The Vatican to Vegas

For decades, the phrase Loose Slots was repeated on signs along the Las Vegas Strip, a pun on getting "lucky" (slots as in "sluts"), to go with the flyers reminding visitors that "it's" legal here. According to legend, back in the fifties, the number of prostitutes within each casino used to be assigned, as if by odds makers who also knew the precise ratio of flesh to gambling.[1]

The script, then as now, appeared to be calculated down to the last dime. Don't expect to win, but expect a good ride. Visitors gambled away, on average, over three hundred dollars per capita every weekend.[2] Most accepted that without argument. The potential to break loose was always there, even though the odds favored the house. You paid for the experience.

Visitors have been paying for centuries, responding to tricks as venerable as prostitution itself. The more lavish the special effect, the more it followed a script about power, about giving in to power, about pretending to cheat authority. Special effects are a form of collusion, like a doctor allowing the patient to fake the surgery. They are "complicit" childish play, "scripted" like Tom and Huck playing Indians.

So we begin with a suggestive atmosphere, perhaps a bar, properly assigned, inside a sixties Vegas casino. A seductive stranger is having a drink next to you. The mood is a trifle naughty, but utterly safe. You feel secure enough to be a cheerful accomplice, to play against the house, even stand in line to try your luck. Inside spaces like these, carefully scripted to maximize profit, you can choose an additional reward as well. You can receive a visual shock or surprise, a special effect; and not a cheap one at that, something lavish.

This is a "history" of how scripted spaces have made these ticklish, immersive effects possible. I concentrate on very fancy public spaces, from 1550 to the present, across dozens of media, in a shell game as old as prostitution itself. These spaces were set up to provide only the fragrance of desire, for po-

litical or financial profit. But most of all, they were set up to release a "marvel," a briefly eloquent stupefaction. Its effect could be a trifle bawdy, yet safe enough for church—a glimpse of a thigh, perhaps something exotic, supernatural, even deeply religious. The thrill might be a ride that pretends to kill you, or a rowboat that takes you past death itself. Or it might be the "blow hole" in old Coney Island, where a gust of air would blow women's dresses up to their waists, while men would wait below—online—for a glimpse. I have interviewed several ladies who remember the "innocent" fun of the blow hole, and the men who would smile innocently afterward.

Of course, all this brings me to a confession, in the spirit of modesty. I almost never join any organized game. I don't see the fun in being an accomplice. This has occasionally led to research problems, when trying to enter the mindset that makes for special effects. For example, I get restless on long lines at Disneyland. The obsequious good cheer gives me an ache. I remember a particularly grumpy—blazing—August day, when suddenly Mickey waved at me. I shook him off. All I could see was some poor soul, a worker impacted inside,[3] sweating like a candle, in a state of arrested decay.

What's more, I much prefer special effects when they are ruined. For example, occasionally, I conduct sim-tours of Los Angeles. That is the opposite of my anti-tour,[4] where every building I point out is missing. On the sim-tour, no buildings are missing. But everyone I point out is a fake. I really like fakes, the blunt enthusiasm of them. A few years ago, during one sim-tour, we stopped at the New York Street in Paramount Studios. Toward a far corner, everyone noticed one brownstone building peeling like wallpaper. It looked weirdly "Baroque." Like trompe l'oeil, the solid vanished into a wafer of nothing. Ten people in the group ran to get photographed in front of the peel, with the silly chicken wire behind it. I tried to warn them that they were wasting their film. Once light passes through the lens, the trompe l'oeil would recede. The photos back from the lab would look completely normal, like snapshots of midtown Manhattan.

Another example of "ruin": In 1993, I visited the Luxor in Vegas soon after it opened. Luxor was billed as "the first pyramid in 2,600 years." While I leaned at the entry, a chunk of the front wall broke off in my hand. It was weightless, made of stucco, chicken wire, and Styrofoam. For years, I kept my chunk of the Luxor on a shelf near my computer, beside a piece of the Berlin Wall; next to broken pottery shards from Armageddon (I had found them at a parking lot in Israel, at Megiddo, the spot where Revelations promises the world will

end); and finally; near some tattered first editions of pulp novels from the fifties (urban ruin as special effects).

