



THE VERMILLION SEA

OBSERVING THE TRANSIT OF VENUS



Marylee MacDonald

Part One: The Traveler's Lens

Noël

Mission San José del Cabo, Baja California, August 1, 1769

Someone had died in the desert. Vultures circled high above, and the shadows of their wings slithered over the rocky ground. Smoke from the mourners' torches had blown away, replaced by the smell of burning dung. Noël stepped from the granary. Heat rippled up and down his body. Fever again? Or merely hunger? For a month he had eaten nothing but the fruit of prickly pear, and that by the grace of Stanislaus, a savage and a constant friend. The surface of the moon could not have been more remote than Mission San José del Cabo, and he could not bear to think of how joyfully he had made himself at home among the Indians, not a one taller than his own four feet.

At dusk the wind blew nonstop. Airborne grit, tasting of copper and creosote, coated his lips. He should take the camera obscura inside before dust pockmarked the lens. Chappe would have chastised him for leaving the instrument exposed, but at least it had not blown over, a small miracle on a day that had lacked any evidence of God's interest in their affairs. He shortened the tripod's legs and tied the covering drape around them. Even through the heavy, woolen cloth, the edges of the mahogany box dug into his shoulder. He reached the palisade, where he lengthened the tripod's legs, leveled the box, and arranged the drape so that it formed a kind of shepherd's tent. Then he pointed the lens toward the mountains and made a viewfinder with his fingers.

The vista had been waiting for him. The pink-tinged peaks. The huts with their collapsing roofs. The church and presbytery that the Spaniards had demanded as their due. Next to the cross stood the cedar skeleton of the failed observatory, its cross-braces weakened and the canvas shredded by the relentless, buffeting wind.

The axis of the picture would turn on the cross. It stood for so much. The crucifixion, of course, but also the arrogance of the Spaniards and their belief that the Jesuits had somehow armed the downtrodden natives of this land. It was not his truth that he must draw, but the truth of California, *terra incognita* on the map.

He took a sheet of water-stained paper from beneath his shirt. With this drawing, he would discharge his final duty. Then, if he so chose, he could surrender his lead-holder and never draw again. At least not with the camera obscura, makeshift for the artist's eye and hand.

He took a deep breath, parted the drape, and stepped inside. Like all their clothing, his as well, the fabric had absorbed the scent of death. Beneath the drape—enveloped, suffocated by the lingering stench of urine, feces, and lye soap—he felt the wind paste the woolen cloth to his arm. He plucked it loose, but the wind insisted on crowding in, trying to dislodge him.

He placed the paper on the viewing glass. The lens made a mirror image of the landscape and shrank its vastness. The sky had emptied. No clouds to speak of, the vultures home to roost. The lead of his porte-crayon traced the adobes' swaybacked roofs. Apart from two men hanging strips of fish and another returning from the creek with a jug of water, nothing moved. If the men at the Botanical Garden cared to know what grew here, they could remark on the spiny plants with their sour, pink fruit. Try to live on that, you fine gentlemen! But even an image made fresh and on the spot could not convey the smell of dust and the immense, wind-whipped silence. It was not a picture anyone in Paris would admire, or buy. But, he had to make it because it was true, the one true image that spoke for all Chappe had dreamed of and attempted, and that threatened to come to naught.

Noël

57 rue Menilmontant, Paris, February 18, 1830

At least he hadn't starved. Not yet, at any rate. He pulled off his gloves and tucked them in his coat sleeves. He had taken a calculated risk in venturing out. Sidewalks wet, needles of rain, and an umbrella with a broken rib. His hand went to his pocket—the five-franc coin was not quite enough to pay the rent. He was hungry, but he should sit. Usually his heart calmed down if he did not demand too much of it. And in the meantime... Not that he meant to end his life, but just as a precaution. You could never tell. He pushed the backless chair to his writing desk, its legs sawed off to accommodate his height. A fountain pen lay in one of the cubbyholes. Notepaper. Now for his glasses. He patted the pockets of his vest. What a bother! Ah, there they sat, next to the lamp. He had half a mind to light it, if only to drive away the gloom and match the cheer he was attempting to bring to his task. He dipped the pen tip. The Last Will & Testament of...

