13. Animation as Baroque: Fleischer Morphs Harlem; Tangos to Crocodiles

The Place of Animation in Special Effects

Animation was very much a Baroque form of narrative, highly evolved by the mid-seventeenth century. Steadily, as cinema took charge of visual culture after 1895, it lost its earlier links to theater and scripted spaces and became associated mostly (and then entirely) with the flat screen. But that was only temporary. After 1955, with Disneyland, animation returned to its roots, as an architectural, sculptural, and graphic narrative.

Today, a much expanded animation is arguably the primary story grammar for the Electronic Baroque era. Smart bombs are essentially monitored through animation. The desktop on your computer screen is animated. Computer games are animated. The broad principle of user-friendly software is animation—to bring algorithms to life, to anthropomorphize data. We imagine that we have more control because the icons seem to notice us; but with each user-friendly step, we move farther from programming itself.

In much the same way, special-effects cinema is the "uneasy alliance" of animation with industrial melodrama;[1] because animation evolved earlier than 1820, when melodrama essentially is formed. Thus, animation is not a dramatic art, not in our usual sense of the word. It is an "elemental" mode of story, closer to folklore, fairy tales, epic sagas, to its seventeenth-century roots (if not older).

Most of all, animation is story about warring media—where one medium traps another inside it. Puppet shows and commedia dell'arte are caught in mid-motion inside a drawing. Sculpture is jump-started to life as theater. The precise distance from a Bernini sculpture when the flesh turns back to stone is animation. This makes for narrative about uneasy alliances, very much a Baroque sense of story.

As a special effect, animation is a sensory echo—the instant when still images can be sensed. It is momentary, a brilliant pause inside moving pictures. You suddenly notice the strings of the marionette. The drawing climbs briefly out of the movie. Isolated still frames break through the stream inside the projector.

In my book *Seven Minutes*, I review aspects of how animation has expanded since 1928: how it continued to rely on links to music hall and vaudevilles, to nineteenth-century illustrated books, to the comics. In other essays, I notice animation expanding into TV viewing, TV commercials, MTV editing back in the eighties. Very early, in Oskar Fischinger's movie commercials (masterpieces from 1929 to the fifties) animation became a primary form of selling a product. It was always interactive marketing, the art of direct address, of making your pitch cleverly. During World War II, SNAFU cartoons and Disney training films showed millions of soldiers how to protect their weapons, avoid malaria and syphilis, watch out for spies. Animation is instructional madness made coherent—controlled anarchy. It maps the unfindable as direct address, very useful for special-effects propaganda, or as spoofs of propaganda; a strangely intimate, nonthreatening way to visualize fear (as in animated movies about the risk of crash landing—for passengers while they fly on airplanes). It is a carnival about dying, and coming back to life.

Animation never required a fourth wall, not in 1650, and not in 1950. Its proscenium was supposed to look fluid, to allow the viewer into the story; or for characters to escape into the theater. It was the art of turning Baroque trompe l'oeil or anamorphosis into moving images. Animation evolved in an era when the actor often talked back to viewer. No wonder then that animation was already "virtual" in Ernie Kovacs TV gags in 1955.

In all its variations, over four centuries (and even further back), one special effect always returned: animation is a string of instants when you sense that this could not be real. It builds stories from moments when both illusion and the "real" are trapped inside the same gesture—or the same gag.

By revealing the illusion in "real" action, animation tells a story about production itself, about the making of; but at the same time, the plot keeps rattling along. As a result, animation often loses character to make a point (an effect). It is consistently less character driven, in order to make the entire screen much more legible: to slip antilogical fragments in the corners, the background, to reveal the hands of the puppeteer.

These intrusions allow for critiques about the "real." These critiques can be extended to social relationships, to politics, to phenomena. That inspires story-

telling where the animated screen is much more exhaustive than in live action, more like multitasking than linear. But it is linear in its way—or multi-linear, many lines competing at once, a flurry of lines.

In the Hollywood film industry, character animation has been shoehorned into movie melodrama all too often. Hollywood animators are trained to think of dramatic character first and foremost, a kind of slapstick melodrama. That is how a feature cartoon must be made, apparently. And I can see the point in one respect: traces of movie melodrama should be trapped inside the animated dinosaur. But ultimately, the audience comes to see the dinosaur as epic, elemental parody—the battle between industrial myths of free will and epic nonsense. They come to see the uneasy alliance between special effects and drama.

Animation is balletic incoherence suddenly given form and drive, clearly an anamorphic form (from chaos to revelation). The multimedia object flashes to life, very much like trompe l'oeil. The tricks with the audience allow for immersive special effects, similar to Baroque sculptural and architectural tricks. It is literally stop-motion, the contradiction between sculpture and "life" brought to a heart-stopping, momentary irony.

In the two chapters that follow, I discuss two forms of animated special effects: metamorphosis and the masque. I realize that the tone of these essays is somewhat different than earlier sections of the book. But animation adds a very unique phenomenology to special effects.

Metamorphosis

1900: A chalk line transforms into a man's whiskered face. A hand reaches across the drawing, then erases and redraws the face, aging it, changing its sex, its race. Caricatures of blacks, of Jews, of women's naked thighs appear and dissolve, what was called "lightning hand" at the turn of the twentieth century.[2] In 1907, Stuart Blackton filmed his lightning hand sketches,[3] as did Winsor McCay four years later.[4] The memory of lightning hand reappears in Otto Messmer's *Felix the Cat* cartoons of the twenties. Even as late as the forties, Ward Kimball and other Disney animators performed lightning hand as a racy burlesque for soldiers, where the line drawing turns into a naked woman.[5]

Along with chalk[6]—or ink—any number of substances have been used to indicate the human hand tangibly interfering, leaving textures askew: finger paint on glass; shifting sand; or simply programmers using algorithms to make

shapes shimmer without mass. But the effect is essentially the same, in hundreds of animated shorts. The eye senses—almost sees—one substance transmuting into another. It goes from line to protoplasm and back again. And during this transformation, time transforms as well.

While this transforming goes on, another species of special effect makes the look even stranger. Gravity itself seems to disappear. Laws of what goes up cease. An uncanny antilogic assumes control. Objects lose substance: they become mercurial. Flesh, or metal, flows like water, as in the early "morphing" effect initiated with *Willow*, *The Abyss*,[7] and made standard after *Terminator 2*.

Cartoon metamorphosis may seem to be lost inside an architecture of disunities. However, metamorphosis is far more lyrical than a pyramid of gags. It is the animation walk cycle interrupted, spliced. It is a pause, an Artifice, a mode of trompe l'oeil as cinema. In the midst of a walk cycle, a creature changes species. Its body and proportions become exaggerated, with "extremes" on either end. But the frames inside, called "in-betweens," stabilize the action, make the switch more convincing; and also balletic, rhythmic.

