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Fiestas and Fiascoes- Balloon Flights in Nineteenth-Century Mexico

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Tradition alone did not suffice in Mexico a century ago for celebrations. Novelty, particularly the daring and spectacular exhibition of modern invention, was needed to entice paying crowds. Touring "professors" and their balloon ascensions provided a blend of spectacle and uncertainty.

Fanny Calderón de la Barca, Scottish-born and Boston-bred wife of Spain's first ambassador to Mexico recorded her observations in a perceptive book that enjoyed great popularity and is regarded today as a classic of travel literature. Among the many events described in *Life in Mexico* was a balloon ascent:[1]

> Friday: April 23rd. 1841
> We went to Mexico yesterday to see a balloon ascend from the Plaza de Toros, with an aeronaut and his daughter—French people, I believe.
>
> The scene was really beautiful. The plaza was filled with well-dressed people, and all the boxes crowded with ladies in full toilet. The President was there with his staff, and there were two bands of music. The day was perfectly brilliant, and the streets crowded with handsome carriages, many of them open. The balloon swayed itself up and down in the midst of the plaza like a living thing. Everything seemed ready for the ascent, when it was announced that there was a hole in the balloon, and that consequently there could be no ascent that day. The people bore their disappointment very good-humouredly, although it was conjectured that the *air traveller* had merely proposed to himself to get their money without the slightest intention of performing his voyage.
>
> One amusing circumstance was that some penny-a-line rhymer had written an account of the ascent of the balloon—and, when we came out, the plaza was full of men selling these verses which the people were all buying and reading with roars of laughter.

The crowds' patience was rewarded with a successful ascent a few days later by Louis A. Lauriat of Boston. His experience and his care in importing special cloth for the balloon and equipment to produce hydrogen gas assured eventual

1. Howard T. Fisher and *Marion* Hall Fisher, eds., *Life in Mexico. The Letter of Fanny Colderón* de la Barca: *With New Material from the Author's Private Journals* (New York, 1966). 442, 770 n. 1.

success.[2] Ascensions were never entirely routine; many things could go wrong, causing disappointment, injury and riot. Many fiestas were marred by aeronautical fiascoes.

Balloons appeared initially as one more scientific novelty of the late eighteenth century. The Montgolfier brothers of France are regarded by most as the inventors of balloon flight in 1782-3.[3] The ascensions in Paris of their emulators were widely reported. Imitations of simple craft lifted by heated air were flown elsewhere, including the Viceroyalty of New Spain (as Mexico was then known).

There was an unprecedented interest in scientific progress. Even New Spain's rulers, in the past restrictive of foreign ideas, encouraged publicity of new techniques in the hope of practical results. *The Gazeta de México*, an official newspaper and the first in New Spain, began publication in January, 1784 with a technological emphasis. Soon it reported on unmanned balloon flights within the colony.[4]

After a sketchy report of a balloon built in the city of Jalapa, the *Gazeta* of June 2, 1784 pointed out that aerostation, the science of balloon flight, would be much more difficult in Mexico City than in Paris or Madrid. The altitude (7500 feet) would require a greater amount of elevating gas for the balloon to rise into the less dense air. This pronouncement by the prominent Mexican scientist, Jose Antonio Alzate, apparently did not discourage experimentation in less elevated areas. And eventually aerostats were launched in Mexico City as well.

The *Gazeta*, of February 22, 1785, published details of the first of a number of hot-air balloons successfully flown in Vera Cruz. On the sixth of the month, before the highest officials of the region, a merchant launched a paper globe of nearly ten feet in height and twenty feet in circumference. Burning straw heated air which rose to fill the balloon and then to pull it upward. The aerostat rose some three hundred feet vertically, and then travelled sideways for more than a mile, before descending to the beach. It was felt that a more lengthy flight would have occurred had all the "common gas" that had been produced been used in the globe. An editorialist in the *Gazeta* announced enthusiastically that perfection of these globes would merit the attention of learned men in all of Europe. Meanwhile, further tests in Vera Cruz ensued without delay. On February 18, a globe was launched from the street in front of the Governor's residence, which, after climbing over one hundred feet, crashed in burning pieces. Its paper construction caused the fire, and the escape of gas cut short its flight.