What's more, I grew up in a neighborhood where special effects could only be found as ruin, in the slums of Coney Island. From the boardwalk, I would lean on the rail, to watch sailors and Gypsies mingling (and commingling) on the empty sites where amusement parks used to be. Down by the shooting galleries along Neptune Avenue, the stares from twelve-year-old Gypsy prostitutes terrorized me. Some were even younger than I was. I was afraid to meet their glance, because they'd know that I was too naive to understand what they wanted.

Thus, special effects implied an urban tug-of-war, between Jews and Italians, sailors and Gypsy girls, Puerto Ricans and Irish youth gangs, while I watched the fireworks from my fire escape. No wonder I keep finding power struggles, and layers of erasure, in my research on special effects. At the same time, clearly our culture needs to unearth these anyway, to concentrate on the cracks in the pyramid. Frankly, the rot in amusement parks is visually breathtaking. It humanizes the effects, takes us inside the deal that the audience once made with the program.

And it is indeed a venerable deal. For Vegas "architainment," the clearest points of origin go back to the Baroque. When the Forum shops opened at Caesar's World in 1992, they were hyped as "timeless replicas of a street in ancient Rome." Similarly, when Caesar's itself opened in 1966, it featured "Rome swings," and a Circus Maximus "showroom," lined with "exact" copies of Venus de Milo, Canova's Venus, many Venuses. Poolside was an "Olympic" sized replica of the baths of Pompeii, where showgirls dressed like Cleopatra greeted guests as if they were Richard Burton. It was Casino Renaissance; then after 1989, when Steve Wynn opened the Mirage, it became the "Electronic Baroque." Finally, in 1999, for the New York Times, Wynn officially declared that Las Vegas is a Baroque city.[5]

That was very much the spirit of the nineties: hundreds of "sim" Renaissance and Baroque buildings added or rehabbed. In Clark County, Nevada, a 1550s style of Tuscan villa caught on for town houses, then spread to Orange County, and to beach towns in southern California. Even movie shrines were given more helium during the nineties. Along Hollywood Boulevard, a copy of Griffith's Babylon set (1916) introduced the new Kodak Theater (2002), next door to the newly polished pagodas of the Mann's Chinese. These, in turn, compete with a pharaonic promenade added to the Egyptian Theater, and newly technicolored Moorish interiors for the El Capitan (1926; rehabbed by Disney in

1993). On the ceiling of the El Capitan, dome paintings from Spain and Italy have somehow migrated four hundred years;[6] a twisted mutation certainly, but there it is. Whenever technology changes, special effects will grow a new tail, even a new head, but still manage to dig the same hole.

It still frames the same kind of thrill, a sudden yet fragrant shock. Special effects could probably survive a nuclear winter. They easily survived the bombing of the World Trade Center. How many times have we seen Jesus crucified, witnessed the end of the world, watched humans morph into beasts? We walk in air-conditioned comfort through the most terrifying verses of the Bible. Why are special effects so durable, particularly about terror? Are effects today, from cable news to Harry Potter, part of a Baroque cover-up? Indeed, in many ways, they obviously are. Thus, parallels with the period 1550 to 1780 are very instructive.