Let us say it takes twenty frames to manage this, twenty painted cels. In a midpoint inside this cycle, between the extremes, there is a *lapse or hesitation*. The picture is suddenly not very readable. For a few frames, the object—the body in this case—does not look like what it was, nor what it will be. This pause is a mode of Artifice, similar to Perspective Awry in the Baroque, a glitch that reveals the apparatus of filmmaking. It is a reveal.

The audience may catch a glimpse of the hand at work—not the hand itself, but the traces it leaves on paper. These traces become an alternative plot point, like noticing the string of a marionette, as part of the story. In Modernist terms, that glimpse is a self-reflexive device. In terms of the Baroque and special effects, it highlights the craft of the animator. Oskar Fischinger's abstract films are essentially *reveals* as sensory rhythm. But Fischinger's animation, unlike live-action cinema, a stream of reveals—hesitations set to music—can be extended almost indefinitely.

Like anamorphosis or trompe l'oeil, they move in a very brief sequence. The reveals move in hyper-extended cycles, literally running into each other. The cycles add up to a narrative of sorts, a visual fable about colliding atmospheres (the god descending to earth; the storm raining indoors). They are condensed magic realism, snippets from Gogol's tales, Kafka's *Metamorphosis*, or Bruno Schulz's *The Street of Crocodiles*; and of course, the Quays' sumptuous adaptation of Schulz's novel, filled with hesitations as colliding atmosphere. Real meat from the butcher is handled by puppets (an old Švankmejer trick). Screws and

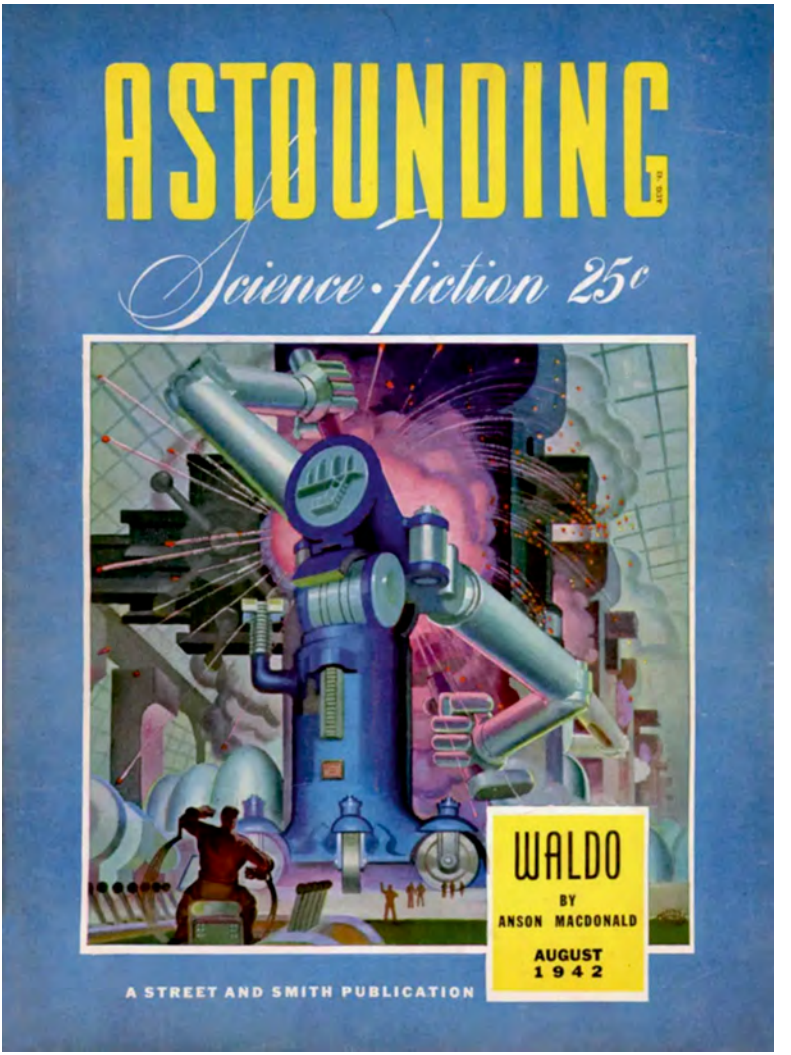
dust in the workshop turn in reverse, as if time were going backward. All the automata coexist as a single organism struggling with paramnesia. They perform rituals without purpose, pray at the wailing autopsy wall, pretend to be shop girls, have sexual foreplay with string and grinning manikins and kidneys from the butcher. They play house with an old lightbulb.

In other words, not only does the body morph, but the air itself does as well. It brings us back to the Baroque automaton: A puppet learns to breathe without string, through cams and levers inside its body. Gradually, its gestures evolve, as if lungs were growing. Visually speaking at least, two atmospheres collide; they swarm into each other, like oil through water. The creature seems to breathe our air and another air at the same time.

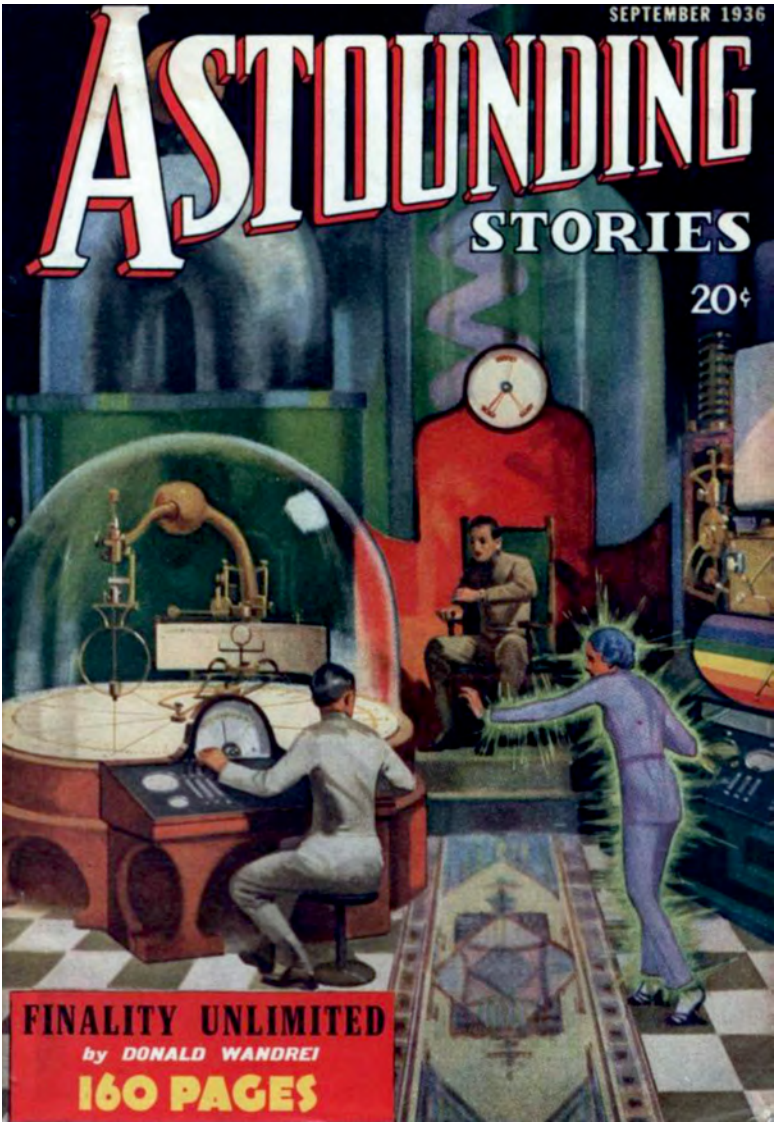
Giovanni Paolo Panini, The Interior of St. Peter's, *circa 1754. The eye line is tilted almost diagonally as if listening to whispers behind the archways. But uneasy whispers are drowned out by a labyrinth of special effects embracing the ceiling. These form an immersive sanctuary that leads to the baldachin deep in the background–a brass canopy by Bernini that covers the remains of St. Peter. Panini reproduced nearly the same view in dozens of paintings and engravings. They remain very popular, in fact may have become the standard way to "show" the Vatican as a scripted space.*
(Photo courtesy of the National Gallery of Art, Washington D.C.)

