast quadrant of the Sevilleta area. There are two or three volcanoes here, one near the southern Sevilleta boundary, the other two within the Veranito Wilderness Study Area.

Overall, these are poorer candidates primarily because they are clustered near other geologic features and so don't match the lonely open spaces we see for ourselves at the Cleft and caldera.

Caldera candidates: San Lorenzo Canyon area



The map here shows the southwest quadrant of the Sevilleta area. I explored this area for two reasons; firstly to assess the power line views at the southern end of Sevilleta. Frustratingly, I was unable to get near enough to the power lines themselves, though I have mapped out a good hiking access for a future trip. The pin shows the westernmost location I was able to reach within the canyon itself, which is just shy of the power lines.

Secondly, I wanted to explore San Lorenzo Canyon to see if it was a good candidate for Yeesha's childhood home Tomahna.

Searching for Tomahna



The above images show the Tomahna landscape as re-created in [EXILE](#) and [REVELATION](#).

And these photos were taken at San Lorenzo Canyon.

I've made two exploratory hiking trips there and each time, I'm more convinced that this must be Tomahna. Such landforms are quite rare in this part of New Mexico though are much more common farther north.

To find such a striking match in this vicinity where so many other bits of evidence converge is nothing short of amazing. Or possibly proof.

Evidence from [REVELATION](#) and a purported comment from RAWA suggests that the Cleft is only a few miles from Tomahna. If we take the evidence from the [BOOK OF TI'ANA](#) seriously, then it would be about an eight-hour walk away from the Lodge, which I have theorized is the location where Atrus built Tomahna for his new family.

Part 5 Wild Theories and Speculation

Part 5: Wild Theories and Speculation

Non-canonical
evidence



Here's where I throw in bits of evidence that seem relevant though are non-canon.
Buckle up, it's gonna be a bumpy ride!

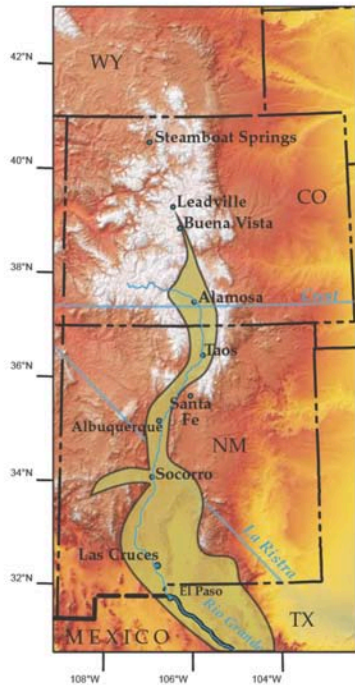
Magma bodies: Yellowstone and Socorro



The Socorro Magma Body has a big brother farther north in the northwestern corner of Wyoming. The size of the Yellowstone Magma Body is absolutely huge in comparison. The map on the right shows the comparative size of the near-surface widths. The circle on the middle image highlights the area shown on the right map. As you can see, it's tiny compared to the massive magma area beneath.

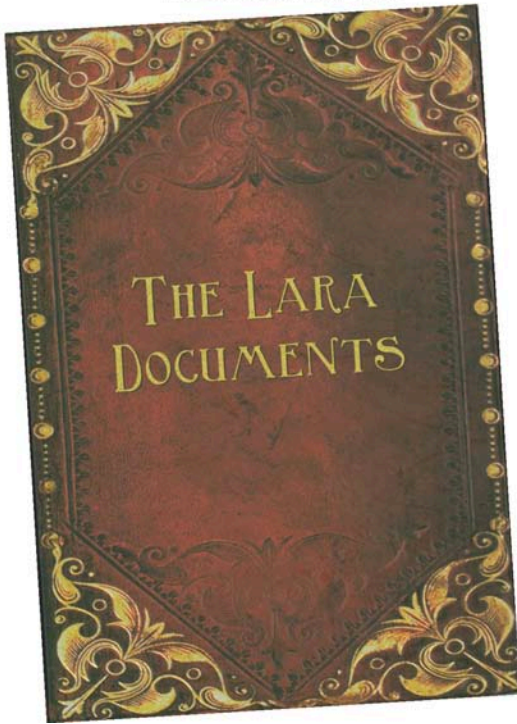
What if there's an important connection between these magma bodies?

The Rio Grande rift



So far as geologists have been able to document, the Rio Grande Rift's northern boundary is at Leadville Colorado. Many geologists believe it continues farther north from there, which leads to my wild theory that it continues all the way to Yellowstone and its magma body.

J.D. Barnes: The Lara Documents



As you've probably noticed on the prior maps, I've marked the San Luis Valley and Domasio Lara.