These parallels bring me to the theory behind this book—the political unease behind the staging of Baroque effects, then and now. The deeper this unease, the more flagrant the tricks. Deceits were tortured. As in our era, this fakery serviced "global" or transnational arrangements. It twisted them, posed them. But beneath the lavish shamming, monarchs were caught between fundamentalists and greedy corporations. And of course, then as now, they often chose badly. Their lopsided kingdoms matured during religious wars. They sponsored lavish special effects in response to these wars, about terror and terrorism. And like our disaster movies, Baroque effects relied on "software" of a kind: solid geometry for architecture, optics, sculpture, paint, theater. Numerous handbooks after 1550 detailed how to build these illusions, including charts for carpenters, and texts by leading architects like Serlio,[7] the painter Fra Andrea Pozzo,[8] designers like Joseph Furttenbach the Elder.[9]

During the eighteenth century, quadraturistas, or illusionistic painters, operated practically as a guild through western Europe, along with the final phase of the Baroque fantasy—automata and "toys." When all these faded, a period of transition led to industrial replacements, new forms of lavish effects. At the same time, Baroque crafts, even as they faded, led to science fiction itself, and finally to cinema; and in recent decades, to the eccentric trail of scripted illusions that we find today.

These parallels also bring me to the structure and rhythm of the text. The title, The Vatican to Vegas, is not simply rhetorical. It refers mostly to a history that I have constructed, from about 1550 to 2003—about special effects as an instrument and critique of "power." The research moves through architecture, philosophy, literature, theater, optics, mathematics, technology, pageants.

Clearly, somewhere around 1550, a grammar that suited them all came of age. It was modeled mostly on perspectiva as barrocco (or barochetto)—on perspective elegantly awry. This grammar delivered entertainments strangely like those we find today about disinformation, cybernetics, gala role playing, user friendly paranoia.

Of course, occasionally, to deliver all these connections, I will drift back even earlier, to pioneers like Brunelleschi, Uccello, Masaccio, Leonardo, Dürer, Alberti. But very clearly by 1550, their "magic" had become widely available. Masters of special effects—of turning perspective awry—could simply purchase the kit.[10] In Italy most of all, and soon after in Germany, France, and Holland, optical craftsmen standardly knew what tools were needed. Even the mathematics was nearly standardized, with staggering applications across many fields at once.

No wonder these masters were "Renaissance men." They were arguably the first "data" engineers. Eventually, careers for these engineers had solidified. Perspectival illusion became practically an established, all-purpose profession. It could serve for war or spectacle, based on similar mathematical blueprints: grids and solid geometry. These blueprints could sail a ship to the Americas. They also could sail a ship inside a theater. Perhaps Leonardo was not a scientist in hiding, drawing those elegant winged machines. Perhaps he was drawing science fiction. As one of the leading military engineers of his day, he knew that most of his sketches were unbuildable. However, myths of Renaissance visuality demand that he be a NASA prototype. For this history, he is also an Imagineer.[11]

In his famous sketchbooks, Leonardo uses Albertian "absolutes"[12] to design *fantasia,* which meant literally the site where imagination dwells in the soul.[13] Leonardo also built dozens of scientific illusions for pageants and theater, even mechanical "toys" for the court, like his haunted alarm clock.[14] We mentally gather these together, in a room, like a cabinet of curiosities, or a memory theater. We walk through. They add up to a mystified, sensory form of storytelling: *istoria*.[15]

But Leonardo was still early in the game. Eventually, a narrative, architectural grammar was set in place, for tricks indoors and outdoors, mechanized to move, or sculpted. And then in the late twentieth century—after 1955—a similar grammar was rediscovered. Thus, from Baroque Rome to Baroque Vegas, with a stop at Disneyland on the way, we can mentally walk through an odd continuum, through spaces and instruments of illusion that are strangely parallel.

Of course, I realize that for histories constructed in this way, the past is always basically the present. It is an ironic history of techno-illusions, with hundreds, with thousands of documents buried inside. The basic arc may be simple enough—Baroque to electronic Baroque. But the ironies presented by the evidence make for very odd structural transitions: how these effects were staged, who paid and why, who cheated knowingly. The eras that fit special effects do not always match other historical models. The fragrant machines warp more than transform, operate against the historical grain, almost as a conservative denial of history. Optical mechanics warps toward cinema, from 1660 to 1893, but often as a reaction against industrialization. Panoramas in 1829 warp in two directions—toward industrial skyscrapers and toward neo-Baroque trick films.