Two nights later a more successful flight was effected on a calm night from the patio of the residence of a government official. The spherical globe, forty-

2 Louis Anselm Lauriat (1785-1858) made numerous successful ascensions in the Boston area. He came to Mexico through a contract that two merchants named Wright and Lapham signed with General Barrera. A first manned ascension in Puebla promised to be particularly lucrative, according to correspondence kindly provided by a great-great-grandson. Nathaniel Lauriat of Hartford, Conn.

3. Brazilians claim that colonial-born cleric Bartolomeu Lourenço de Gusmão demonstrated a heated-air-filled balloon in Portugal in 1709.

4. Francisco Vindel. *Las primeras aeronaves* en *América fueron de invención española* (Madrid, 1954) quotes at length from the Gazeta. Vindel notes that not long before. in 1774, the authorities had banned kite-flying.

five feet in circumference, rose to such an altitude that it appeared to be a small star, moving in varying directions before rising out of the sight of the many curious citizens who followed its progress from below. After a forty-five minute flight, the hot-air balloon fell into the sea six miles from the city. The *Gazeta* of March 22, 1785 recognized the growing interest in these experiments with a plea for patience in waiting for practical and reliable uses of the balloon. It also reported another globe flight; on March 7, an aerostat rose to an altitude of about five hundred feet before falling into the sea near Vera Cruz.

Two weeks later the tempo of experimentation had accelerated so that the *Gazeta* of April 5 could report the varied successes and failures of seven new ascensions in Vera Cruz. Fire, "which has declared itself a constant rival of this new work," was responsible for the end of most of these. Hot air from a burning pile of refuse, captured in paper globes, proved to be highly flammable. One aerostat, the article noted, had avoided this hazard on the night of the nineteenth of March. It achieved a spectacularly beautiful flight, disappearing from view as it drifted inland. The report speculated on the effect such an object might have on unwarned people who suddenly saw the strange object in the sky. Not only fire, damage in landing, and disappearance, but hostility from a fearful and superstitious peasantry destroyed some of the earliest balloons. In France, the Montgolfier balloon of August 27, 1783, was destroyed by peasant pitchforks only fifteen miles from Paris.

In the summer of 1785, the Mexican experiments spread elsewhere from Vera Cruz. On June 18, at elevated Oaxaca, (to the south of Mexico City,) an aerostat with dimensions of eighteen feet in height and twice that in width, was flown. The balloon, which had been brought from Vera Cruz, could not be launched on the first attempt, and it caught fire in its "successful" flight. Yet, it captured "the admiration of all," and the launchers proceeded to construct others.

Puebla, an important city southeast of the capital, was the site of four aerostatic flights in June and July. These included the first verified attempt at a manned flight made in Latin America. A large balloon, thirty-five feet high with a circumference of seventy feet was encircled by a net, the lower ropes of which were attached to a gondola, fourteen feet long and nearly five feet high, in which the aeronaut stood. The balloon was filled with heated air amid tense circumstances. A gusty wind threatened at any moment to cause its incineration by blowing the flaming material used to heat the air against the surface of the balloon. Suddenly, a part of the gondola broke, throwing the balloon into disequilibrium. The would-be flier than abandoned the vehicle hastily and perhaps eagerly.

Meanwhile, there had been no attempt to launch similar balloons in Mexico City. The publicity given to the difficulties posed by its altitude was probably an important reason. Finally, on the night of September 17, 1785, students of the Royal Academy of San Carlos publicly tested two aerostatic globes in the Botanical Garden of the Viceregal Palace. The event was witnessed by the Viceroy, Bernardo de Gálvez, and a large number of other officials and leading

citizens, as well as by a multitude of ordinary folk who filled the adjacent plaza and all nearby balconies.

Unfortunately, the two globes each rose vertically only about sixty feet before pausing and then igniting. Failure to follow exactly the specifications of the balloons flown elsewhere was given as the reason for this disappointment. However, a popular account of the night states that the initial sadness of the crowd turned to awestruck wonder as seven successive aerostats were then launched to dazzle the spectators by their fiery brilliance in the dark sky.[5]

Such aerostatic globes were launched more as a spectacle than as practical or experimental devices. Usually launched at night, sometimes with illuminating lanterns and reflecting streamers (thus increasing the likelihood of fire), they spread throughout Mexico as a new highlight for various festivals. The *Gazetu de México* continued to give notice of many such ascensions. The most spectacular of these was sponsored by the editor and the printer of the *Gazetu,* in honor of Viceroy Gálvez and his wife. The balloon was a huge sphere, sixty feet in circumference and forty pounds in empty weight. It was of elaborate design, complete with illuminating lanterns and a legend reading, "Long Live Your Excellencies." The globe was launched from the Viceregal Palace as a highlight of a sumptuous ball, and it drifted out of sight serenely at a great altitude.