Residents of the Prince Bishop, Würzburg *(murals by Tiepolo, completed 1753). Showing the point of view of the Prince Bishop, when guests arrived to pay homage. While they ascend the stairs, the prince sees a tromp l'oeil that resembles him preparing for the hunt, while Europe symbolically waits. This is the most repeated photo of Würzburg.*

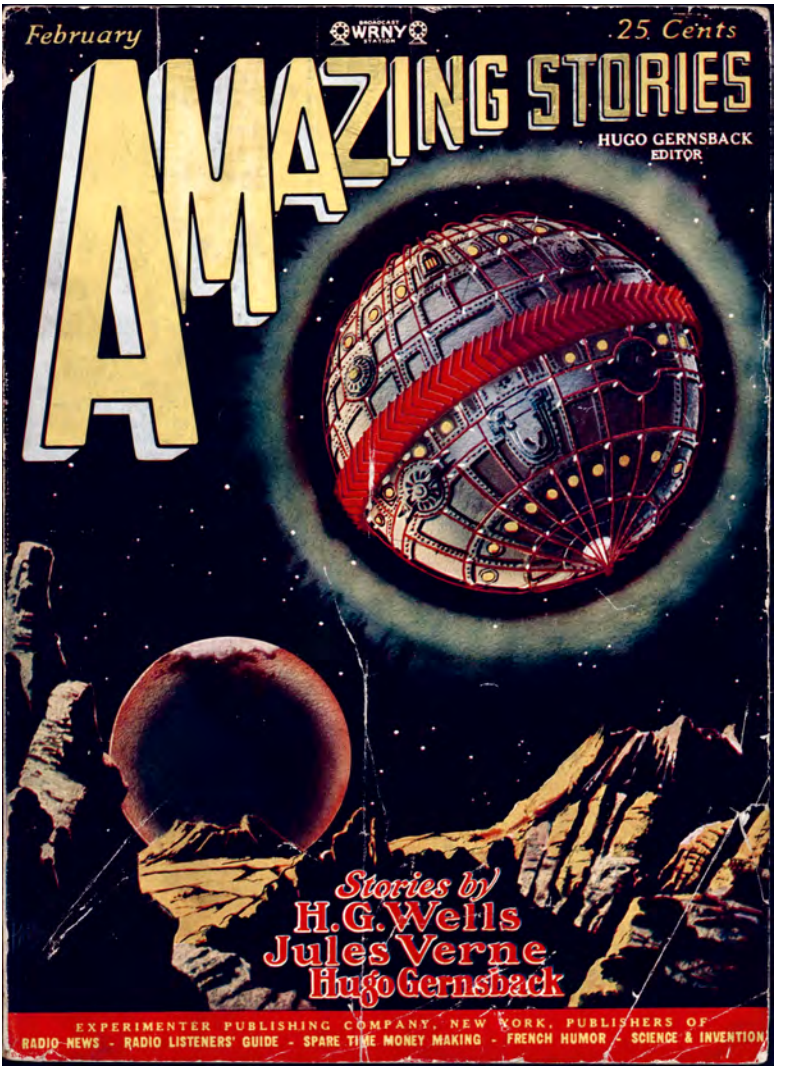
The Zeppelin (1900) precedes the airplane as the first industrial flying machine. As represented here, it stood like a panoramic skyscraper and floated like a Baroque cloud chariot.



The famous story by Robert Heinlein that coined a phrase used in the forties by the nuclear industry to describe gripper arms controlled by a human arm. The story's hero, a severely handicapped man, needs to industrially augment his limbs and skeleton, to bring "convulsive movement in his primary waldoes." Like many sci-fi characters, this Baroque Imagineer is also inspired by magic.

