7. Aloft: Jules Verne; Felix Nadar; Edgar Allan Poe

In 1844 Poe writes: "The Baron was one of those human anomalies … who make the science of mystification the study and the business of their lives." Clearly, by Baron he means Von Kempelen, as in "Von Kempelen and His Discovery" (1848), about turning lead into gold. Poe had just seen the famous chess-playing automaton, and was fascinated by characters like these—by the occult mood of Baroque science. Its toys and inventors seemed unearthly, like hoaxes. They were emblematic of one of Poe's obsessions—to be trapped between, neither truth nor fiction, present nor absent. Poe becomes a key spokesman for the interlude between 1780 and 1840, which, by the way, was also a golden age for hoaxes.

Are hoaxes a special effect? Are they echoes of Neoplatonic science—of Baroque techno-occultism? Are these hoaxes a vital source for science fiction and effects today? Certainly, scenes from those early tales keep reappearing. In *The Mummy Returns* (2001), an oblong, antique balloon operates by a screw propeller similar to the *hélice* imagined by mid-nineteenth-century *fantaissistes*, like Nadar, Dore, Verne. Our journey in this chapter takes us into the Baroque Imaginary as lighter than air. (To distinguish its stories from sci-fi today, I will call them "science-as-fiction.") They were hoaxes based on misremembering—on the floating away of Baroque science. I'll begin with a summary statement:

From 1835 to 1865, "science-as-fiction" evolved out of hoaxes and the Baroque Imaginary; and it evolved mostly in print—as fiction, journalism, popular illustration. In these fictions, the most obvious signifier was travel by balloon, while lost in the clouds. Balloons become heir to the myths of terra incognita, to the silent and preindustrial as escape, as chance technique.

Indeed, in many of these stories, gentleman scientists do their adventuring by balloon, that silent precursor to noisy industrial machines. The balloon becomes emblematic—a symbolic interlude—as do the science fables of Poe, the

personality of Nadar, and hoaxes of all sorts. They all point in essentially the same direction, toward special effects imagined during the early transition toward industrial imagery (after 1820; and these images, in turn, find their way into cinema).

Science-as-fiction stories treated the machine as an anomaly, as a Baroque remnant. The old promises were adrift: the occult laboratory; the balloon; the automaton; electrical magic. They were lost dining the revolutionary period. They were oddities now, inventions not fully exploited. Thus they enter the fictive imaginary.

In countless stories, this oddity is shut down by the world; but the hero plugs on, the scientist as flying dutchman, as ancient mariner. The oddities are not as noisy as industrial machines. They hide underwater or underground. They are not as loud and ruthless as the steam engine. They react against the conservatism before 1848, and then after 1848, the clumsy and brutal emergence of industrial capitalism. They were outside of both worlds, the Baroque imaginary as progressive and regressive at the same time. Anomalous adventurers were caught in the crosswinds during this transition, from 1820 to 1870. They pretend to be aloft; but this is merely an internalized daydream, incipient science fiction before the industrial imaginary takes over.

Paris, 1863

The balloon *Le Géant* became the colossal flop of the season, lampooned ruthlessly. Its sponsor, the newly formed Society for Aerial Locomotion,[1] had been meeting inside an Arabian tent, at Felix Nadar's lavish new studio,[2] at the height of his fame. Nadar was an adventurous polymath, perhaps the first media star in Europe—a designer, illustrator, journalist, amateur scientist, pioneer photographer, and the most renowned aeronaut in Paris. While in a balloon, tethered more than aloft, he had produced the first aerial photographs of the city Using magnesium flares, he had photographed the unseen below the city as well, its sewers and catacombs. Now, with his friends, he planned an even grander coup. They would decide what kind of flying machine might be invented some day. According to their brochures, the best guess was a two-masted, steam-driven spiro-copter, the *hélice*.[3]There was no hope of building it in 1863, only of sparking interest. So, spearheaded by Nadar, the Society raised enough money for a special-effects promotional event, the ultimate in "aviation."[4] A factory nearby was hired to sew together the world's largest hot-

air balloon. Called *Le Géant*, it extended 147 feet and held 212,000 cubic feet of gas, with a two-story gondola.

