

12/21/12: ILLUMINATIONS

... ‘a man seduced doesn’t measure anything the same way, not time, not the force of gravity, and especially not distances.’¹

‘He wrote me: one day I’ll have to put it all alone at the beginning of a film with a long piece of black leader; if they don’t see happiness in the picture, at least they’ll see the black.’²

We drove three hundred miles to see the sunrise. This day was of particular importance, purely due to alignments. The entrance of the winter solstice was charged with a significant weight, more so than in any normal year. Tangential deviations of the internet told us that the galactic equator – the mid-line running down the Milky Way – would be aligned with the sun and earth during the solstice, at a place known as the Dark Rift feature, or in Maya astronomy the Black Road or Xialba be. This alignment of three celestial characters is known to happen twice every year, in two configurations:

‘In one instance, the *earth* will be between the sun and the galactic equator, and in another (exactly 6 months later) the *sun* will be between the earth and the galactic equator. The 2012 AD alignment as is said to be associated with the Long Count calendar is of exactly this type, being of the latter stated order: Earth > Sun > Galactic Equator, *but critically*, with one very important additional factor, which indeed makes the entire arrangement far more complex and infrequent: The 2012 AD conjunction is one that involves the earth, sun, and the galactic equator, *specifically at a time when the earth is at the winter solstice (northern hemisphere) point of its orbit*, at a seasonal extreme. Now, an event of this sort certainly does not occur every year, but rather once only every 25,800 years. And this is due to a very subtle celestial motion: precession.’³

The occurrence of the 2012 winter solstice – or Southern solstice – was timed at 11:12 am UT on December 21st, a date that had been gathering an ominous reputation for the past half-century, through countless theories and speculations surrounding the ‘End of Days’ and the catastrophe of Apocalypse. The Maya Long Count calendar was one of many used to predict solar eclipses with great accuracy and to align sacred buildings to the movement of the sun and stars. Devised by the ancient Maya to help them keep track of long periods of time that were not accommodated by the solar and lunar calendars they used on a daily basis, it consisted of a 365-day year, and roughly 394-year centuries (or 144,000 days) called “b’ak’tun”. The calendar was due to complete the 13th turn of the b’ak’tun, advancing to the date 13.0.0.0.0 at 11am on December 21st 2012. Despite no explicit reference to the Apocalypse being found in the codexes and scribe artefacts of Maya culture, a prevailing thought in Western society arose in which the ‘ending’ of this particular count of 5125 years heralded a definitive doomsday scenario. In a recent lecture, Dr David Carrasco of Harvard University summed up the findings of various scholars who had sought the original reference to the End, in Western literature:

‘The offending passage appears in Michael Coe’s first version of a book called *The Maya*, published in 1966... He was comparing the Maya sense of time with the expansive notion of Hindu kalpas, and he writes, quote, “There is a suggestion that... Armageddon would overtake the degenerate peoples of the world and all creation on the final day of the 13th baktun...the universe will be annihilated on December 24 2011.” He later, in another edition he changed it to the, what is the more correct date, December 21st 2012.’⁴

Over the next half-century a plethora of 2012 literature was developed, predominantly embodied in American concepts such as the New Age movement and millenarianism. Narratives were developed that speculated not only on thoughts of an ensuing global catastrophe, but also on philosophies surrounding the dawn of a new world era; the promotion of counter-cultural sympathies, socio-political and spiritual activism, and strategies for entering a cosmically enlightened state of being. All of these competing visions are, according to the archaeoastronomer Anthony Aveni, the product of a “disconnected society”, in search of entities who may hold answers to the spiritual questions within each of us.

Our chosen site for experiencing the solstice sunrise was the Old Mission at San Juan Bautista, a town located roughly 100 miles south-east of San Francisco. The previous year a story had run in the Los Angeles Times witnessing a visual marvel achieved by the Mission’s placement in the landscape. Every year, weather permitting, the sun rises at dawn of the winter solstice and enters the church through a high window and the main double doors, casting a beam of light directly down the aisle, illuminating the altar and tabernacle (the enclosed receptacle for the Body of Christ). Some speculate that this is a fortunate accident, while others have researched ‘astronomically or liturgically significant azimuth-based architectural alignments’ in several missions. Dr Rubén Mendoza has spent the better part of 17 years discovering and documenting ‘the equally spectacular solstice, equinox, and feast day solar illuminations of main altar tabernacles at some twelve California mission sites; fourteen New Mexico Pueblo Indian sanctuaries, one Arizona site, three Texas Missions, as well as a host of Mexican Mission churches including those in Mexico City and in the Sierra Gorda of Queretaro, Mexico.’⁵