Special effects do not make for the usual teleological history. Instead, they are a history of surprising connections, like effects themselves. They are more often a record of collective forgetting and collective sublimation. However, my research does clearly point toward a few constants. They repeat in literally hundreds of documents and interviews.

The first time, inside a layered, aromatic space, special effects tell their "story" in a few seconds. They are coup de theatres, thunderclaps that shock you: a burst; an eruption; something small, like an insect down your back; a wall dissolving suddenly. That has affected the rhythm of this book. In order to describe how these shocks feel, I have accelerated the language, used tricks that speed up the imagery, to show the phenomenon itself. If the text occasionally runs like a jump-cut movie trailer, it is because I am delivering three acts in two seconds.

The next constant involves scripting. To pack the wallop they need, special effects must reassure while pretending to "shock." The terror has to be honeyed. It cannot strangle you hopelessly into a corner. So there will be a lot about how the scripted space is nailed together, how the nails themselves are an apparatus that tells a story. This story delivers special effects about trauma and paranoia. It is a comfort zone about terror itself. But I do not mean terror as in horror. I will deal more with special effects horror in the second volume. That is a somewhat different subject, more about conscripted spaces, interior topology. For this book—and a vast enough subject indeed—the effects I cite were too expensive to simply chill you into heart failure. In these scripts, the fragrant ambience also had to defend the power of princes and kingdoms. These shocks might pretend to drown you, but only in six inches of scented bathwater.

The Politics Behind the Shock

We review the plain facts: A special effect, by definition, "fools" the audience. By fooling, it manipulates them, on behalf of whoever runs the game; let us say, on behalf of those "in power." But this is hardly a sin, not in our civilization. Many very great Renaissance/Baroque masterpieces qualify as media manipulation. And those are worshiped. What's more, we all love to be tricked by some version of the sublime (or by sublimation, at least). So rather than praise or condemn how manipulative effects can get, why not simply discover their nuances, as well as their cracks? When is a trick as thin as an eyelash? How does it "work" an audience—"immerse" them in scripted revelation, from resurrections of Jesus to a night at the casino?

Imagine an audience in 1470, staring up at three-point perspective in Mantegna paintings[16]—up the skeleton of a dome, with its oculus staring back omnisciently from the roof. This was probably a virtuality of such exquisite, luminous irony that the wall itself must have "melted." However, by second viewing, even the next day, one's eyes began to adjust. This magic had become familiar. The narrative had evolved. Even in 1470, in the hands of an exquisite master, the "virtual" was relative, even unstable—certainly mutable (and probably, it was designed to be).

At the same time, the prince's bald political power was not at all relative. The influence of princes—and wealthy merchants—floated comfortably inside these illusionistic settings, much the way it does today along monumental consumer streets. Or even on the Internet, or in a movie where the computer makes the world explode. What would Hitler have done with computer graphics? Or the Roman emperor Augustus? Imagine the computer in the hands of a powerful medieval pope like Gregory VII,[17] who once forced the Holy Roman Emperor to walk barefoot in the snow for three days.[18] As a literary effect, we zap Gregory back from the afterlife, let him stroll through a trade show on new software (something like Siggraph). Pope Gregory is ecstatic. He declares the computer "godlike." It is a Sacrorum *Concilium*[19] pressed like flowers inside a small box. He touches the interface. The box suddenly hums, agitates. He steps back, thrilled, then makes a statement: "Never before have I seen entertainment, salvation and power tied by a single knot. If popes had computers in my day, they would have rendered unto Caesar … simply nothing."

One could just as easily imagine what a revolutionary Puritan in the seventeenth century might have done with software—in the Weberian sense: make special effects to prove that predestination does not inhibit free will. One can

see what special effects are doing today to democracy. Or should I say when democracy operates like a game? Inside this game, the audience pretends to share authority with those in charge. But by the end—like sex in the parlor while your parents are asleep, or like masturbation or solitaire—no power really changes hands.