It would be launched at the Champ de Mars, precisely where the Montgolfiers had pioneered balloon flight eighty years before (1783). Newspapers covered *Le Géant* as if it were a small war in Africa. Moored and tethered, it rolled under strong breezes. Then disaster struck. True to form, hot-air balloons were difficult to steer. Almost immediately, *Le Géant* hit a crosswind, and floated erratically to the suburb of Meaux. The press was savage. But Nadar proved as cheerfully feckless as Goldsworthy Gurney. He and his friends dug even deeper, paid to have *Le Géant* resewn. Then, to prove that "aviation" would some day be safe enough for women, Nadar persuaded his wife to fly with him; and as further insurance, invited the Godard brothers, direct descendants of Montgolfier's original crew.

This time, the crowd was thin. La Princesse did not show. And once again, there were gusts. And yes, once more they blew *Le Géant* out of sight—this time much farther than before. Nadar's wife screamed for revenge as the basket floundered for seventeen hours. It passed from France to Germany, and headed northeast. By morning light, she could see clearly that they were somewhere in Hannover, and sinking fast. *Le Géant* barely missed a locomotive running through a farm. At last, it struck a tree instead. Nadar suffered a fractured leg, and even the experienced Godard brothers were badly shaken.

Nonetheless, this second failure reversed his fortunes, made Nadar even more famous. He wrote two books about his exploits, published by Hetzel, both very well received. He continued to take aerial photographs of Paris, and lured other cultural lions into his aeronautical society (Offenbach, George Sand, Dumas *père*). Nadar also financed a journal, *L'Aeronaute*,[5] that survived four issues. Gustave Doré drew the frontispiece, as follows: umbrella flying devices circle the cathedral spire of a medieval town; in the distance, a balloon floats over a locomotive crossing a hill. The railroad leaves puffs of smoke that tie the composition together. Doré, who had a childhood balloon phobia, could only bring himself to render *Le Géant* as a dot lost in a bad wind. Hugo called the balloon of Nadar a foible of science, a symbol of Napoleon III's failures. Then it became an icon of Revolution during the Siege of Paris, when Nadar helped set up a mail service by balloon, over the heads of the Prussian army. In 1882, the symbolist Odilon Redon produces the etching *The Eye Like a Strange Balloon Moves Toward Infinity*, dedicated to Poe. Henri Rousseau's balloon and Max Ernst's (Freudian/oedipal) balloons are painted as fantasies lost in a wind.

But if Nadar failed as a scientist, he succeeded as a work of fiction. His greatest homage came from Jules Verne, secretary of the Society, and lifelong friend. Nadar had met Verne soon after the Revolution of 1848, helped introduce him to Baudelaire's translation of Edgar Allan Poe, not long after Verne had already written his earliest novel on balloon adventure (1851). Equally important was Nadar's extravagant, nomadic personality. I keep feeling his genetic imprint in Verne characters, particularly novels from 1863 to 1870, in Nemo, Ardan, and Fogg.

For Verne, Nadar clearly was a transition, a version of the Baroque gentleman scientist, now as bohemian, or even Victorian adventurer. One could argue, I suppose, that the 1860s was the last flowering of late Enlightenment science, the Amateur[6] before urban professionals took over. Or did they? This myth of the amateur scientist seems permanently engrained, true or false—the dotty, absentminded, unworldly adventurer, fearless but cushioned by daydreams. Of course, Nadar was much more canny than that, but myths always require extra helium.

There is also considerable debate about how far Nadar's influence actually went. The first of Verne's *voyages extraordinaires*, *Five Weeks in a Balloon*, was already at Hetzel's desk months before the flight of *Le Géant*. However, Verne lore standardly identifies the character Michel Ardan—in two novels[7]—as an anagram for Nadar. Also, illustrations of Ardan feature the spiky, waxed mustache that was Nadar's trademark, spiraling upward like an *hélice*. Nadar was a pioneer of flight before it was invented, but what he invented for the most part was the balloon as a myth of escape. We learn to overcome the air, he wrote, which "overturns walls, uproots century old trees, and tosses the ship into impulsive currents."[8]

Thus, for Verne, this feckless, brilliant man was part of a larger imaginary persona, manufactured in dozens of novels. We can spot the cues easily enough: a polymath who is an outsider; a scientist of independent means, or free at least of capitalist impulses—a "neo"-Enlightenment adventurer. But most of all, this persona belongs to a unique transition in popular literature, the late Enlightenment for mass publishing: cultural relativism circa 1750 turned into Verne's *voyages extraordinaires*. The apotheosis of the form came mostly from Edgar Allan Poe, who redesigned Baroque techno mysteries into modern fictions. Unquestionably, Poe was Verne's most profound influence, cited more than any other writer (except perhaps Hugo, but Hugo was Apollo that year, soon after the long-awaited publication of *Les Misérables*).