Consecrated in 1797, with a gesture of arms raised to the sky by the Franciscan Father Fermín Francisco de Lasuén, the Old Mission San Juan Bautista was the fifteenth of twenty-one missions in Alta, California. It chimes out its place near the remnants of the El Camino Real (or King’s Highway), the 600-mile length of which is strung together with roadside rust coloured bells on hooked green poles, silently marking the circuit of historic Californian missions, presidios, and pueblos running from San Diego in the south, to Sonoma in the north. The bell that stood sentinel at the start of the Mission promenade lacked animation, or seemingly even the potential for sound. Far removed it seemed from a 200 year old routine of calling in the faithful; the indigenous Indian converts, Californios, Mestizos, Hispanicized Indians from Mexico, and transplanted Europeans. Questionable is the simplicity of relations – as stated in the Mission’s short tourist pamphlet – between the ‘friendly and cooperative indigenous people’ and the church builders, who must have had one eye on the growing network of Christian enlightenment. Exactly who influenced the purposeful capture of a yearly trajectory of light, funnelled carefully down to highlight the ornamented saints and gilded details, is uncertain. Native traditions of the area were well known for their emphasis on sun worship, therefore aligning a newly introduced infrastructure with these phenomena would seem an intelligent approach toward a smooth transition of faiths. Dr. Mendoza states that ‘consideration of the melding of Franciscan Catholicism and Hispanicized Indian beliefs, cultural mores, and religious traditions must be understood from within the mirrored framework of intercultural interaction, reflexivity, and *mestizaje*.’⁶ A merging process that eventually loses any real remembrance of original features or differences, or even the vague notions of such ideals as *original* or *different*.

A bronze statue of St. John the Baptist facing the sunrise from outside the church entrance – arms raised, neck craning heavenwards, and naked but for a ragged loincloth – reeked of the classic visionary wooing his new flock with epic gestures. However, the act of speculating on the intricacies of a mutual enculturation seems far too fallible, being as it is filled with undocumented opinions and insights, hopes, desires and convictions, and the forever replaying crux that collective memories and individual intentions are usually at odds.

Also visible from the Mission’s eastside cemetery – containing 4,300 burials from 1808 through to the 1930s, beneath craggy olive trees – is another type of route traversing California; the San Andreas fault. Scoring the Western edge at which America ends, this tangible fissure lends support to the loaded disasters of Hollywood’s apocalyptic imagination. A psychologically dangerous rift, slowly inching its own inexorable path toward both a separation and a new geological synthesis, at a pace most likely unimaginable to modern attention spans; operating on a different count entirely. And so here we have a complex set-up; lines, movements, and alignments all acting as celestial, determined, terrestrial, spiritual, engineered, and expected punctuations on a fluidly melding timescale. “It’s a synthesis instead of a conquest.”⁷



The Mission’s Victorian era bell tower figured heavily in Alfred Hitchcock’s 1958 thriller *Vertigo*, despite having succumbed to dry rot and being torn down in 1949. Through clever tricks of stage design, background painting, and studio models, the director brought the structure back to life in order to lend the film its recurring death scene; the fall of a heroine double, once in fiction, and again in reality. The Spanish plaza outside the Old Mission, with its horse stables and colonial-style buildings, features heavily in the unravelling of this coded tale of desire, murder and memory. The first Madeline gazes at the fabricated tower over the shoulder of Scotty’s embrace, following a choreographed remembrance of dreams and actions resembling those of a sleepwalker possessed. The second Madeline, this time Judy re-dressed as Madeline – her hoax uncovered by the now delirious detective who states, “One final thing I have to do... and then I’ll be free of the past”⁸ – glances at the tower with dread, her secret quickly spiralling out into the light of reason. Scotty, imagined by filmmaker Chris Marker as ‘time’s fool of love, finding it impossible to live with memory without falsifying it’⁹, clings to the hope that he can stave off the inevitability of time and death. Despite his efforts, or perhaps because of them, he finds himself with the same perspective on a death marked twice by the silence and the ringing of bells; bells that call the parishioners in to pray, bells that cause such a strange intrusion into an ancient environment, bells that mark out the path of a convincing idealism long trodden.