It is astonishing how often, over the centuries, special effects have set up imaginary power struggles very much like that—in theater, on the screen, in media politics, on the Internet, and so on. For each era or type, I will start with one case study where power is a special-effects struggle. Then I will take this game apart like a clock, and proceed from there.

The case studies will range from the sublime to the shoddy. However, my research has shown me that almost none of us is immune to even sleazy special effects. I certainly won't pretend that I am, not after researching 450 years. I have discovered that I can be suckered by gaudy movies as much as anyone else; and by splashy gimmicks in architecture, theater, urban planning, painting, social history; literature, publishing, philosophy, science, technology, scenography. In my research, I was surprised by how well many designers understand these tricks as expert craftsmanship—down to three acts in a few seconds. Also, designers kept reminding me that they wanted the spectator to notice how paper-thin the effects were. Thin was elegant. Thin showed control, like a ballet.

That was a chastening discovery. Afterward, I stopped trying to deconstruct what to them was obvious. Better to put aside almost every term based on the nonlinear, on abstraction, simulation, neo-Kantian allusion. None of those quite fit the evidence. Special effects were simply not a copy of the real; not even a copy of themselves. They were medicine where the doctor helps the patient fake her surgery. They were "complicit."

It will take a while to discover how this complicity works. We will proceed step by step, one spectacle or gizmo upon the other. Clearly, special effects often required a double collusion. Two cheat codes ("folly") operated at once, each erasing the other. One code helped the prince cheat; the other helped the player. And yet they visually coexisted, like two thieves breaking into the same window. This was very common in Baroque labyrinths, also in trompe l'oeil and anamorphosis. What's more, this doubling of the special effect, according to social class, was commonly understood by artisans and artists centuries ago, though often ignored by art theory after 1800.

How to Navigate 450 Years

After 1800, very little theory was written about the narratology of special effects altogether, almost nothing about power-brokering as a poetics. By comparison with 1750, we run short of terms. It makes sense to borrow from Renaissance and Baroque sources. For interviews, I only repeated terms (old or new) that seemed crystal clear, market tested. Generally, the clearest terms revolved around a single question: how do your tricks get the viewer to walk through in comfort, without being bored? In other words, effects masters will script their paradoxes by the square foot, like labyrinths.

But one term tested the best by far—scripted spaces; it seemed to explain itself in every interview. It is clearly the best point of departure. With scripted spaces as a tool, I can easily launch into chapters on the scripting of illusions in architecture from 1550 to 1780, then on toward cinema and amusement parks, and finally to our era, when both architecture and film coexist inside the same moment. By decoding scripted space, we learn how power was brokered between the classes in the form of special effects.

Scripted spaces are a walk-through or click-through environment (a mall, a church, a casino, a theme park, a computer game). They are designed to emphasize the viewer's journey—the space between—rather than the gimmicks on the wall. The audience walks into the story. What's more, this walk should respond to each viewer's whims, even though each step along the way is prescripted (or should I say preordained?). It is gentle repression posing as free will.

How is this scripted freedom accomplished? The entrances and exits are often fixed, and the perimeter isolated from the world, as at Disneyland. From front to back, the choices are defined; yet somehow the walk is supposed to feel open. The design has to justify the price that the spectator pays. The trade off must "appear" flexible somehow, reveal many ways to go, even if there are none. You are always at a fork in the road, deciding to give up this for that. Thus, the player can enjoy feeling a "little" bit trapped.

Scripted spaces of this sort are common to all theme parks, casinos, computer games, and Baroque churches. The reader probably has thought of ten very personalized examples by now. Here is my favorite list: A walk to an execution is a scripted space; an entrance to a brothel; the twelve stations of the cross; refreshments at Disneyland; the placement of kitchen supplies at a supermarket. Even an overdesigned bathroom can be a scripted space, but a little tedious in an emergency.