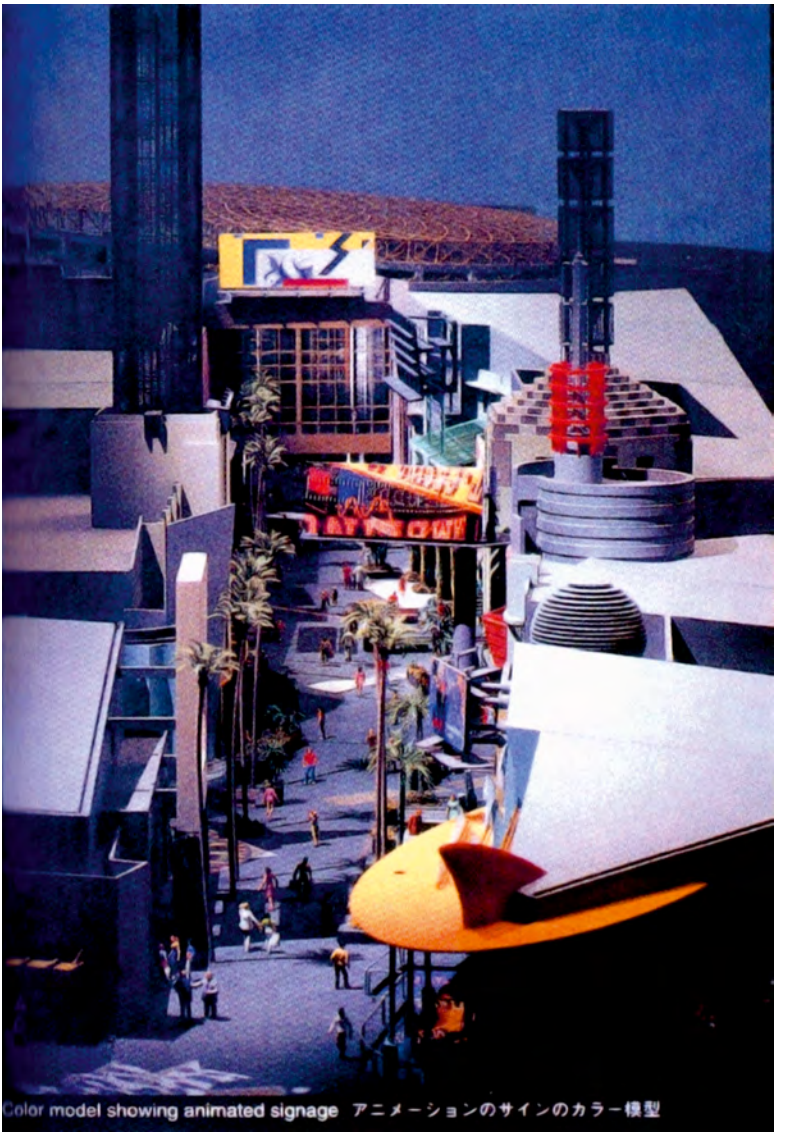


Cover for the story "Finally Unlimited," by Donald Wandrei, about sensory and psychic time travel, particularly to the year 2005, with work stations and gizmos imaged by sci-fi illustrator Howard V. Brown.



A view of the earth, as seen from the moon, by an updated Baron Münchhausen, from a story by Hugo Gernsback (reprinted from 1915). Most of the stories in this classic issue (February, 1928) were reprinted from other sources–a journey through the wars promised before 1914, and the hazards perversely imagined afterward, even of movie "death stars" to come.

Castle Falkenstein, 1833. Sketch by architect Christian Jank for King Ludwig of Bavaria. The last of Ludwig's huge special-effects castles: planned, begun, but never constructed–except as Baroque Imaginary. In the 1990s, a version of the castle was built in Texas, for weddings and movie shoots. The steampunk computer game, Castle Falkenstein, overflows with Victorian science fiction, Darwinian surprises, and Baroque "magick."



Color model for Citywalk (1994), showing animated signage, and the space of the Universal Studios and the LA Basin below.
(Photo courtesy of the Jerde Partnership)

An early rendering for the Fremont Experience, the outdoor lobby covering Fremont Street in downtown Las Vegas (1996). Architect Jon Jerde considered Italian "anamorphic paintings" as a possible inspiration, then realized that Baroque ceilings would prove far too expensive. Finally a "celestial vault" was installed, a tube of video 2,000 feet long, and 100 feet high (an electronic Baroque).
(Photo courtesy of the Jerde Partnership)

The New York casino street formerly inside the Luxor pyramid (1996), then removed after New York/ New York was built.
(Photo by Dave Bailey)

Watching New York/New York under construction (1997), from the New York streets at the old MGM Grand's "Grand Adventures" amusement park.
(Photo by Dave Bailey)

Composited Space

How does the animator turn this kind of atmospheric palimpsest into story? In simplest terms, the background morphs; it is yet another form of compositing. Imagine Cyrano hopping from the earth's atmosphere to the moon, merely by skipping past a broken yellow line. Depth and mass change hands, as if the background were alive.

How does this tension add up to morphing as story—about the composited space? For clues, we ought to review how animation is drawn. To add life to a drawing, the identity of line should be unstable, to imply movement, breathing. Otherwise, on film, it may coarsen until it becomes bland or unreadable. But it must be firm. Drawing soft outlines around the body may not help, because too often they turn into unlikely shadows on film. Therefore, in life-drawing classes, animators are trained to "forget" simple body proportions. Instead, they study "implied mass," lines that show the weight shifting from one leg to another. The model's hip is distorted as he strains to hold pose. That may be distressed even more; the outstretched arm is lengthened. These exaggerated torsos might look very sensual, or merely suggest physical discomfort, the presence of time and gravity. But on film, the results will look fiercely energetic, particularly if clever gaps are slipped into the cycle—as in extremes or hesitations.

Then there is the power of erasure, yet another tool vital to special effects on film, before the drawing is "cleaned up." We look at an animator's sketch pad. To capture implied mass, there is a blizzard of lines. From these, the most "active" (distressed) will be selected. The rest will be erased. The result should leave negative space or mass, which amounts to yet another hesitation, but this version is not chaotic (frozen, entropic, amnesiatic); it suggests controlled stability—no waste. And it implies mystery as well: a phantom presence, as if a hundred pounds were hidden in the dust and scribble.

The drawing becomes *allegorical* in Walter Benjamin's sense of allegory—a ruin. It is a dialectical emblem, where all that appears natural is simultaneously Artifice. The obvious comparison would be animated bodies that morph, particularly in the *X-Men* franchise, another Baroque Marvel comic book on film. While the mutants go into morph, their bodies become "events." One persona "shrivels up," but leaves an absence (the person they were). Inside this trace, "craftsmanship" is revealed, "like the masonry in a building whose rendering has broken away."[8]

But animation is shapeshifting not only of the body, but of the space as well; as if body and space were scripted and breathing together. They are a multiple, from colliding atmospheres to dissolving ink—phantom limbs. We imagine the shadow where a picture frame once hung, then sense that the shadow (like trompe l'oeil) is actually the leg of a large organism; and suddenly twitches slightly.

All these fragments—bodies, air, background—make a coherent story together, a *condensed* "epic" about decay or loss; in other words, the loss of control, the loss of the past, the loss of representation. It is a composite in decay, shapeshifting across dimensions, many substances into each other. The morph is solid and absent at the same time. It is like a scar that narrates, a braille of absences. The viewer can practically run a finger across the ridge of a hesitation, very haptic, a touch of all-at-once. The drawings leave an elegant wound as they dissolve to make way for motion.[9]

The morph is also a history of production itself, like many special-effects films: a history of the drawing in decay or erasure; or even of the team who made the effects. In thirties animation, the original drawing was cleaned up, then traced by inkers on to another medium: inked and painted on a cel. In the nineties, it is scanned digitally, then paint-boxed, a morph of production itself, with far fewer strings, often fewer hesitations.

Also, the morph should suggest an uneasy alliance inside the character's body and inside the atmospheres at the same time. Like Dr. Jekyll nervously grabbing his throat, both the space and the body should look as if they might revert back, as if the air is dangerous. The morph is supposed to look unstable, in hesitation, on a journey into antimatter, where many atmospheres meet. Metamorphosis then is a story about *hesitation* and *reveals*. We worry when the hidden will surface: the entropy, the molting, melting.