The Lara Documents were acquired in 2007 by fellow explorer J.D. Barnes, who solicited assistance from the explorer community in their translation. The story he was told about them says they were discovered in the late 1800s by a Mexican prospector named Domasio Lara, who found his way into some caverns just south of the San Luis Valley in northern New Mexico.

Although the correct vegetation zone that far north is quite small, there are volcanic features there too. Could there be a network of caverns stretching all along the Rio Grande Rift? Could the D'ni empire in our Age have been far larger than we yet know?

The cavern and the Naica crystal caves



To the south, there is a fairly recent cavern discovery near Naica, Mexico. Could this be part of a southern series of caverns related to those along the Rio Grande Rift? These caves are located within the Rio Grande watershed but thus far, I haven't been able to determine if they are part of the rift system itself.

Maintainers on the surface

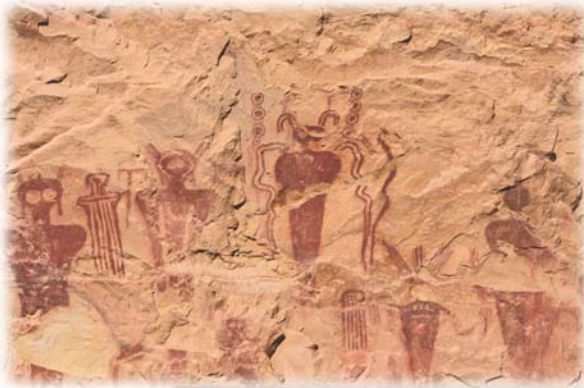


In my petroglyph surveys, I have been searching for signs of the D'ni, Yeesha or the Bahro on the surface. A particularly intriguing figure of legend is the Mudhead, a katchina character of the puebloan peoples.

Their legends describe the katchinas not as gods but as beings who came to the people from the mountains, stayed with them for a time and taught them the ways of right and wrong. The katchinas eventually left, but the tribes to this day still commemorate them in their ceremonies and traditions.

The resemblance between the Mudhead katchina and the Maintainer helmets is remarkable. All of which lends credence to the D'ni stories about the Maintainers who left for the surface during Ri'neref's time and never returned.

The Dineh and the D'ni



The resemblance between the Navajo name for themselves and the D'ni name for themselves is striking. And the Navajo creation stories are even more intriguing, particularly in their resemblance to the analogous puebloan stories.

All speak of their ancestors emerging from worlds below up into the world they live in today. The Navajo versions of these stories vary between having three or four former worlds the people emerged from. The first three worlds are common between the stories; the difference lies in the last. Some versions of the stories say the Navajo lived for a time in a black and white world before emerging into today's surface world.

Could this be a reference to a brief time in the dim cavern before the Maintainers came to the surface to live among the humans here?

There are also Navajo stories of insect people in the first worlds. And there are numerous examples of rock art in the Four Corners region (northwestern New Mexico and beyond), where beings are shown that many believe to represent the Ant People.

Could these be representations of the Bahro?

Suggestive rock art: Kadish, Teledahn and Maintainers



The Mudhead petroglyph above is from the Albuquerque area; all the rest are from Three Rivers, in south central New Mexico. Three Rivers is notable for its huge concentration of petroglyphs, having more than 21,000 located within 50 acres.

The images above show some D'ni-related glyphs, with Kadish's symbol in the lower left, Shroomie in the lower right, two Bahro harvesting a Teledahn shroom in the middle and the cavern city in the upper right.