Researching scripted spaces easily gets out of control. Broad parallels crop up everywhere. A medieval water clock resembles King Kong (both are automata). Baroque landscaping looks like a video game (both are labyrinths). Practically any form of surreal[20] bricolage can be a scripted space, from medical charts on the small intestines to the puzzled stares of bored store clerks at the mall. The symptoms grow like an infection, like medical students checking for rashes on their faces. So to avoid endless symptoms, I should narrow my categories: By scripted spaces, I mean primarily a mode of perception, a way of seeing.[21] This helps us notice instructive pairings that are basic to special effects, what Magritte called affinities: the Vatican paired with Vegas casinos; Baroque cities with Disneyland; mega-malls with computer games; the Crystal Palace Exposition of 1851 with armchair imperialism; *Star Wars* with video games; gun sites with Flash software.

Within these scripted spaces are slender epiphanies, like the instant when you glance up at Mantegna's ceiling of 1470. They are a scripted phenomenology, where the shock that is a "special" effect can be very, very brief—brief yet scrupulously designed: again, three acts in a few seconds. During the Baroque, these few seconds were often called "moments of wonder."

The Tone of a Good Shock

Similar to what I suggested earlier on rhythm, the tone of this book must reflect that kind of sensory surprise. I promise to use some well-tested literary gimmicks, even structure entire sections as a special effect. Among my sources: Poe on "effect"; Barthes; Nietzsche; Nathalie Sarraute; Proust; Woolf on moments of being; Balzac's cognitive maps of Paris; Johan Huizinga;[22] Situationist détournements; always Foucault; always the history of animation and media; Benjamin's sense of ruin. But inside this obsessively researched book, fictions still have to invade the evidence.[23]

Special effects operate also as literature. In fact, I am quite convinced that the book itself is a Renaissance computer. So, to assist the literary tone and rhythm of special effects, I have upgraded the appendix. I have added a search engine right before the index in the back. As in The History of Forgetting, the appendix should help the reader to return to the moment when fiction and fact were simultaneous, to the shipwreck diary of Henry Selkirk[24], whose memory was alive to readers when they opened *Robinson Crusoe.* For this book, I particularly want to highlight the moments when Poe and Verne turned Baroque spe-

cial effects into "science as fiction." They understood what has become obvious now,[25] that scholarly evidence operates as special effects. Making history look continuous is fundamentally a fictive act. I believe, therefore, that the honest scholar should try to keep those fictional tricks right on the surface. Otherwise, in our bizarre civilization most of all, fake "objectivity" becomes very dangerous. As an afterword, we will enter the election of George W Bush and the war on terrorism as a special effect, about the events after September 11 as another stage in the horizontal shifts in power during the era of the electronic Baroque, particularly about news media as an instrument of power. Clearly, as of 2003, the American presidency has formed an alliance with cable news, to use special effects as a homely tool of government. A carefully scripted briefing can erase any scandal (except perhaps scandals in the stock market, where profit, the ghost behind special effects, is too real to fake).

Also Part IV—on the present—shifts tone from earlier chapters, to match the low-grade attack of nerves that has afflicted the culture of the United States in 2003. A second volume will be needed, to respond to the rapid changes coming over the next few years, to the "new fun" and terror in the pipeline. Even more cheerful but alienating special effects are coming soon. "Buckle up."

What Is a Special Effect?

A technological marvel controls an illusionistic environment. It has been set up to deliver elaborate shocks. Within these shocks, an allegory emerges. Staged as an epic journey, this script immerses the viewer in a reassuring adventure. This adventure is often about a "marvelous" power larger than life, larger than humans alone can ever hope to be.

How Special Effects Reveal Political Anxieties

Starting at 1550, concluding in 2003, I will track the political anxiety that hides behind the sweet shock of a special effect, how it literally flirts with death. But very often, these scripted shocks suddenly feel prophetic, painfully close to how power actually operates, like terror as a computer game; or auto-da-fe as theater, the burning of witches as special effects in seventeenth-century Spain. We should never distance these "effects" by calling them surreal or simulated. Even when they look very blithe and dreamy at first: underneath, they are designed to convert terror into a friendly ride.