Disney Versus Fleischer on Metamorphosis

This haunted and self-reflexive use of hesitation was not universally admired. Disney, for example, distrusted metamorphosis if it made the animator's drawing too obvious. A revealed scribble weakened the impact of full animation. In the words of Thomas and Johnston, who have become the Boswells of Disney production methods, "When the animator distorts the figure, he must always come back to the original shape."[10] Donald or Goofy can be made to bulge and implode, but never lose their "personality,"[11] never turn into other

things in the way Warner's characters did. In thirties and forties cartoons, for example, there are no Disney gags where characters who slam into a wall turn into metal coins, and twirl noisily as they land. That trick, so easily laden with frames that hesitate, was reserved for *Tom and Jerry* cartoons at MGM.

According to the Disney rule, once a character's body was shown—rubbery, watery, human-like—that substance was irreducible (no hesitation or lapse). Walt was convinced that revealing the drawing behind the flesh could wreck the atmospheric effects that he prized so highly. He preferred wind, water, or heat to test the character's endurance. Disney nature made war with the character's body. In *The Band Concert* (1935), Mickey stays intact (no metamorphosis of any kind)—and on the beat—while conducting an orchestra thrown asunder by a tornado. His dogged refusal to morph was the central gag to the cartoon.

Pluto was perhaps the only Disney character allowed to show his scribbles—to have "lapses." For example, in a cycle drawn for the cartoon *Alpine Climbers* (1936),[12] Pluto's body literally takes wing. Lines snarl up until he looks like a bird in a blender, becomes a hesitation. His body appears to dissolve; that is, we see it lost for two drawings out of sixteen. However, in their analysis of this drawn cycle, Thomas and Johnston advise us to turn away from "lapses": "Never lose the personality of the character in either a long shot or a wild action."[13] Other hesitations and lapses were treated in much the same way. At Disney, animators were told to avoid speed lines and rubber-band effects common to thirties cartoons—and used frequently by the Fleischers, Tex Avery, and Bob Clampett. Disney was emphatic: clean up by shading; keep volumes constant.

Not that Disney hated to see cartoon characters show off their plasticity; quite the contrary. But the stretch and squash that he thought pleased the audience would make "lapses" impossible. For example, characters were supposed to trip broadly, but slowly and gracefully. Goofy in particular often loses his balance so slowly that he seems to be moving in a tai chi exercise. He surfs empty space while he plunges two hundred feet. No matter how awkward the stretch, his body mass remains amazingly constant. His legs knot up like a fishing line, but never lose their mass—never a loose line to remind us of a flat drawing.[14]

For the early sound era, Disney's rival for cartoon special effects was clearly the Fleischer Studios. By contrast, the Fleischer Studios in the early thirties (1931–1933) specialized in metamorphosis, with a simultaneity of effects that is still extraordinary to catalogue; certainly by Disney standards, this seemed to wipe out the coherence of "story". Unlike Disney, the Fleischer animators liked to emphasize "traced memories" when they copied from live movement

through rotoscoping (tracing live action into animation frame by frame). They also used allusion in a more self-reflexive way than at Disney—in other words, sight gags about other media than animation; for example, details drawn from vaudeville theaters and Coney Island rides the Fleischers knew. Or even traced memories of New York streets: kosher butchering in a bullfight scene; the Manhattan subway down a rabbit hole.

I suppose much of the difference came out of the Fleischers' love of industrial special effects. The tricks that for Disney revealed "illusion of life" (a caricatural naturalism) for the Fleischers were scientific marvels on display. That meant less commitment to hiding how animation was done.

For example, both studios tried 3-D systems. In the Fleischer version, tabletop models were composited in front of the camera. Miniatures of caves or streets are visually unmistakable; they are much rounder than the cels shot in the foreground. What Fleischer called "3-D" looks much more constructivist than Disney's system a few years later. Disney believed that multiplane should enhance the naturalism of an atmosphere. In Disney's multiplane camera, the cels were placed in slots inches apart, to make them look like atmospheric cutouts in deep focus—smooth from front to back. But in Fleischer (until they tried to copy the Disney look in the late thirties), the solidity of the miniatures is plain to see; it softens the 3-D background severely, leaving the flat drawings—in front of the glass—very crisp and ripe.[15]

Betty Boop Goes to Harlem, by Way of Coney Island

Betty Boop's Snow White (1933) is undoubtedly Fleischer's masterpiece as "lapse," particularly its final sequence in an underworld—both an Orphean journey (i.e., the myth of Orpheus), and an Orphic journey (a silly dance of death set to music). Inside this underworld, "hesitations" govern movement and motivation. For example, the evil queen turns Koko the Clown into a shapeshifting ghost, while her mirror keeps sprouting hands; and a blackface to tell her who is fairest of them all. At the same time, Koko as ghost is rotoscoped from a clip of Cab Calloway.

Koko (a leftover from silent animation) was usually the character assigned to such roles. Of all the Fleischer characters he was rotoscoped the most often. By 1933, that gave him a phantom presence, too often invaded. Graphically, rotoscoping leaves scars—something a bit too human, a bit too lithe, subtle but plain to see. Koko practically inhabited two bodies at once, from a car-

toon clown who shuffled (buttery head, sack-like body) to a leaner man who ran gracefully (more angles to his chin; a stiffer spinal column). He was designed to be haunted, wrapped in billowy cloth that was ideal for ghost dancing between bodies, particularly in this, his last extended appearance, his swan song.

Koko sings "St. James Infirmary," while turning into a twenty-dollar gold piece, then into a "shot of that booze."[16] At the same time, to illustrate the line "crap shootin' pallbearers," the wall behind him is lined with murals of skulls and cows together, gambling. That bears scrutiny, usually requires a few viewings: it is intentionally *traced* like the wall of a Coney Island Mystery Cave Ride. It is also traced out of a collective imaginary (at least the collective of animators). The skulls of African Americans reenact the greasy underworld of back-alley and saloon life in Harlem. But not Harlem as blacks knew it—this is Harlem as the white male Fleischer animators saw it. The skulls resemble the racist extremes in Currier and Ives prints, with Jim Crow white-on-black pickaninny scowls, and the ooga-booga lips common to American cartoons until the late forties.

Trace Memories

The scene is rich enough in allusions to New York—as the animators lived it—to suggest a Trace Memory; like a foldout postcard filled with racy sketches of scenes in the city, a composite of weekend leisure for the boys at the Fleischer Studios. It is their boozy Manhattan caricatured in some detail, as an inside joke. (On Fridays, the animators used to visit hot spots together, particularly Earl Carroll's Vanities, the Ziegfeld Follies, wrestling, and hoochie-koochie dance clubs—and of course the Cotton Club.)

Even details on Betty's body were a traced composite—a traced memory—of women they saw along the way. Her garter was like those favored by hoochie-koochie dancers so popular at burlesque and dance parlors.[17] She slouched her back like a flapper at a speakeasy. Her banjo eyes and her bounce were copied from the moves of vaudeville singer Helen Kane. Her head bobbled like a Coney Island Kewpie doll, shaking on a spring.