But which name should he put down? The grandiose Alexandre-Jean Noël? Or simply Noël? Might as well write "The Noël who went to California." That was how he was always introduced—or had been when he had the wherewithal to attend the Society of Artists.

Now in his eighth decade, he found himself reduced to a single room, and fifty centimes for a hot shower at the public bath. So be it. Let the government's estate agent find a carter to box up his engravings. Let the art appraiser, whom the authorities would undoubtedly send, squeeze the tubes of hardened paint and remark on his extremely minor fame. Let the notary pocket the foreign coins on his dresser. Of course, he had no intention of dying. Not yet. Figuring out how to live—that was his chief concern. Live, eat, and pay the rent.

The will was a legal matter, though, a precaution. His testament had to pass muster with the humorless and rule-abiding authorities. Better give the name he was born with, Jean Noël Turelure.

"Hello, Monsieur?"

"Never fear, Mister Colson. I almost have your rent."

"Monsieur! Are you taking a nap?"

"Stop bothering me!"

A woman's voice below. The command of the harridan was unmistakable. He smiled. Ah, women!

"Monsieur, I am leaving a tray just here. By your door."

A tray? The harridan had sent up food?

"No, wait. You must come in."

Old bones. A stiff back. His too-short legs not wanting to obey. Sighing, he launched himself toward the door. Yesterday he had spent the day freezing under his covers and smelling the delightful aroma of Sunday dinner. He had longed for a bowl of Madame Colson's pot au feu but dared not ask.

The door swung in, revealing the Liverpool tailor with his pinched brow and smiling mustache. The man brought with him the air of the drawn-and-quartered, a family man seeking respite from the chaos of children coming home from school. He had stuffed a yellow tape measure and scissors into his apron pocket.

"Where shall I put the tray?" Colson said.

"On the hassock."

Colson looked at the cube of straw-stuffed leather. "But have you not a proper table?"

"The hassock will do."

Colson nudged the hassock closer to the stove. He lowered the tray and lifted the lid of the crock. The sweet, oily smell of onions, bay laurel, and fatty beef wafted into the room. Madame had sent the remains of yesterday's meal. Oh, glory! If Noël had believed in God, this would have been an answer to his prayers. Had he sunk so far that he no longer had faith in his fellow man?

"I shall leave you to it, then," Colson said, his eyes dancing from the piles of engravings leaning against the wall to the walls themselves, bare of any decoration save a single painting, and that because the previous tenant had driven in a nail.

The room, Noël thought, with its purple and white striped wallpaper and swags of flowers, was the kind of place his wife might have chosen, but his reduced circumstances left him with only a bed, a dresser, and a desk, no means of transforming it from a Spartan bachelor's quarters to a cozy pied-à-terre.

He scooted the chair to the hassock, sat, and broke off a hunk of baguette, sopping up the broth. The softened bread dissolved on his tongue. Half expecting Colson to bring up the matter of the rent, now that he had managed entry, Noël fished out a parsnip and popped it in his mouth. "Madame Colson is a divine cook. I hope I am not taking food out of the little ones' mouths." A carrot on the end of his fork! A carrot in winter. Where had she found such a delicacy? With just this bite he felt sated.

Colson bent over. "May I have your fork?"

"By all means."

Colson took the fork and also his little scissors. He speared a hunk of fatty beef wrapped in lardback bacon. He snipped the string. Picking up a knife, he cut the bacon into tiny pieces.

"Must I eat that?" Noël said.

"Or there will be hell to pay." Colson stood over him, arms folded.

"You have thrown down the gauntlet," Noël said. "I will pick it up." With only the smallest effort at gumming, the bacon softened.

"A man come into the shop today. Said you was a famous artist." Colson stood like a teapot, a hand on his cocked hip. "I said I knew it because I'd had a word with the bloke who carried up those big gold frames of yourn."

In five steps he stood at the curtain that closed off a half-room in the back. An easel leaned against the wall. Twine tied the stretcher-boards, cut to length. But it was either rent or canvas, and so far Noël had not found a way to pay for both.

"If you need help setting up your atelier, let me know," Colson said.