A blend of gentle illusion and raw power, special effects often theatricalize political disaster: shipwrecks; wars; rape and pillage. The gaudiest effects probably came out of Italy during the Baroque era, during a global economy peculiarly like our own. There lies our clue: Then, as now, special effects were shock absorbers. They were found to soothe the terror by packaging it (in atmospheric spaces, but as fragrant as a corpse in the backyard). The more disastrous the spectacle, the more fragrant immersion that it required, the hints of terror that spice the effects. Then as now, 1550–2003, the viewer gets to sit like a general watching the war, pretends to be ordering soldiers into battle, in 1618 or 2003.

Occasionally, these imagined disasters reveal more than they were supposed to. I had no idea while writing this book that special effects during the nineties might portend real events today: Many chapters written before September 11, 2001 fit too conveniently into our emerging nightmare. Some of the worst came true. Now, I have to add an afterword about our Thirty Years' War, as part of our electronic feudalism during the Electronic Baroque. The irony feels much more chilling than a special effect.

Many seigneurial arrangements—feudalism— died after the pandemic of the Black Death in 1348. They were unstable remnants by 1650, but crucial to governing the state. At the same time, what remained had become a globalized blur, both real and imagined, wars on terrorism that turned upon themselves during the Thirty Years' War, 1618–1648.

For the prince, these creaky seigneurial rules of order were not enough to support the state. He made alliances with merchants, to prop him up against the warlord tendencies of this dissolving situation, to invent a "neo-feudal," absolutist kingdom, often as much imaginary as real. The civic culture that expressed this uneasy alliance was special effects.

Similarly, in 2003, the vertical industrial nation-state has proven creaky: In place of its egalitarian fantasies and facts, a horizontal crash has begun. Power vacuums are releasing local ethnic and fundamentalist impulses that have lain relatively dormant for centuries. Global media and special effects—the Electronic Baroque—have become central in bringing imaginary order to this horizontal crisis, and to the uneasy alliances it brings.

So we will certainly get to 2003. I ask the reader to be patient while I get there, to treat each chapter as a subplot inside a larger journey, like a novel that ends with a bang. It will take hundreds of pages to fully explain this link between political nightmare and special effects, how the effects were engineered. But even more crucial, "why" they were produced. Unfortunately,

we often don't know why: Why is the engine that makes this book a little like historical fiction, like relentless characters inside a Balzac novel.

Chapters as Journeys

The chapters operate like a picaresque about

1. the sensory immersion of a special effect
2. the way it was engineered
3. its relation to power, both then and now

They resemble a Baroque journey, as in an eighteenth-century novel, perhaps a Saragossa *Manuscript,*[26] or *Clarissa*. The characters in this story travel across time, from Baroque special effects to the era of the Electronic Baroque (1955 to the present). But they get thrown by obstacles along the way: There lies the pleasure of the picaresque—its contrasts, its enigmatic spaces. Of course, I'm so deep into the material now, reading itself feels like a collusion, like special effects; or a picaresque diary of marvels. We will make this journey in three parts, triadically: First, we concentrate on Baroque architecture. Then we shift toward nineteenth-century optics and industrial illusion (panoramas, world's fairs, Coney Island). The industrial seems to contrast with the Baroque, until they merge after 1955. In the world of special effects, the abstract is an absence made for illusion.

- Part One: Immersion/Scripted Spaces 1550–1780: Architecture, Theater.
- Part Two: Transition: The late Baroque: automata and other gizmos, the shift from scripted spaces to ornamentation. Then the shift toward the panoramic, and the birth of science fiction as special effects.
- Part Three: Screen Entertainments, 1895 to the Present. Industrial Special Effects.
- Part Four: The Electronic Baroque, in stages after 1955.
- *Afterword: Transitions since 1989.*

These four operate inside a simple chronological machine, with breaks inside on behalf of special effects, as they responded eccentrically to shifts in power and technology over the centuries. This chronology appears more fully in the appendix, which is linked to the index—as a "search engine," for the history of special effects.