The "dramatic" plot, such as it is—more a scripted space than a plot—turns a Mystery Cave ride into a blend of Coney Island and Manhattan. It proceeds like a taxi tour, a few drinks at each stop. First, Betty enters during an opening Ziegfeld chorus number, until the queen orders "off with her head" (another hesitation—her thumb and forefinger turn into a guillotine). Then, while tied to a tree, Betty torch sings "Always in the Way," as if she were in a vaudeville

"mellerdrammer." But very quickly, she breaks free. Then, while walking downhill, she trips absentmindedly, rolls into a snowball, and slides into an icy lake. While frozen she keeps sliding, passes through the Seven Dwarves' cottage, and into a Coney Island ride. Or should I say an amusement-park underworld/morphworld, even with a potted plant on her coffin, to remind us again of New York apartments, where windowsills were decorated with flowerpots.

Meanwhile, the queen is lapsing her way to the cave. She runs the mirror as a hoop over her body, transforms into a hag witch, then forces Koko to shapeshift and freezes Bimbo the Dog. But even this witchcraft fails to kill Betty. In frustration, she turns into a cakewalking, rather cute dragon, with ducks on her head who honk like bird whistles for geese hunting.

The peculiar heat from her morphing into a dragon also melts the underworld, releasing Betty and her friends, as if they were mammoths thawed from the ice. A musical chase ensues, climaxing with hesitations as spectacular as any the studio produced. Bimbo grabs the dragon/witch by the head, and turns her inside out. Her skeleton is visible in black, as if she were wearing tights painted to look like a skeleton for the scary finale on-stage. It is easy to run this skeleton gag frame-by-frame on video: her dragon body melts, then seems to run off by itself—lapses bringing hesitation—while the skeleton makes a three-quarter turn. The way she turns resembles gimmicks in theaters—musical finales on a revolving stage. That finishes off the queen. With a last downbeat, Betty, Koko, and Bimbo flee the cave, and do a May Dance. The lapsed underworld is gone, but the characters show no sign of wear, give no sense that this was any more than a theatrical journey, despite all its allegorical layers—which brings me to broader questions.

The throughline, such as it is, has to be called metamorphic. After all, Betty and Koko's journey is crammed with versions of shapeshifting, body to ghost; frozen death to life, flesh inside out, a world outside caving in. The morph is theatrical; it is Baroque theatrical machines updated, eroded, lingering on the New York vaudeville stage. And it is the moment of wonder surely, as masque. Like many masques circa 1620, that moment fits into a very thin musical sketch, a dance, not much more than a silly allegory; but filled with morbidity and Grand Guignol.

The morph fleshes out the absence of dramatic plot in this cartoon. Instead, the story takes us on a vaudeville tour through the underworld of New York entertainment: cardsharking; running craps on the street; speak-easies in backdoors; boating rides under the sign of death in Coney Island. The "tour" is about

uncertainty—modernity and the Depression as the Fleischer team witnessed it. Indeed, from 1931 to 1933, Fleischer cartoons have a peculiar bite to them.

Bimbo's Initiation (1931) is an early example. Bimbo, as if trapped in immigrant panic, is forced to spin into a labyrinth of imprisoning rooms. Some rooms sprout knives that try to stab him; others grow mouths that gulp him; or erase gravity, and force him to crawl across the ceiling. (The comparison with Kafka's Gregor Samsa seems unavoidable, although the Fleischers knew little of European Modernist literature, or Surrealist theater, film; theirs was a homegrown pathology of urban life.) Bimbo keeps refusing to be a "member" of what seems like a strange Bundist or Masonic order in caricature hooded men with spent candles on their heads, as if this were the world where dead candles wind up, the coolness after the night-light goes out. (Also, this era witnessed a huge revival of the Ku Klux Klan, even as far north as Maine, particularly from 1922 to 1926, but a symptom of problems in many cities.)[18]

Finally, one of the leaders pulls off his hood, and turns out to be a lady poodle, the sexiest poodle Bimbo had ever seen, "a pip" he calls her. She does a bumptious bump and grind for him. He grins as if he were being tickled from the inside out, lasciviously; his eyes follow her. She is an earlier—almost and all-too-human— version of Betty Boop. Immediately afterward, every one of the hooded KKK Bundists takes off "her" hood. They're all copies of this voluptuous Betty Boop. Bimbo slaps Betty's ass; she slaps his too—a raunchy version of the dance black bottom.[19] Then a gleeful layer-cake chorus-line finale ends the cartoon in the way most of the Fleischer shorts of that era ended, like a Victor recording that runs out of threads and simply stops, on a final trumpet or downbeat.

Morbid Parodies of Industrical Special Effects

This is a dark piece of work for kiddies to watch, even for adults. And there were others almost as dark from Fleischer in the twenties, even before the Depression. In two of the most remembered: the world explodes and New York goes cockeyed in *Koko's Earth Control* (1928); and Max gets multiplied industrially and attacks Koko in *Cartoon Factory* (1925). So their apocalyptic cartoons can be periodized, from grim machines to grimmer machines. By the mid-thirties, under the censorship during the Shirley Temple era, their macabre twists continue, but are more about repression, more about guilt than dancing on your grave.

Two cartoons in particular from 1936, *Cobweb Hotel* and *Small Fry*, have since become cult favorites in Weird Cartoon collections. They each are built around nightmare chases like the Boop cartoons—many metamorphic scenes—but here instead of bouncy dance numbers, we see flies tortured, or baby fish forced to swim through inky inversions, as if they were inside a Baroque theater filled with watery nightmares. While Fleischer employs fewer morphing gags as the thirties goes on, tries to make cartoons that resemble Disney full animation much more, something of the allegory of underworld remains.

I have always assumed that the Fleischers' insistent diablerie came out of the immigrant world they knew from Bedford-Stuyvesant, Brooklyn, as children. They understood the xenophobia of a Jewish neighborhood, living as part of the largest influx of foreign immigrants to hit any American city at that time. In New York, as in Los Angeles today, up to 25 percent of the total population were foreign born. This, in itself, is metamorphosis—ethnic cultures caught between, in hesitative shock, in lapse.

This agonizing unease was heightened by economic disasters like the Great Depression; or by class warfare, the strikes, the street fighting. These were localized by the Fleischers, into the look and feel of streets on the way to work, the muddle of urban legends, about gangsters, cops, anti-Semitism, racism, even the rumble of the elevated train; childhood friends caught by the Depression; the taste and service of the food.

Consider how animators draw caricatures of this anxiety. They give a cartoon body more reptilian "attitudes." They exaggerate how heavy (and repressed) or light and sexual cartoon clothing can be. A man or a woman use their arms openly or defensively as they walk through a New York street. The subtleties of an urban case of nerves have their own visual tropes, a rhythm in the shoulders, in the posture, in walk cycles; angling the neck just a fraction to watch out for who may be behind you; staying toward the outside of the sidewalk. It is not really a fear of crime so much as a fear of the mixing of classes and races. It is a comfort zone built out of a mood of uncertainty.