Official patronage came to an end soon after. Revolution spread from France, center of ballooning. Simple hot-air balloons continued to be flown in local Mexican fiestas.[6] But these small fiery globes could not compare to European balloons due to lack of proper resources. Light non-flammable fabric was one deficiency. But the primary missing ingredient was the recently-discovered gas, hydrogen.' The difficulty in producing it in non-industrialized Mexico was one of the causes of frequent failure of promoted ascensions once these resumed fifty years after the initial excitement.

Mexico in 1833 had a new bullring in which to celebrate events appropriate to an independent republic. Adolphe Theodore, who had learned ballooning from a French expert and had made a number of ascensions in Cuba in 1830- 1, was brought to Mexico City with considerable fanfare.[8] The promoter was General Manuel Barrera, a wealthy politically-connected businessman who seems to have monopolized early balloon exhibitions. He did not prosper in this, any more than some professional franchise owners of today![9]

5. Armando de María y Campos, *La navegación* aérea en *Mexico* (1944). pp. 12-17. summarizes the Gazeta and quotes the description of Artemis de Valle Arizpe in *Cuadros de Mexico.* The details above are from Vindel's excerpts.

6. A hot-air balloon launch of September 16, 1825 is supposed to have been a feature of Mexico's first observance of that date as its independence day.

7. Charles H. Gibbs-Smith, *A History of Flying* (London, 1953) traces the development of balloon flight.

8. Pamphlets to promote Theodore's proposed ascension are among the initial aeronautical items published in Latin America. See N. H. Randera-Pehrson and A. G. Renstrom, *eds.,Aeronautic Americana, A Bibliography of Books and Pamphlets on Aeronautics Published in America Before 1900.* (New York, 1943). pp. 35-6.

9. Manuel Barrera (c. 1771-1841) began his rise in society as a tailor. He married wealth and then prospered as a contractor to a corrupt and debtor government and as a smuggler *(Life in Mexico.* p. 473). Barrera owned the bullring from which balloon ascents were scheduled.

Theodore's equipment, particularly the device needed to generate hydrogen, was costly to operate and transport; he required a substantial advance from Barrera. This was to be covered by admissions paid for the ascent of May 1, 1833. But on that day, the aeronaut claimed to be unable to make the flight, owing to unfavorable weather.

Officials, faced with ticketholders suspicious of a swindle, jailed the timid flier. To be released, Theodore agreed to make the promised ascent, but with another balloon of greater capacity constructed for him. After delays caused in part by difficulty in finding sulfuric acid (to react with iron filings to produce hydrogen), the ascent was finally set for October 13. Just before that date the government cancelled the event, because of information that the aeronaut was not competent to conduct it safely. The people of Mexico City were furious. Theodore was again jailed before being allowed to leave the country. The influential sponsor was not required to refund the ticket price. Instead, General Barrera chose to sponsor a substitute ascension.[10]

Fortunately, Eugene Robertson, of vast experience including Latin America's first manned public ascension at Havana in 1828, was available in the United States. In spite of the previous confusion, the Plaza de Toros was filled on the scheduled date, February 12, 1835. The ascension succeeded; two days later Robertson returned from his landing site to a considerable celebration. The uncertainty about the balloonist's fate and whereabouts sustained interest after he had disappeared from view.