Software

This book is designed as a computer 450 years old: the chapters, index, notes. This "Baroque" structure helps me to explain how "software" since 1550 has serviced special effects. Of course, since the movie *2001* (1968), the power of digital effects has incrementally advanced, into architecture as well as media. But we need to take the long view. Arguably, the closest cousin to the computer is the book itself. The Renaissance invented data that required new designs for the book—about perspective for war and theater, as well as for maps, charts, graphs, navigation both real and fanciful. To enter this Renaissance computer, the reader is invited to click to the search engine at any time.

Hoaxes

When text in a book generates special effects, what does that look like? The answer is plain enough. I need to occasionally lie, throw in a fictional surprise, on behalf of the few seconds it takes to fool the reader. I should fluctuate between fiction, hoaxes, political intrigues. For the tone of the writing to be sensory and atmospheric, in the sense of special effects, I need to mix in the fictive and the novelistic. The tactile and auditory in effects belong in writing.

There is also a problem of length. It will take two volumes to complete the full story (particularly since 9/11 has utterly shifted the direction of special effects worldwide). Volume I travels mostly through the expensive publicly financed illusion. Those were perversely lavish scripted spaces, sponsored by princes and giant concerns. Volume II, by contrast, will descend into something more private—toward the architecture of "paranoia." By that I mean noir/gothic paranoia since 1620—horror, criminalized illusion, revenge dramas, and a lot more on special-effects cinema. Volume II also will shrink special effects into miniatures, a shilling or dime's worth, into the nano of special effects since 1700, the invasion of the body by special effects, under the shocks that will emerge after 2003. However, like Volume I, the structure and rhythm will have to match the intent. The phenomenon of descending into scripted paranoia will require some literary license. Certainly for this volume, this license includes the Renaissance computer, as a data picaresque about scripted illusion.

But despite where the journey takes us, the picaresque must be as convenient (and user friendly) as a railway timetable in 1860, even if it slips off track, into absences, through phantoms and fakes. In other words, convenience

means a familiar routine, from chapter to chapter: Each will start with a case study about the reception –the phenomenon of special effects. Then on to the theory implied by this effect. And finally, its burden or surviving mutation today. That way, I take apart the case study like a clock, particularly its grammar (three acts in a few seconds), its erasures, its artifice.

Of course, to get started, the traveler must pass through an ornamental entrance. That was the ritual of special effects. For centuries, curtains were trick entrances more than fourth walls. But I prefer to enter by a ruined path, something a bit cracked, like my childhood memories of the boardwalk in Coney Island, special effects as carnies in ruin, like a carny barker at a forties midway.

Entrance to a Freak Show

The circus barker was a uniquely American conjurer for special effects.

His job was to get the spectator to commit. Consider the description in William Lindsay Gresham's classic carny novel, Nightmare Alley (1946):[27] "Clem Hoately, owner of the Ten-in-One show and its lecturer, made his way through the crowd." He rinsed his mouth with water, spat to clear his throat, then mounted the step. He started his pitch in a "low and conversational" tone, to sober the audience with hokum about scientific curiosities. They remind me of the science hoaxes that led to Poe's science fiction in 1835; or to Méliès' magic act, before he made films.

"Folks, I must ask ya to remember that this exhibit is being presented solely in the interests of science and education." Immediately afterward, a drunken "geek" stepped out of a pit, fondled a snake, then strangled a shrieking chicken. Presumably, the barker's spiel and the geek killing a living thing will lure the audience past the entrance, and distract from the naked greed that was easy to see. In the audience, Stan "noticed that at one corner of [the geek's] mouth, there was a glint from a gold tooth," a forced smile. The entrance to a scripted space must resemble a conjuring, filled with "blinds" that promise something wondrous inside (three acts that shock you in a matter of seconds).