In *From the Earth to the Moon*, the Gun Club in (Poe's) Baltimore rallies behind Michel Ardan, as they prepare for their trip to the moon. Ardan makes the implausible seem so easy, but his pettiness can be maddening. By chapter twenty-five, it becomes clear that if he had his way, there would be no space remaining in the projectile for people. As the eccentric scientist, he wants to fill it with "useless trifles," even a Noah's Ark of pack animals—bullocks, cows, horses, donkeys—and intends to plant seeds on the moon. His enthusiasms and misogyny are charming and dangerous, certainly not the gloomy version we might find in Poe.

Like Nemo, the ultimate Verne misanthrope, a scientist adventurer could "pass for one of those cosmopolitan, curious of knowledge, but disdaining action; one of those opulent travelers haughty and cynical, who move incessantly from place to place, and are of no country."[9]

Poe Floats

Poe's writing becomes the summa of the Baroque Imaginary, the bridge from the late Enlightenment, from Neoplatonic myths of science to tales of science fiction. He was determined to generate literary sensoria, to bring the mysteries of shipwrecks and aerial descent into the spirit of reading itself. Like a master of theatrical effects, he promises to reveal "painful erasures and interpolations … the wheels and pinions—the tackle for scene shifting—the stepladders and demon traps—the cock's feathers, the red paint and the black patches … the properties of *histrionic*[10] (as in the factual/fictional story; both sensory and histrionic). Poe's visceral descriptions are legendary, of course. In *The Masque of the Red Death*, he calls them "voluptuous scenes." In *Hop-Frog*, they follow a court dwarf's apocalyptic revenge:

> I see *distinctly* what manner of people these maskers are. They are a great king who does not scruple to strike a defenseless girl, and his … councilors who abet him in the outrage. As for myself, I am simply Hop-Frog, the trickster. And this is my last trick.

In "The Philosophy of Composition," he promises to convert special effects in the theater to the *effect* on the page, to a shock wave in a story, where the narrator is revealed as unreliable, like a psychoanalytical trompe l'oeil. Essentially, the scripted space turns into the point of view of the madman trapped in his

interior, and thus astonishing the reader. In "The Man That Was Used Up," the narrator (as if studying anamorphosis on a wall) bumps into a sack that is General A.B.C. Smith's body. The general's slave then screws back his cork leg, his head, inserts his teeth, then "adjusted therein a somewhat singular looking machine," to restore the "rich melody and strength" of the general's voice. Similarly in "Mesmeric Revelation," Poe compares this interior special effect to the sleepwalker about to die, not unlike the late Baroque fascination with the statue that breathes:

> I observed on his countenance a singular expression, which somewhat alarmed me, and induced me to awake him at once. No sooner had I done this, than, with a bright smile irradiating all his features, he fell back upon his pillow and expired. I noticed that in less than a minute afterward his corpse had all the stern rigidity of stone. His brow was of the coldness of ice … Had the sleep-walker … been addressing me out of the region of shadows?

In 1835, a hoax as *effect*[11] was badly perpetrated, then overshadowed by another hoax that somehow convinced readers across the eastern United States. The first came in June,[12] "The Unparalleled Adventure of One Hans Pfaall," written by Edgar A. Poe, about a man escaping from his creditors by taking a balloon trip to the moon. But Poe wanted his hoax to be uncovered as a fake, a "canard." He only pretended that all Europe was in an uproar about Hans Pfaall.

The crisis began up in the sky over Rotterdam. From behind a bank of clouds, an object emerged, "heterogeneous, but apparently solid;" and yet "so oddly shaped … whimsically put together." On the ground "the host of sturdy burghers" stands "open-mouthed." At last, they "accurately discern" that this object is "a species of balloon." A very ornate species, suggesting Baroque science, another special effect involving a "fantastic machine." It hung in the sky like a bat, or a foolscap flying upside down. A tassel made of blue ribbon dangled from the bottom. The tassel held a basket, and in the basket was a gnome-like creature. The gnome looked well-dressed, very civil. He leaned outside the gondola, and dropped a letter. People gathered as the parcel landed. Then the balloon "arose like a lark," and vanished behind another cloud bank. Meanwhile, the letter turned out to be a diary; by one Hans Pfaall, addressed to the College of Astronomers.