Suggestive rock art: Yeesha and Preafter

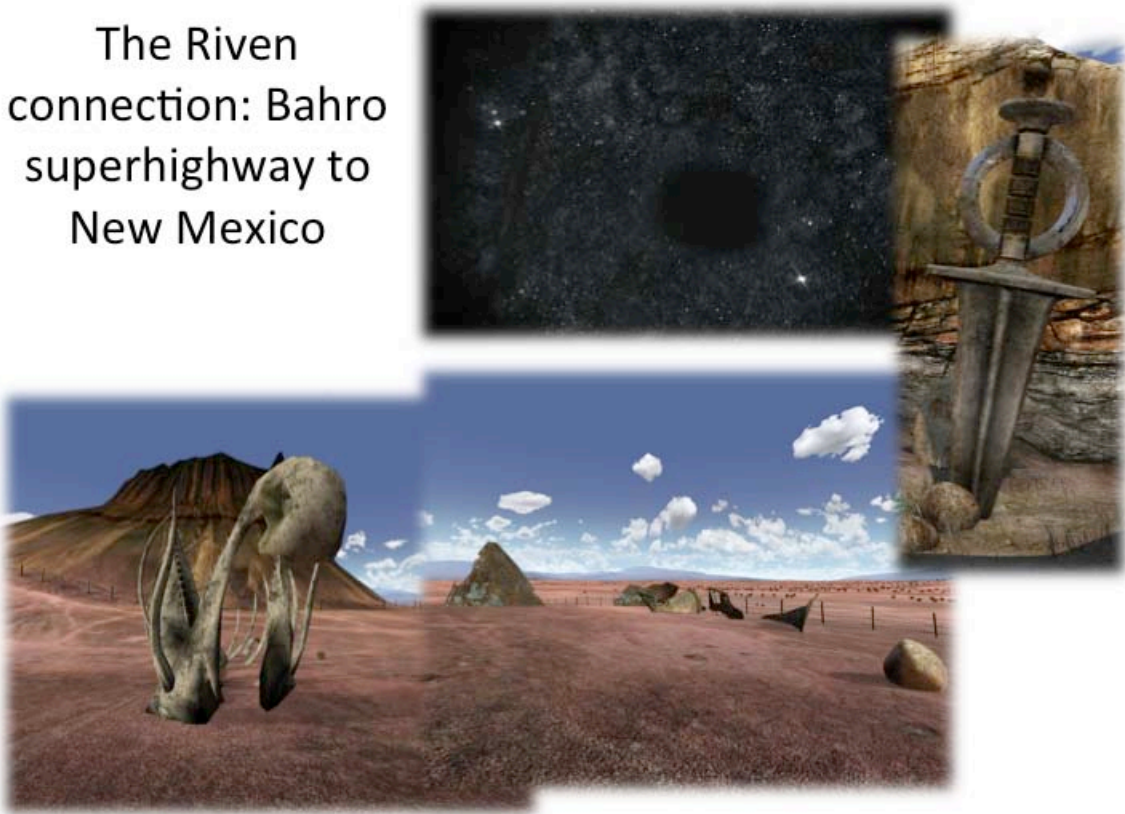


The above images are from Three Rivers and the Albuquerque area.

The woman in the middle could be a rendition of Yeesha. And the Crying Eye of the Sandias could be a human-made version of the Bahro crying eye symbol. My pet theory is that Yeesha painted the original back in the 1960s.

The Preafter spiral shape can be found on occasion pecked onto lava rock faces. I have yet to discover the significance of this shape in relation to the D'ni and Uru.

The Riven
connection: Bahro
superhighway to
New Mexico



And now to connect the dots to this year's Mysterium theme: Riven.

First of all, we can thank the Bahro for creating a direct connection between Riven and the Cleft. As RAWA himself says, it was not Written by Katran and Anna.

The daggers which mysteriously appeared around the island, and the lava filled fissures were made possible by her [Katran's] odd style – which I cannot explain. And although Catherine and Anna intended for the lava filled fissures as part of their plan to rescue Atrus while still leaving Gehn trapped in his Fifth Age, the Star Filled Fissure was not intentional or anticipated.

*To me, it remains the most mysterious object in all the D'ni histories. –
RAWA, 1997*

After completing Yeesha's journeys through the Bahro caves, it becomes more clear that the Riven star fissure is another example of a Bahro wormhole, for they all work the same way. A friendly, inhabitable island in the middle of deep space, a waystation between one place and another. A stable path between two places distant in location and even time.

The Riven
connection:
Moiety survivors
and the Apache



There is an interesting resemblance between Riven native male dress and that adopted by the New Mexico Apache. Both favored red headbands; although many New Mexican tribes used headbands, red seems to have been peculiar to the Apache men.