As Marker saw it, ‘the vertigo the film deals with isn’t to do with space and falling; it is a clear, understandable and spectacular metaphor for yet another kind of vertigo, much more difficult to represent – the vertigo of time.’¹⁰ In his 1983 film essay *Sans Soleil* – named after the Mussorgsky song cycle *Sunless* – he begins his musings in San Francisco, trailing the films locations as Scotty had trailed the clues of Madeline’s double. He filmed the hilly streets from car, the Victorian hotel vanished and replaced by concrete, the florist Podesta Baldocchi where ‘the tiles hadn’t changed’ – in short: ‘I made the pilgrimage of a film I had seen nineteen times.’¹¹ Marker’s homage begins with stills taken from Hitchcock’s original, quickly blurring them into the realm of colour and particles, before introducing his own approximations, captured 25 years later; holding a mirror up to the sets of a film so full of mirrors. In them, the subtle shift of time is present; the infrastructure of humanity mostly remains, individuals recede. Marker sees only *Vertigo* as being ‘capable of portraying impossible memory – insane memory... In the spiral of the titles he saw time covering a field ever wider as it moved away, a cyclone whose present moment contains motionless the eye.’¹²

Making our pilgrimage of these two films we captured a still that reflects Hitchcock’s introductory shots of the Old Mission, a shot that Marker recreated with the added motion of running, his camera handheld: the arches of the promenade. In the right hand corner stands the stump of a tree glimpsed in *Vertigo*, the reason for its removal unknown and forgotten. Hitchcock references another type of tree, the cross section of a giant sequoia, which is in its turn noted twice by Marker, travelling through the time warps of his own oeuvre:

‘On it Madeline traced the short distance between two of those concentric lines that measured the age of the tree and said, “Here I was born... and here I died.” He remembered another film in which this passage was quoted. The sequoia was the one in the Jardin des plantes in Paris, and the hand had pointed to a place outside the tree, outside of time.’¹³



Saul Bass created the now iconic title sequence of *Vertigo*, along with the promotional posters and printed ephemera in which the spiral motif serves as backdrop to the stylised *noir* silhouettes of the entangled Scotty and Madeline. In 1969 he made a pitch film to rebrand the decidedly un-modern logo of the telecommunications company AT&T. The film, voiced by an assured American male, begins: “Some people in our society feel regimented. Others feel free. Still others see society as dehumanizing.”¹⁴ In a split-screen shot, a doubling that works as an instantaneous replay, a crowd is shown stalled in front of traffic lights, joined together in a regimented ONE, TWO, ONE, TWO calisthenics. The voice tells us: “The present system, the bell, needs updating.”¹⁵ Being unchanged since the late 1930s, the bell system logo was cumbersome and antiquated; a slew of words unsuited for the rapid glances of city kinetics. Bass stripped away all unnecessary language, leaving simply the black outline of a bell enclosed in a circle. His proposal for the marking of vans, uniforms and the daily infrastructure of the company identity was similarly radical: stripes. “In the contemporary world, stripes have a message, they say ‘competitive,’ ‘competent,’ ‘alert,’ ‘dedicated.’ They say the things we the Bell System actually are.”¹⁶

The spirals used by Bass in the *Vertigo* credits are also known as lissajous curves or figures and were created by John Whitney Sr., considered by many to be the father of computer generated graphics. Born and raised in Pasadena, California, John and his younger brother James pioneered new forms of image and sound generation, creating 8 and 16mm optical printers, and precisely calibrated pendulums for writing sound waves onto filmstrip. Expanding on the harmonic motions of spirals, radiating lines, and atomising dots found in early experimental film such as those of Marcel Duchamp – in particular his 1926 *Anemic Cinema*, in which spirals resembling details of Barbara Hepworth sculptures are sent through the cycle of a turntable, and a later film with music by John Cage, featured in Hans Richter’s *Dreams that Money can Buy* – the Whitneys moved into a neurological, cosmic dimension, also incorporating flexible masks and punctured cards to film light directly rather than capturing light reflected from drawings. Discussing the creation of his early homemade analogue computers, John Whitney Sr. explains:

... ‘greater stimulus came with World War II with the need for elaborate calculating machines to calculate fire control and ballistic missile problems, and, ah, so the earliest computers were, um, ah, ‘spawned’ by this need of WWII to, uh, uh, devise mechanical analogue computing devices, and those were immediately obsolete at the end of the war and became freely available to anyone who wanted to buy them. I bought them and turned them from swords into plowshares in the sense that I bought them and turned them into, ah, designing machines.’¹⁷

Having worked collaboratively on their acclaimed 1940s series *Film Experiments 1-5*, the Whitney brothers went on to separate projects and careers. John began his development of mechanical analogue systems which founded the principles and techniques of ‘incremental drift’ and ‘slit-scan’, the latter being put to use most famously in the Star Gate sequence of Stanley Kubrick’s *2001: A Space Odyssey*. James, who had trained in painting, moved towards painstakingly produced animations on film, creating abstract shapes and visual sensations through the elementary use of dots and lines building and receding in continuous flows, or coloured orbs and curves splintering and refracting into stand-ins for meditational mandalas. His final unfinished film project of a trilogy and prologue representing the four elements exemplifies the labour intensive craft he employed in order to discuss his interests in Eastern philosophies and cosmic thought.

‘WU MING (1977), the “water” film, uses the opening words of the *Tao Te Ching* as its title: “NO NAME.” The full passage reads: “At the beginning of Heaven and Earth, there were no names. Names created millions of things. Without desire, there is mystery; but with desire there are only things. All begins the same, but names make it different.” ... About 17 minutes long, WU MING consists of one simple gesture, one action-reaction: a particle vanishes into infinity and rebounds as expanding waves (the basic phenomena of light energy as scientists understand it.) ‘During the final stages of his illness, James arranged the footage of KANG JING XIANG [this would be the “air” film] in the proper sequence for editing, so that it could be finished after his death (in 1982). The Chinese characters that make up the title are philosophically ambiguous: They could mean “like an empty mirror,” as well as “what is seen during a lustrous religious ecstasy.”’¹⁸



And so the morning turned out clear and frosty. We each chose our own viewing locations, marking out a spot among the crowd that had gathered in the dark, all of us there to witness a slow illumination. A gold illumination creeping across the wall like the gold ink and leaf of decorative arts, church mosaics, lavish bindings, sought minerals; a gilded, plotted path. A streak coaxed and cajoled in year after year for as long as the window frame stands, or the doors swing open. We, all of us there, produced a requiem for the sun’s trapped radiation. We took it in and absorbed it, our eyes open and hungry for the truth and simplicity it was offering, perhaps mostly unaware of precession, the subtle torque and wobble of an invisible axis that had landed us all there to a moment punctuated every 25,800 years, and fortunately forgetting the arbitrary nature of it all, missed in a blink. We calculated the finest perspectives of this moment. We felt in our guts the time-codes of a handmade focus in and out, a purposeful blurring of a half-truthful enlightenment. Taking the mid-point between the sensation of something and its clarity, and working our way back and forth between the two, searching out details only to disfigure them. Afterall, what would have been the point of attempting to catch sharply an event so hinged on moving particles of dust, breath, exterior and interior visions, incremental shifts. Footprints on the dusty aisle were scuffed and altered before our eyes, as all of us politely clambered for a better view, a clearer elevation to remember and impress upon ourselves these flickering silhouettes and specks of dust and streaks of expanding waves: on the tiles that hadn’t changed.

As it drew to an end inside, the arches outside cast rounded shadows, having remained the same throughout their various imprints on film and its electronic sibling, seeming elegant, regimented, and pure from afar but roughly constructed up-close. Separated by decades yet offering the KEY TO HEAVEN, over and over and over forever and ever and ever Ah—. I have tried to tease out the links between all these things, but all I could think of was light. Generation after generation attempting to capture light for many purposes, whimsical and profound. Really there is not so much complexity in all this; the sun rises, the sun sets. You either see it or you don’t. And next year will perhaps be a similar pattern. History is history, and ‘heat is basically particles in motion’.¹⁹



‘Like an electron or an organism, a spiral galaxy suggests itself as an expression on one level of the partially achieved state of conrescence. The conrescence that our own small planet, a subunit in the hierarchy from electron to galaxy, is now experiencing is of enormous importance to us as a species, yet there is no certain fate to which we can entrust ourselves. The self-evidence of the fact of freedom and its logical necessity for meaningful thought means that no phenomenon functions with absolute mechanical certainty. This is the fact, at once sobering and exhilarating, that quantum physics has secured. It may be that the fate of evolution on earth, with its escape, or no, from catastrophe, is of no concern to the larger universe, much in the way that the death of millions of cells occurs in higher organisms as a normal part of metabolism.’²⁰