"My atelier!" Noël repeated. He'd asphyxiate if he attempted to paint in this close room.

"You was a friend of that painter David," Colson said.

"I knew him. But I would not call him my friend."

"Who did you know that was famous?"

"Oh, Vien, Vernet, Halle."

"Never heard of 'em."

"They were painters in the Classical style."

"You know any famous painters across the Channel?"

"One or two." But they were probably dead, and in any case Monsieur Colson would not know their names, nor have the faintest idea why their painting styles had fallen out of favor. Still, it was wonderful to say the names of his old professors, to be talking about art while he sopped up broth from his plate, even with this ignoramus of a tailor.

"Shall I stoke the stove?" Colson said.

"If you please."

And, of course, Colson pleased. For having his boy deliver a bucket of briquets, Colson charged twice what Noël might have paid had he had the strength to walk to the coal-monger's. With the tongs, Colson pushed the embers aside and shoveled out the ash. The stovepipe needed cleaning, but Noël did not dare mention the danger. Colson set the ash bucket on the stove's cracked top, put on his pince-nez glasses, and walked over to examine the painting.

"Is this by someone famous?"

"Me," Noël said, "but I'm hardly famous."

"Maybe my wife has an engraving of it."

"Hers is by probably 'Death of the Father' by Greuze. Stop, you imbecile! Don't put your finger on the canvas!"

Colson jumped back. "I just wanted to know who was on the bed."

"The abbé Chappe d'Auteroche."

"The astronomer?"

"Yes."

"My father had his book about Siberia." Colson turned toward the picture again. "That's him?"

"And me."

"Which one are you?"

"Which one do you think?"

Colson's finger came out, pointing first to one and then another, finally pausing at the small figure in back. He craned in, then looked at Noël. "As different as day and night. God's own truth, but for the size, I wouldn't have identified that boy as you."

"It's a piss-poor self-portrait." Noël had tried to draw himself younger, but of course one could never turn back time. Mouth twisted, he looked more like a person whose toe had been stepped on than a boy captured in a moment of piercing grief. And that wasn't the only bad thing. Chappe's face looked like a pale, melting block of butter and Dubois—well, unlike himself. Though Noël had thought himself capable of drawing from memory, certain images could not be conjured from the darkness of death.

Alexandre-Jean Noël, "Mort de M. 'L'abbé' Chappe, membre de l'académie Royale Des Sciences, à la Califournie, ou il avait été observer le passage de Venus en 1769."



"Is this Africa?" Colson said.

"No. California."

"Did you go there with the idea of making a painting?"

"I painted that eight years after I came back. One of my old professors—Vernet—thought I could capitalize on it."

"Capitalize on what?"

"The lingering astonishment at Chappe's death."

"You was cashing in."

"Yes and no."

"Did you paint this with the hope of selling it?"

"I painted it as a favor."

Colson squinted and leaned in. "Who are those people on the left?"

"Oh, Stanislaus? An Indian."

"I thought he was one of them Hottentots."

"The Indians are dark-skinned."

"He looks black."

"The varnish darkened."

Colson's finger hovered. "Is that supposed to be a boy?"

"It's Stanislaus's son. That's an iguana under his arm. A pet."

Colson stood frowning, looking from Noël, who was using his fork to lift out a turnip, back to the painting.

Do not attempt the beef, Noël thought. A cube of gristle and bone floated in a sea of broth. With Colson standing there, making no move toward the door, the awkwardness of chewing without teeth sent a ripple of heat up his neck. He should have offered Colson a chair or told him to sit on the unmade bed. Instead, here he was, trapped in his own room with a man he barely knew, other than that they shared the same front door.

"What is it, for God's sake, Mister Colson? Is there something you want to ask?"

"I was wondering if you could make my picture." Colson licked his fingers and smoothed his thinning hair. "I'm not much to look at, but I guess Missus Colson likes me well enough."

So here it was again. The old awkwardness of discussing payment and the equal awkwardness of a portrait done for free. Noël poured out the half-liter of wine that Madame Colson had sent up. Blessed woman. The wine burned his throat and settled with a comfortable slosh atop the bacon. He felt like a lamp, lit from within.