Various problems delayed an encore. Robertson's next ascension finally took place on September 13, anniversary of victory over a weak Spanish invasion force at Tampico in 1829 by the dominant national military figure, Antonio López de Santa Anna. The third flight on October 11, 1835, was again linked to the glory of General Santa Anna. For twenty years, periodically in power, Santa Anna encouraged balloon flights, which gratified his need for pomp and splendor. [11]

Robertson's flights were typical of early balloon ascensions everywhere in that they were widely and extravagantly advertised in order to attract paying customers to an enclosed launching area. These announcements plus reports in the press are the main sources for historical description of the spectacles. According to the handbills, the festivities of October 11, 1835, offered a few "ringside" seats at 24 pesos in the shade or 14 pesos in the sun, with the great majority of admissions at approximately one peso. According to the press, the multitude with the general admission tickets swarmed in as the gates opened at nine. Already the large balloon was being inflated. At ten, a small unmanned globe was launched, followed soon by another. These trial balloons indicated the winds at higher altitudes, and also kept the crowd entertained. Finally, at

10. Doroteo Negrete. *Cronología aeronáutica de* México (México, n.d.). pp. 7-8.
11. During a siege of Veracruz in 1832, Santa Anna is supposed to have sent taunting messages to the enemy via hot-air globes.

eleven, the main ascension capped the ceremonies, which had been accompanied throughout by martial music.[12]

The Lauriat ascension of April 1841, noted by Fanny Calderón as a failure, probably was scheduled for too late in the day. Not until one in the afternoon did the gates open. Then several hours of inflating the main balloon while launching small globes to stirring music allowed time for the box seats (twelve pesos in the shade, four in the sun) and the general admission to be sold out, but also permitted the stormy afternoon weather to postpone the ascent. The successful sequel, General Barrera's last promotion before his death, occurred two weeks later at eleven in the morning.[13]

In 1842 began the era of the first Mexican balloonist, Benito León Acosta. He had been expelled from the engineering school as unruly, but evidentally mastered science to the degree necessary to succeed as a balloonist. After his first ascension on April 3, President Santa Anna granted a monopoly to make balloon flights anywhere in Mexico during the next three years. Barely surviving his second effort in Mexico City, Acosta nonetheless made a splendid third ascent on June 13, 1842 in honor of his patron's Saint's Day.

The young Mexican aeronaut soon began a tour of the provinces. On Easter of 1844 he performed at Pátzcuaro, Michoacán. Six months later, an effort in nearby Morelia was less fortunate. The flight should have been postponed because of ominous weather. The crowd may have appeared the more threatening, however, and Acosta proceeded to his launch. The balloon blew against a building and the aeronaut fell from his basket, fracturing an arm and a leg. The balloon was blown away and lost.

Mexico suffered political instability and invasion in the next few years, and Acosta seems not to have performed. But the irrepressible Santa Anna once more returned to the presidency in 1853 and balloon flights were appropriate for celebration. Acosta reinjured his leg in a rough landing at Querétaro. With the final fall from power of General Santa Anna in 1855, Acosta retired. He lived to old age in Mexico City, at times building simple hot-air balloons to demonstrate to school children.

After Acosta, balloon flights became more common. Other native aeronauts performed throughout the republic in simple hot-air balloons. Foreigners, on the other hand, had access to better equipment. Extravagant claims thus could be made to attract paying crowds. Even scientific experiments were promised.'"

Science provided justification to the authorities for balloon ascensions. On October 25, 1858 Mexican officialdom prohibited unauthorized ascensions, hoping to avoid accidents caused by ambitious amateurs; the prohibition was repeated four years later. The criterion to demonstrate experience and capability

12. Negrete, *Cronología aeronáutica.* pp. 8-12. More accessible than this rare voume of around 1920 are the writings of José Villela. Mexico's prime aeronautical historian who has published a variety of articles and books, as cited below.

13. Ibid., pp. 12-13.

14. Ibid., pp. 15-19: Acosta's career is also summarized in José Villela Jr., *Pioneros de la aviación mexicana* (México. 1964). pp. 30-34. This book reorganizes articles published in the Mexican magazine *Aviación* in 1958-60.

was the scheduling of scientific experiments. Mexico City, in fact, was a special site for studying the effect of high altitude due to the head start provided by the elevation of the city.[15]

Spectacle often accompanies science on its way to becoming sport. Experiments such as parachute drops of animals may not have engaged scientific minds as much as they entertained crowds. The dog "Muñito" somehow was trained to parachute from his solo hot-air flight, while the more complicated-manned ascent struggled to prepare itself. Professor Samuel Wilson in 1862 brought his scientific instruments to determine whether there existed at some altitude a strong and steady air current sufficient to carry a balloon from America to Europe. This project of the time-there were proposals in the United States as well-was not to be accomplished until the 1980's. More typical was Wilson's crowd-pleasing ascension mounted on the back of a horse. [16]