Hans Pfaall considered himself as an unremarkable man, a mender of bellows. I imagine him in a cracked leather apron. Rotterdam is made to look

quaint and Baroque; and it probably did look relatively quaint until its harbor and downtown were bombed by the Nazis in 1940.[13]

Let me try a bit of fictional scholarship: In 1835, from Poe's window in Baltimore, a city like Rotterdam probably looked mostly like a Baroque remnant, stuck inside the Dutch Enlightenment. Its streets very likely reeked of the seventeenth, and eighteenth centuries, like Delft or Antwerp, or even "old" Amsterdam. It was another one of those Netherlandish stadtholder towns he had never seen. Often in the nineteenth century, Holland is described like a Baroque microcosmos, a tiny holdover that still specialized in optical magic and Baroque philosophy. I am reminded of the old saying, still in vogue as late as 1835, that French armies may rule the continent but Germany rules the clouds. Rotterdam could easily be imagined as an extension of those quaint Germanies, a tired burgher city within a congeries of little states, not part of an industrial giant in the making.

But most of all, these quaint Baroque details reveal Poe's internalization of special effects. In 1835, like miniature "toys," the omelet of German and even of Dutch states—even of Prussia—were not generally viewed as industrial. More often, they were dismissed as feudal, atavisms, where old-fashioned craftsmen produced miraculous automata, and great philosophers like Kant or Leibniz hid out in quaint towns.

In the final page, Poe announces that the diary of Hans Pfaall was faked.[14] That trick—the literary magician showing his hand—is a cue for us. The crossovers shows us how a latency ends: 1780 versus 1840, an era about to launch. The cleft is marked spiritually by Poe's writing, and its effect after 1848.

In "A Descent into the Maelstrom," we follow Poe's retelling of the Baroque shipwreck, arguably the most influential literary storm ever written:

> Never shall I forget the sensation of awe, horror, and admiration with which I gazed about me. The boat appeared to be hanging, as if by magiic, midway down, upon the interior surface of a funnel vast in circumference, prodigious in depth, and whose perfectly smooth sides might have been mistaken for ebony, but for the bewildering rapidity with which they spun around, and for the gleaming and ghastly radiance they shot forth, as the rays of the full moon, from that circular rift amid the clouds which I have already described, streamed in a flood of golden glory along the black walls, and far away down into the inmost recesses of the abyss.

Poe devoted less than a quarter of his publications to these scientific canards.[15] Most of these express his fascination with deciphering and debunking, faking goldbugs about technology. But they also reveal his shift from Baroque science to industrial science fiction. After 1838 in the U.S., a feverish excitement for railroads has taken over. The interlude from 1780 to 1840 has ceased. The modernity of speed is being imagined, but in the spirit of Baroque tempests and terra incognita. The literary engine for Baroque imaginaries is reshaped. Eighteenth century sea monsters, occult scientists, Bougainvilles, Crusoes evolve into adventures for the age of railroads.

In "The Thousand-and-Second Tale of Scheherazade," Poe retells the Arabian Nights as if it were The Persian Letters, Imagine Poe as Diderot taking inventory at the harbor of New York City; then weaving a fiction. This time Scheherazade has done some serious traveling. She woos her boorish king with stories about "conjurors" who build occult machines.[16] The magi have contrived a steam-driven sea monster. It has human worms on its back, smoke rising from its blowhole. They have an automaton that can beat any human being at chess. Another machine out-calculates "the united labor of fifty thousand fleshy men." Another "thing" with fingers made of lead moves at incredible speed, to produce "twenty thousand copies of the Koran in an hour." Industrial alchemists turn base metals into gold. They spin platinum wire thinner than a spider's silk. They make the sun paint your portrait. They drop lightning, like a child's toy, into your hand. They have trained infants and the commonest cats and dogs" to see a thousand times beyond the naked eye. They restore objects lost twenty million years ago. Finally—this wonder is very incongruous—they expect women to attract men by wearing lumps on their backs like camels.

"'Stop!' said the king—'I can't stand that, and I won't.'" He orders Scheherazade put to death. As the arrows pierce her body, she consoles herself with the thought that history will tell even more stories as wondrous as these, and that her brutish husband would be deprived of "inconceivable adventures."