"I know I make a poor subject."

"Please, Mister Colson, your looks are not in question."

"What is it?"

"I have no money for canvas."

"Can you not use something else?"

"If I had a board..."

"What kind of board?"

"You know. A board. A panel from a joiner's shop would do."

“Why not paper?”

“You said you wanted a portrait.”

“A likeness, Monsieur.”

“Since you were interrogating me on the subject of that painting”—Noël waved his fork—“I thought you were envisioning a proper portrait.”

“I’m not a great man,” Colson said. “My wife put me up to it.”

The hours bent over a cutting table had given Colson a widow’s hump. But surely the man must have a Sunday suit. A chair would straighten his posture.

He shouldn’t. He didn’t want to. But how could he say no? “What medium do you want, then? Pen and ink? Charcoal? Pencil? If you don’t care about oil, then sanguine.”

“What is that?”

“Sanguine? It’s hematite, a red-brown chalk.”

“Whatever you think best.”

Noël straightened. “All right. Sanguine, I think. I will need some paper and fixative.”

Colson raised his eyebrows.

“To keep the chalk from smearing. I have an atomizer someplace. I can dig it out and hope the rubber hasn’t cracked.” The tick-tock of his heart reached his throat. He was letting himself get too excited. It was only a drawing, and after all, how many thousands had he made? But somehow, suddenly, he wanted it to be good.

Colson bent to pick up the tray. His hands shook, and the wine glass upended, sounding a *ting, ting, ting* as it rolled against the pitcher. He hugged the tray to his ribs, but the shaking traveled down his pants leg. A man possessed by anxiety.

Noël hurried to the door and held it open.

"And what of your fee?" Colson said.

"Look here. I almost stole Madame Colson's napkin." Noël pulled it from his cravat and blotted his lips. "For my fee, in exchange for your portrait, I should like to join you for dinner once a week."

"You would?"

"If that is too much—"

"No, no! You being a name and all."

"A name!" He sniffed. An artifact, more like. A relic. A has-been.

Colson turned sideways and edged down the stairs one foot at a time. Noël understood that the dinner arrangement would have to be negotiated with Madame, but to his surprise Colson looked up. "Sunday next, then. After mass."

"I am not a mass-goer," Noël said.

"Neither are we," Colson answered.

"You are Protestants?"

"Of a sort."

Protestants, and of a sort. Noël smiled. His kind of people.

Colson took the stairs sideways and, at the bottom, tapped his toe against the door. It opened. "One o'clock, then," he said, looking up.

Noël rested his elbows on the stair rail. Wet footprints glistened on the vestibule's tile. He must have been insane to invite himself for a family meal. Or desperate. He dared not impose more than once. Colson had children to raise, and the tailor did not look well. Noël must keep to his plan. Facing the body's decline required courage of a different sort, one that meant he must surrender the last of his illusions and find contentment with what remained. Of course, in his hip pocket, he had the Drawing Master's son, but he was loath to show up at the Baron's hotel, hat in hand, especially now that Charles X had fallen and the Chamber of Deputies had appointed that ridiculous pretender, Louis Philippe, the one who had revoked his pension and put him in these dire straits.

Noël slid the chair back to the desk and looked at his list of small bequests. Names, addresses, not all of them current. If Colson lent him an Almanac of Business, then he could find the young woman who had, for a time, attended his Drawing School. Understandably, the birth of children had shrunk her ambition. And the young artist who had abandoned his painting for the sake of his family's varnish enterprise—Soehnée. An empty picture frame would go to him, along with a hope that he might fill it.

Whatever an artist attempted to paint or resolve from his past lay hidden beneath daubs of paint, and yet the feeling was there, pulsing out. Saying look at me, like me—and, ultimately, pay me, for I have shown you what otherwise you would have missed.

Chappe

Aboard La Concepción, Baja California, May 20, 1769

Was it not hubris to stare at the sun?

An astronomer could blind himself. Every astronomer was sensible of both the dangers and the opportunities. To observe the Transit of Venus, an astronomer would have to close his viewing eye and wait for the moment when the planet's teardrop silhouette encroached on the sun's fiery disk.