Felled tree trunks were hiding the mound, it appeared as many mounds do, unremarkable. Beneath the accumulated centuries of natural growth lay a six-foot-wide room, believed to have been used for the teaching of scribes, artists or scholars. Discovered in 2010 in Xultún, Guatemala, the room’s walls contained a mural of the king accompanied by several other figures, one of whom has been identified as a local scribe: named Young Brother Obsidian. One of the walls is covered with mathematical calculations projecting 7,000 years into the future from the date of creation, A.D. 813 or 814. Around this time in Classic Maya history, trails of commerce and trade were breaking down, many Maya cities were collapsing due to unprecedented drought. Perhaps the society knew that their culture was nearing a shift, a new epoch. Young Brother Obsidian’s task may have been to show the people that their King would live on in cosmic time, beyond the vagaries of mortality, to remind the people that there were no such thing as endings. They had the sense to sit still and observe the machinations of a celestial system that was already in motion. To have the conviction of mind to point to time beyond their own existence, a place outside the walls, outside of time. To anchor their vapour to the coming whispers of aeons, generations, births, deaths, covered and uncovered mounds.

“The name obsidian is one of the most ancient of rock names still in use today and was brought into the language by Pliny (the Elder) almost two millennia ago. Iddings (1888: 261) writes that the stone was named after “...Opsius, its discoverer, in Ethiopia, according to Pliny, who says that when laid in chamber walls in the form of mirrors it reflects shadows instead of images.”²¹

– Emmett Walsh, Los Angeles, January 2013

1 Eduardo Halfon, *The Polish Boxer*, Bellevue Literary Press, New York, 2012

2 Chris Marker, *Sans Soleil*, Argos Films, 1983

3 Keith M. Hunter, *2012 AD – Mayan Calendar Galactic Alignment*, see: <http://www.ancient-world-mysteries.com/2012.html>

4 Dr. David Carrasco, *Apocalypse Soon? The Maya Myth Debunked*, lecture given at The Peabody Museum of Archaeology & Ethnography, November 28, 2012, see:

<https://www.youtube.com/watch?v=cOJuh2UxtWo>

5 Dr. Rubén G. Mendoza, *New light on the California Missions*, see: <http://www.oldmissionsjb.org/pdf/New%20light.pdf>. Dr. Mendoza is an archaeologist and professor of Social and Behavioral Sciences at CSU Monterey Bay, and was present at the Old Mission San Juan Bautista during the 2012 winter solstice. He spoke from the altar at length about the ‘miraculous’ spectacle that was slowly unfurling.

6 Dr. Rubén G. Mendoza, *Sacrament of the Sun: Eschatological Architecture and Solar Geometry in a California Mission*, in *Boletín: The Journal of the California Mission Studies Association*, Volume 22, Number 1, 2005

7 An unknown voice heard on the radio, September 2012

8 Alfred Hitchcock, *Vertigo*, Paramount Pictures, 1958

9 Chris Marker, *Sans Soleil*, Argos Films, 1983

10 Chris Marker, *A free replay (notes on Vertigo)*, originally published in *Positif* 400, 1994

11 Chris Marker, *Sans Soleil*, Argos Films, 1983

12 Ibid.

13 Ibid. Marker is here referring to his 1962 film *La Jetée*

14 Matthew Lasar, *The “Psycho” designer who tried to save AT&T in the ‘60s*, published on arstechnica.com, July 29 2012.

15 Saul Bass’ AT&T pitch film see: <http://www.youtube.com/watch?v=xKu2de0yCJI>

16 Ibid.

17 Source unknown, circa 1980s. <http://www.youtube.com/watch?v=pGH5aCYtje5>

18 William Moritz, *Who’s Who in Filmmaking: James Whitney, in Sightlines*, Vol.19, no.2, Winter 1985/1986

19 A second unknown voice heard on the radio, December 2012

20 Terence McKenna & Dennis McKenna, *The Invisible Landscape: Mind, Hallucinogens, and the I Ching*, HarperOne, New York, 1975, p. 168-169

21 <http://www.obsidianlab.com>