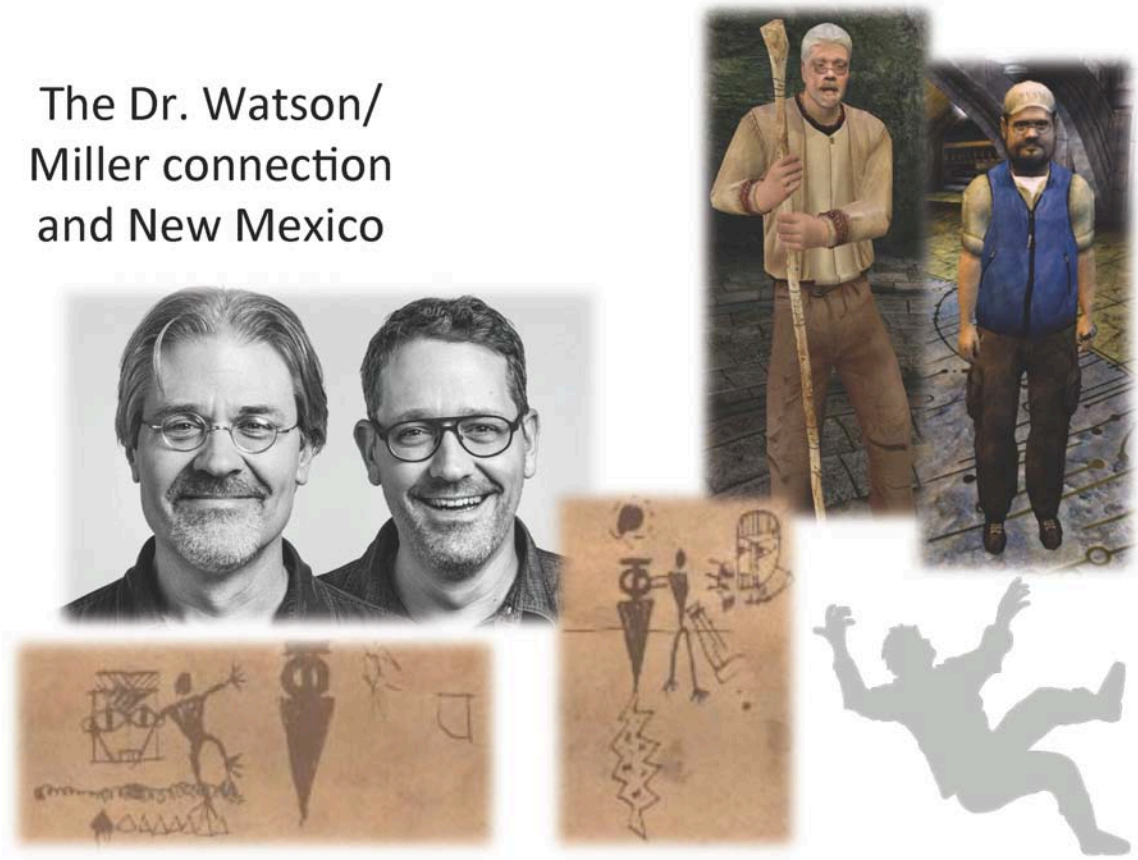
The Apache were a nomadic group of tribes in this region, related to the Navajo, until Anglo encroachment confined them to reservations. Both the Apache and Navajo emigrated from western Canada in about 1200 CE. I suspect the Navajo in particular mingled with the surface D'ni around that time and adopted some of their vocabulary and oral traditions.

I also suspect that the Apache adopted the Rivenese natives who landed here as a result of Gehn's experiments with the Star Fissure.

OOC note: Riven native actors: Ryan Miller (Moiety rebel), Ernie Whitecloud (Moiety rebel prisoner), Christine Steel (Neelah)

Ernie "White Cloud" Fragua (b. May 1943, d. August 2004) was a member of the Jemez Tribe from New Mexico. He had done numerous commercials, nationally and internationally, TV soap operas, music videos, documentaries and movies. He was a warm soul who lived humbly and humorously, always open to the magic of life. A Vietnam veteran, a trained dancer, a true Shaman. -IMDB database

The Dr. Watson/ Miller connection and New Mexico



So we can infer that people of Rivenese ancestry are living today in New Mexico. And here is a fascinating tidbit about the Stranger.

In [END OF AGES](#), Atrus refers to Dr. Watson as “my old friend”. Does this mean Watson bears a strong resemblance to one of his ancestors? Or even wilder than that, could Dr. Watson actually be the Stranger? Knowing now that the Bahro can meddle with time itself, it’s within the realm of possibilities.

And what’s the real connection between Dr. Watson and the Millers? Could they all share a common historical and familial connection via Atrus? I think it’s entirely possible that Katran went to great effort to locate her fellow Rivenese here on the surface once she and Atrus settled in at Tomahna. After all, Atrus did much the same in searching out the surviving D’ni across the Ages.

Which could mean that The Stranger knew the New Mexico Rivenese quite well. If the Millers are descended from these Rivenese, then the Watson/Miller connection could go back to the times of the Stranger. They may be old family friends.



My current favorite theory about all this is that the Sevilleta National Wildlife Refuge was established back in 1973 in order to protect the rare tribes of surface Bahro in the area; and the need to hide their presence is the primary reason the refuge is closed to the general public.

I also wonder from time to time if the stories of Chupacabra sightings and cattle mutilations are embellished tales of occasional Bahro sightings and the remains of their hunting forays off the refuge.

Afterword

I hope you have enjoyed plunging down the rabbit hole with me. Stay tuned to my Twitter feed and forum thread for the next chapters of this research.

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