The line between hoax and technology disappears, into special effect about techno anomalies. Poe is fascinated by the latencies of his era. He tries to imagine industrial technology that has not yet worn out its Baroque mysticism, its Neoplatonic tromperie. Thus Poe, as the spokesman for 1840, gives birth to science fiction as anomalous, horrific, ruined, as sensory overload, as incredulity. He treats balloon flight as if Cyrano had written it in 1650, but was published in a New York newspaper in 1835. From Hofmann, Coleridge, Tieck—and the famous voyage of Henry Selkirk that inspired *Robinson Crusoe*—he invents a new

variation on the shipwreck, on terra incognita, along with standard Romantic pablum on automata, mummies, corpses come to life; even on an alchemist at work during the California Gold Rush. Then he leaves those odd news fragments: In 1844, rumors persist that a troupe of Swiss Bell Ringers in New York were actually automatons. Poe debunks the rumor by proving that they ate and digested rolls and sausages.[17] Clearly, his techno fantasies were crossover experiments, on how to deliver literature that mesmerized like special effects in the theater.

Poe's *effect* offers an emotional response in threats that loom in the future, what lies under the floorboards (the sound of his beating heart!). His neo-Baroque Imaginary finds its way as hoax; and from hoax, it is encoded by writers like Verne into science fiction. From Verne's adventure books, it is adapted into special effects, even in the films of Méliès. That takes us on a curious journey, different from the sections on scripted spaces. For a time, the fantasy looked vaporous; but its subject is the fierce materialism that is roaring across Europe and the United States (and soon to absorb the entire globe, in waves of imperialism). It is an instant before the naked wood framing gets its clapboard, turns into a house. It is the anomalous moment captured as special effect.

In short, we are watching the Baroque fascination with the neo-feudal state transform into a fascination with individualism, with myths of material democracy. One might say we are taking a journey from feudal rigidity to fascism, with stops along the way. Special effects misremember, miscalculate, turn perspectives awry. But they are clues to a state of mind. Poe is so very clear about his structuring of state of mind; and his influence so profound, he is a very useful, emblematic figure for us. We do him justice by honoring his frustration with the present, his sense of unease, and what it tells us about special effects and fantasies to come.

Afterword—Imaginary Barqoue Time: "The Pit and the Pendulum" and the Cuckoo Clock

In Poe stories, clocks tick infernally. Finally, in "The Pit and the Pendulum," a clock enlarges into a prison cell. Inside, a victim of the Inquisition is strapped to a wooden bed. From the ceiling, he notices a giant clockwork descending with "monkish ingenuity." Its crescent blade has been set to open his chest. He follows its vibrations, each volley bringing him closer to the *effect* of death itself.

Then suddenly he is saved by French revolutionaries, who in turn will invent yet another crescent blade, the guillotine.

Poe has utterly internalized the Baroque mechanism, not by making the man an automaton, but by making the clock a prison. But in fact, by 1840, the Baroque clockwork, so essential to its special effects, had survived not as a prison, but in miniature as the cuckoo clock. These were sold as souvenirs from Baroque Germany, from the Black Forest, and were based on designs as early as 1640. Bellows to make sounds were added during the height of the talking automaton, in 1750. Finally by the nineteenth century, the mechanical cuckoo itself was added.

Thus, miniature Baroque mechanics survived into the industrial era. Cuckoo docks were hawked mercilessly by hundreds of peddlers from the Black Forest area. By 1860, in the wake of Germany's rapid industrialization, the last major feature was added. The housing took on the Bauhaus style, like a railway station house.

The cuckoo clock is a map of the Baroque Imaginary. Its tile roofs are often compared to chalets, and tiny Germanic duchies, to Swiss cantons, and Alpine retreats. They have remained a staple of tourism for 150 years, particularly in Switzerland. While visiting Lucerne, Mark Twain learned to hate cuckoo clocks. They reminded him of "gimcrackery of the souvenir sort," like 'Alpine crystals, photographs of scenery and wooden and ivory carvings."[18] Worse still, wherever he went their piercing "HOO'hoo! HOO'hoo!" followed him. "No sound is quite so inane. For a nervous man, this was a fine state of things." Twain finally buys a cuckoo. He plans to "impair the mind" of someone he hates back home. Otherwise, he will simply chop the thing to pieces.

Like the many special-effects clocks at city halls in Europe (some added nostalgically after 1890) the mystery here is not so much about the numinous, not about the power of Unseen God or of the Counter-Reformation. Nor simply about nostalgia. The power is emergent capital, or new tenements, or new job descriptions—the anomalous as a modernity about to bring on its shocks. Another imaginary machine roars faintly in the distance, keeping time. It is a train across the American continent (1869), a clock mechanism syncopated to the new industrial takeoff. This clock is 1,776 miles long.