Scientific pretense was dropped and daring emphasized by touring circuses. Some of these featured aerialists who performed on a trapeze hung beneath a hot-air balloon. An advertisement of 1873 shows an acrobat upside-down, hanging by his feet. Even with the limited duration of the hot-air balloons, the strength and courage required must have been extraordinary. Tranquilino Alemán was the most famous performer. Early in his career, in 1866, he was given a medal by Emperor Maximilian. Finally, after hundreds of performances, Alemán died at Cuernavaca in 1889 when he fell from his trapeze.

At least one woman gymnast performed. It was customary in the grandiloquent style of the "professors" to dedicate their ascents to "the fair sex." Yet another novelty was short flights by women passengers. A bit of tension was always present, for there were so many possibilities of accident. On occasion, bystanders were carried aloft tangled in the cordage of the balloon. A gymnast fell into the stands of the bullring at Mazatlán, killing the spectator he landed upon. The regulation of ballooning through granting official permits was for safety's sake.

By the end of the century, a stable and more prosperous Mexico saw new forms of ballooning, both sporting and commercial. Paying passengers could now be safely elevated via large captive balloons. Secure cables tied the large balloons, capable of lifting a number of customers, to their base. The first of these was brought from Paris in 1893, and was intended to go on to Chicago for the Columbian Exposition. Instead, its successful operation in Mexico City was delayed due to many problems. Advertising slogans began to appear on balloons. The inauguration in 1908 of a cigarette factory built by a French magnate was marked by the importation of Mexico's first dirigible. Its cigar-shaped envelope displayed brand names of tobacco products. It could go to where the crowds were-a precursor of the Goodyear blimp. [17]

The most famous Mexican balloonist, Joaquín de la Cantolla y Rico

15. Villela. "Héroes y Hazañas en la Historia de la Aviación Mexicana. VI. Aviación 9 (June 1959): 20-22.
16. Villela's *Aviación articles.* included in his *Pioneros de la aviación mexicana.*
17. Ibid.

(1837-1914), had a career which spanned the fifty years from Professor Wilson's showman-science projects until the airplane. As a novice, he rode the terrified horse carried aloft in 1862 and tested a premature attempt at a dirigible. Several of his balloons were "torched" by his family in the hope of discouraging his risky obsession. His ascensions were prohibited for several years after an 1878 fiasco in which his balloon rose to only six feet, stampeding the crowd. [18]

Cantolla's huge red balloon, "Vulcano," was a regular sight on festive days in the last years of the era of Porfirio Díaz (to 1911). Plays and poetry celebrated his ascensions, free to the public. The tall, thin, top-hatted elderly gentleman of good family, who sported a glass eye due to one of his hard landings, was a true amateur sportsman, unlike the professional showmen. [19]

Not a visionary, the elderly aeronaut saw no future in dirigibles and airplanes, with which certain wealthy younger counterparts had been experimenting. The power of the atmosphere was too great to overcome, his experience had shown. Cantolla y Rico died shortly after rising to a higher elevation in the imported new balloon of one of these wealthy sport balloonists than he had ever achieved in his own.[20] An era had ended.

Balloon flights had been distinctly a nineteenth century spectacle. Only for a short time did the airplane substitute as something remarkable to witness. New entertainments ranging from team sports to motion pictures replaced aeronautical events as "things to do." Fiestas no longer were protracted due to the uncertainties of weather and aeronaut. A faster-paced century had arrived.[21]

18. Negrete, Cronología *aeronáutica*. pp. 22-24, and Villela in his various works supply anecdotes.

19. The standard work on life in this era Daniel Cosío Villegas. ed., *Historia moderna de México: El Porfiriato.* discusses Cantolla *y* Rico's ascensions in Moises González *Navarro. La Vida Social* vol. 4 (México, 1957). pp. 718-720. The centennial of his first flight was celebrated in 1962 by a commemorative airmail stamp.

20. A new risk of higher altitude was to be blown south, to territory controlled by Zapata's revolutionaries.

21. Children today release small, simple "globos" to celebrate festive days in Mexico.