This streetwise anxiety is very evident in the mordant edge of Fleischer cartoons; and it is apparent in a different sense today. I am reminded of the cultural aftershocks in L.A. from 1992 through 1994 (looting, fires, earthquakes, massive recession). And I wonder how Homeland Rule and the War in Iraq, and Bushismo in the cities will show up in the gestures of characters in special-effects films to come. In 2003, surveillance is fundamental to the American way of life, and even American entertainment. How indeed today are the shoulders and arms of characters revealing anxieties; how are streets patrolled, how do

people shop at night, how does the politics of class and race erase the daily routine? The sheer banality of controlling one's fear becomes a shaky world made up of graphic "hesitations."

Imagine how someone tiptoes briskly from their car after parking at night in an empty lot. The walk is usually not an expression of "fear," merely how one moves to establish a comfort zone, when the space feels "lapsed." Then imagine how the movie industry turns these anxious (lapsed) zones into cash, into scripts where computer-graphic monsters, as evil immigrants, destroy middle-class real estate. In the nineties, f/x blockbusters like *Independence Day* were part of a bumper crop of disaster films inspired by the shocks of 1992–1994.[20] Like Fleischer cartoons, they are fables about lapse and hesitation, allegories about powerlessness, about alien presence, about underworlds where the animator builds social imaginaries about collective anxiety.

The motivation can be a bit laughable, I admit. Imagine power brokers in the film industry (1993–1994) watching houses burn in Malibu; or their pool spilling over while their best china explodes during the earthquake. Then, after the shaking subsides, or the fires are put out, they head for a local watering hole in west Hollywood perhaps, and decide to greenlight any film that sounds like a special-effects disaster epic. Somehow, lava feels right, anything that shakes like a vengeful mountain god.

Hesitations: Svankmejer and Leaf

We must do justice to hesitations, as the trompe l'oeil of special-effects cinema. For example, Jan Svankmejer's *Dimensions of Dialogue* (1982) is a Baroque (or Surrealist) encyclopedia of hesitations (after seven years of repression in Czechoslovakia, as a dissident). It begins with an Arcimboldi creature (a homunculus made of fruit) eating a homonoid made of industrial parts. Through mad pixillation (a technique for speeding up live action), they chop and dice each other ever finer, until they turn into clay sculpture—which segues into the next scene, where clay lovers start off by making love, merging their bodies into hesitations that orgasm.

Then they take a break, reform into bodies, smile. However, one lapse is left behind. A little blob of clay tries to find a home in their bodies, but they kick it away angrily. Finally, the blob becomes the nuisance that sparks a battle to the death between them. The once loving couple literally gouge their clay bodies into a lumpen gravy.

This brown heap acts as a cross dissolve to the third act: Two beefy clay bureaucrats try to communicate diplomatically. Out of their mouths, instead of words, they present shoes to be tied, bread to be buttered, toothbrushes to be filled, and a pencil sharpener gripped neatly by a highly salivated tongue. However, very soon, they lose track of which object is which. They start buttering the shoes, pencil sharpening everything. At last, hyperventilated, they collapse into doughy lard cakes, like melted bulldogs.

Svankmejer mixes up his "lapses," from clay to everyday objects; that is, by medium, nimbly leaping from food to thimbles to clay to toothpaste tubes. Each substance becomes a robotic piece in a theater of war—a hesitation to mark the precise instant when social codes dissolve into mindless traces. Then the insanity escalates into oblivion. The key to his condensed fable is the mix of everyday media (clay, meats), the metal junk weirdly stuck inside the organic, with the melee that follows: Arcimboldi vegetables; the chopper/blender effect; clay diplomats with rhino necks and watery green doll's eyes.

Another film rich in hesitation/lapse is Caroline Leaf's *The Street* (1976), done in fingerpaint on glass, from a story (by Mordecai Richler) set in the Montreal Jewish ghetto during the 1950s. A small boy waits for his grandmother to die so he can get her room, and not have to share with his sister. But his grandmother stubbornly hangs on for months. Meanwhile, neighbors and relatives make sympathy calls, carrying with them a montage of textures: the dense outlines of buildings; the layers of flesh and clothing in a crowded apartment.

Leaf often uses the hesitation as cross dissolve, from neighbors' bodies to buildings; or as fly-throughs before the age of computer, dissolving paint in the path of children running down the street. The neighborhood is soaked in earthy browns and jaundiced yellows, both nostalgic and suffocating. The boy is trapped inside his vigil, then frightened when his grandmother finally dies. To remind him of his greed, the walls of her room are still textured by her presence. The space is infected by memory, as part of a lingering flashback. Finally, the bodies of mourners swarm into the house on the day of his grandmother's funeral. Their noise transfers for the boy into vaguely competing textures, fingerprints of memory crossing each other, against the sheer angles of the house.

Here too the lapses and hesitations—the tension between the organic and the industrial object—make for a bizarre statement, like the Brundlefly in Cronenberg's remake of *The Fly* (1986). Finally, poor Seth Brundle becomes a brooding mutation of metal and tusk, with barely a trace of the human left, or even of the fly. He has been mutated into a hybrid that defies both the industrial and

the organic, yet is frighteningly compelling, because we sense all those phantom human and fly limbs: the traces of genetic activity; bits of conscious will diffused into uselessness, limping, groaning, and collapsing of its own weight.

Lapses to hesitation become an allegory about the organic disappearing into the industrial, as in the Quays' masterpiece, *The Street of Crocodiles* (1986). The Quays very consciously employ hesitation. In 1995, they said: "What's good about film is that while you're moving through space, it opens up these little parentheses and the imagination drifts off and is flooded by these contaminations … we love that vague wandering off."[21]

Similarly, the crawl at the end of the film is a clue. It is excerpted from the novel by Bruno Schulz, *The Street of Crocodiles* (1932)—a source as rich in "fractured pieces" as the film itself (which is mostly a nocturne based on the book). Schulz sets his narrative, a string of evocative short stories, in the province of Galicia, Poland (a mythical small city near Lviev in the Ukraine). It is very much a haunted town, haunted first by the decline of a gold rush years before; and second—for the reader today—by its Jewish world later wiped out by Nazis. Anyway, the paragraph that the Quays embellish appears in the chapter entitled, predictably enough, "The Street of Crocodiles." That dreamy street is the allegorical setting for the film: a rotting district so embarrassing to the other townsfolk that its precise location is omitted from the map of the city—only a white blank where it should appear.

According to the novel, even the mapmaker had been afraid to visit the Street of Crocodiles. It bears the scars and magical lapses of neglect: cheap jerry-built houses everywhere, suitable now only for the scum of the city. Even the streetcars are made only of papier-mâché. But like a magic-realist illusion, the coaches run blindly without drivers. As the final quote in the film explains, their only "concession to modernity" are montages cut from yellowing old newspapers.[22]

Not that the city at large is that much better; it feels rather gray and dreary. And thus begin the special effects in the story, about vegetation and the inorganic in revolt: To resist urban sadness, the narrator's quirky father tries to flirt with young women who work at the tailor shop. He then declares himself their "*heresiarch*," lectures passionately on the biological oddities of the city, particularly the supernatural plant life. One alien species grows in thick colloids that can be preserved with kitchen salt. But that does not preserve their cell structure. So instead, the slime imitates the nuclei of whatever lies nearby.