The earth was round. That much we knew, thanks to Johannes Kepler and his Laws of Planetary Motion. But we did not yet know the dimensions of the solar system, the masses of the planets, or even Earth's diameter. We could not create with certainty a celestial globe, nor maps that would save ships at sea. Apart from the island of California, the land north of Mexico was still enumerated by our cartographers as *terra incognita*: land without longitude or latitude, nor inlets nor islands, nor even, for all we knew, inhabitants.

There was only one way to satisfy our thirst for knowledge—prepare for the Transit of Venus, a celestial event that would happen twice a century, eight years apart, and then not for another hundred years.* [to be cont'd]

* Kepler predicted the Transit in 1631, along with a Transit of Mercury, the two events occurring within a month of each other, but he died before he could make the observations. Eight years later the English astronomer Jeremiah Horrocks, working from his own calculations, recorded the Transit of Venus on December 4, 1639. Other observations were made, but most were in the northern hemisphere. The data proved inconclusive. Lalande calculated the solar parallax at 9".00, while Pingre put it at 10".25. This year—1769—we astronomers have another chance. Like Icarus, my wings may melt, but by God, now that I am within sight of land, I will do all in my power to fill this gap in our knowledge of the universe.

Author's Statement

I was in the midst of writing a historical novel about Junipero Serra and the founding of the California missions when I ran across an image of San José del Cabo. In 1769, a young artist by the name of Noël accompanied the most famous astronomer of his day, Jean-Baptiste Chappe d'Auteroche, on one of the eighteen Transit of Venus expeditions that went out that year, Captain Cooke's being the most famous.

Poking around in various archives, I tried to figure out who this Noël guy was. As far as I could tell, he was just a footnote in history, an artist who never became famous, though his paintings hang in major museums like the Getty. In contrast, the leader of the expedition, Chappe, was the Carl Sagan of his day.

Why did this expedition matter? Because seafaring nations didn't know the diameter of the earth. The Transit, an event that happened in both 1761 and 1769, would not happen for another hundred years. The stakes were intrinsically high.

But back to the artist. What was he showing us in his pictures? His watercolor-and-ink drawings depict the mission and its indigenous people as well as a funeral procession carrying Chappe's dead body. Had the artist depicted himself? Who was Noël? What did he look like?

These questions led me to archives in Spain, France, and Portugal and to meetings with descendants of his Drawing Master and pupils. It also led me to buy the oil painting that hangs on the wall of Noël's little room above the tailor's shop, the one I have chosen for the book's cover.

The painting, which Noël made in 1778, nine years after the expedition, had been "lost" for two hundred years. However, a few years ago I received an alert that the painting would be auctioned through Tajan, a reputable Paris art dealer. Noël had died without heirs, and the painting had been squirreled away. Now the state of France had decided to "deacquisition" it. Fortuitously, I was the only bidder, and that painting gave me detailed information about the appearances of the characters.



*Alexandre-Jean Noël, Vue d'un village et mission de saint-Joseph en Californie
Cabinet des dessins, Fonds des dessins et miniatures, ©RMN-Grand Palais –
Photo A. Didierjean, Musée du Louvre, Département des Arts graphiques*

I now know that Alexandre-Jean Noël, a dwarf, was a semi-orphan who dropped out of the Royal Academy of Painting to go along on the expedition at age sixteen. Chappe's party left France, picked up two Spanish astronomers in Cadiz, sailed to Vera Cruz, and walked across Mexico. Only when they landed at the tip of Baja did they learn that the mission was under quarantine from the "black vomit." When Chappe died, the three survivors had no money, and Noël had to use his art and language skills to help the survivors make it safely back to Paris.

Noël's internal journey has to do with him believing Chappe's promises, namely that the expedition will be a shortcut to fame and fortune. It also has to do with Noël's gradual realization that Chappe, famous and driven, has no one's interests at heart but his own.

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Welcome to your preview of *The Vermillion Sea!*

The Vermillion Sea is the third novel in this series. The first two are *The Mapmaker's Globe* and *The Artist's Brush* (anticipated publication date 2020). To learn more please click below. You'll land on www.maryleemacdonald.com.

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