The streets become infected, a perfect host for a very exuberant mildew that can turn a room into hothouse. In some rooms, an even stranger mulch attacks

furniture, until table legs start to grow like trees. The branches climb the walls, and strain against the limbs of the house. The groans of lumber suggest a building about to have a heart attack. Therefore, the furniture itself is victimized by modernity. The joists are crippled like beggars' children.

Brute matter comes to life, and starts to morph into pieces of flesh. But rather than an allegory about animism, it is more about morphing atmospheres and hesitation. All living things languish somewhere between discovery and annihilation, fail to connect.

Schulz's technique is similar to Vertov's theory of intervals. More to the point, it resembles Deleuze's description of Rene Clair's use of Vertov, for the film *Crazy Ray*:[23]

> The desert town, the town absent from itself, will always haunt the cinema, as though possessing a secret. The secret is yet another meaning of the notion of interval: it now designates the point at which movement stops and, in stopping, gains the power to go into reverse, accelerate, slow down.

For the Quays, these intervals are enacted, rather than acted, by dolls and a puppet. Each acts almost blindly, as if suffering from faded memory. The dolls' heads sew cloth blindly. The dolls[24] reenact Jewish ceremonies; and pretend there are missing children who may come back. They remain standing on alert, awaiting orders that never arrive. They pause for silent cues, tilt their heads, then burst into action, based on a half thought. Perhaps they are in the shadow of someone else's story, long gone? Their world is out of scale; they are miniaturized inside an unknown maker's creation. The sewing factory has rusted. No humans seem to work there anymore. The cordage machines spin like ancient film projectors. Occasionally, die-hard spectators show up on the corners of the screen (as in all Quay films). But the voyeur seems no more certain of the direction than the others; he is an ancient puppet—a very important distinction for stop-motion animation. Puppets are another species of "character" than dolls. The puppet's face is weathered, historicized: thoughtful, greedy, scheming. The doll, on the other hand, is merely a remnant of a childhood desire; it is a carrier, much blanker in expression, and clumsier in its expressive movement.

Animated Puppets

The puppet and the doll are very much survivals from Baroque animation. Svankmejer is the son of a puppeteer in Prague. Quite possibly, the Quays knew poet Rilke's essay on dolls. Rilke remembers the scrawny, expressionist wax dolls, made by Lotte Pritzel, from a show in 1913. "The doll was so utterly devoid of imagination that what we imagined for it was inexhaustible …. The doll was the first to make us aware of that silence larger than life which later breathed on us again and again out of space whenever we came at any point to the border of our existence."[25]

As computer-generated imagery has increased, the fascination for stop-motion puppetry has grown. The poses, the blind movement of stop-motion animation puppets serve as psychological "lapse." In their housing, they are neither present nor absent—like Starevich's films (1901–1965), which essentially began the trajectory that led to the Quays' work. There, each body that is animated leads you closer or farther from memory—from insects to onion skins to *pulchinelle* dolls. We observe their source material, as Artifice; and watch them blindly follow a human fable. They occupy two places at once: the production (the hand of the maker) and the space on film, but in Quay, the space seems to refuse to tell the tale. They are stop-motion "parentheses." They are "contaminated" by a lost narrative. Movement proceeds very slowly and precipitantly, the way water leaves a leaky jug—but always with hesitation, gravity in pause. As in Svankmejer, the anatomical scenes use cut organs from the butcher, and scenes where heads are transferred from one body to another.

Interiors and Miniature

Most of all, *Street of Crocodiles* is an extraordinarily rich *interior* allegory. The "lapses" jump from phantom memory to phantom film production, a journey through an underworld inspired by Schulz's Kafkaesque magic realism, by Svankmejer's Surrealist hesitations, by the rusting of industrial sites (from Pennsylvania where the Quays grew up, to London where they work). Finally, the uneasy memory of the lost Jews of Poland seems represented here as well, a diorama "contaminated" by the Holocaust.

And yet the structure of the scenes is astonishingly coherent, always about inversion, entropy, losing memory: the neglected industrial warehouse; the cordage and blinking windows as the movie projecting without memory; the

puppet without strings unable to remember; the amnesiacal dolls pretending to act sensually; the autopsy as Jewish prayer; sexual foreplay with plaster manikins; screws unscrewing; ice melting; automatons blindly gesturing. From practically every angle—place, character, and plot coexist as lapsed hesitation.

Most surprisingly, this interiorized film (and the Quays' work generally) was embraced in the nineties by the MTV generation. The Quays produced a number of commercials,[26] even some for MTV.[27] A video for the band Tool clearly plagiarized the Quay technique, as homage; the same for a video from Nine Inch Nails. As many student computer animators have told me, they want their digital films to be haunted also ("quayed").

They want the algorithm to also function as expressionist *lapse*, as interior journey about being caught between. Thus, stop-motion puppets serve a warning about the disembodied sensibility that the computer rep-resents, and the poetics of loss that it should reveal, but rarely does as yet. We can find a prophetic allegory in hesitations—morphs about bad faith, corporate politics.[28] Dozens of morphing programs are for sale, from about nine hundred dollars to as low as twenty dollars, most of them extensions of "feature based image metamorphosis" software developed in the early nineties.[29] The technique has escaped from its animation ghetto, and now is vital—not only for mainstream narrative cinema but also for banking, architectural planning, engineering advertising, fax machines, interface design. The name *Morph* (originally a character on BBC in 1981–1983), has taken on a pioneering meaning, as in *Morph's Outpost on the Digital Frontier* (since 1993), for "business, education and entertainment."[30]

The technology quickly outraced the vocabulary. Nineties morphing already resembled (and operated as) an allegory about accommodation, an attempt to turn our 2-D sense of decay into 3-D global fantasies. Perhaps this was a "natural" evolution: one could argue that computer-graphic morphing was always an epic form of evasion. It was an empty display of worlds in collision, of new species of identity that are perhaps no newer than the assembly line, a few frills added to the workplace. But most of all, morphing suggests that we can author our own modernity, not only survive the shocks easily, but run ahead of them—ultimately a very conservative message.

Like special-effects compositing in other forms, Fleischer's style of morph shows us the city imploding. The pauses mid-morph are cracks in the street, *détournements*,[31] the point where myths of outracing modernity fall apart, and we see the crisis of identity (at work, at home) more clearly. The morph has been

something of an antidote. It is a collage where time and space meet entirely. It may be to our computer culture what the dissolve was to film culture—simultaneously a transition and an erasure.