

PROBE: Nemesis and NASA: The Tragedy of the *Challenger*

For a living organism there is no such thing as full autonomy. There is only variability in the pathways through which its parasitical dependency can be exercised. A fish is not autonomous in relation to water at the moment it is gasping its life out in the bottom of a boat. Nor is an astronaut in relation to the atmosphere of the Earth when he is shut up in a metal ball a hundred thousand miles out, sucking oxygen and responding to messages from someone he cannot see, while relying on the construction skills of men he may not have known.

Philip Slater, *Earthwalk*

In a 1981 essay on "Ronald Reagan's American Gothic," historian Michael Rogin discovers, in the context of a discussion of the 1941 film *King's Row*, a central key to the mind-set of the Great Communicator. *King's Row* is, of course, a film central to Reagan's own myth of self. A lurid "American Gothic" tale of family violence, sadism, and incest, the film incongruously provided the title of Reagan's autobiographical *Where's the Rest of Me?*--words spoken by the character he had played in the film after discovering his legs had been amputated. Reagan's transformation from actor to politician, his book explains, was the result of a similar shock: his realization that "To remain an actor was to be only 'half a man.' He left the movie 'monastery' (his word suggests both holiness and impotence) to put his ideals into political practice, 'find the rest of me,' and become whole" (57).

The ironies of this controlling metaphor for the president's life--the placing of "amputation at the center of Reagan's life" and the location of his "conversion experience in an American Gothic nightmare"--Rogin takes as his subject, and he finds it of great significance for comprehending the contradictions at the heart of the Reagan years. Reagan's whole understanding of the problems of the nation and the world, Rogin insists, owe everything to the unreality of his movie past: "The people in his celluloid dream world can be twisted and twirled, bent and curled, without suffering real damage. They can lose their legs on film and keep them in life, and since no real harm comes to anyone, the President appears benign. He is cut off from the effects of his political program. But Reagan's dream of law and perfect order has punishing consequences for the sensuous, living humans down below" (57).

As an epigraph to his essay, Rogin quotes, with satiric intent, the following caption, taken from an advertisement Reagan did as part of the promotion for his film *Law and Order*:

You can twist it . . .
You can twirl it . . .
You can bend it . . .
You can curl it . . .

The new revolutionary collar on Van Heusen century shirts won't wrinkle ever.

"The neatest Christmas gift of all!" says Ronald Reagan. (51)

Not surprisingly, Rogin also finds the advertisement quite suggestive, neatly summarizing as it does Reagan's dominant fantasy: the "it's only a movie world" of a "Teflon President."

On 18 January 1986, this fantasy was put to a stern test when the space shuttle Challenger exploded only a little over a minute into its flight, killing all seven members of the crew, including Christa McAuliffe, the first teacher in space. Seven "American heroes" and their supposedly infallible craft had been not just twisted, twirled, and bent, but obliterated--in instant replay, stop-motion, frame-by-frame analysis, and enlargement--before our very eyes.

Media critic Ellen Seiter, in a semiotic dissection of the "myth" of the *Challenger*, has noted that "on the connotative level, the space shuttle was used as a signifier for a set of ideological signifieds such as scientific progress, manifest destiny in space, U.S. superiority over the U.S.S.R." As a sign, the Space Shuttle "consisted of a signifier--the TV image itself--that was coded in certain ways (symmetrical composition, long shot of shuttle on launching pad, daylight, blue sky background) for instant recognition, and the denoted meaning, or signified 'space shuttle.'" This signification had been built up throughout the shuttle's brief history until it had become an ideological given. The explosion of the *Challenger* "radically displaced" these connotations.

The connotation of the sign "space shuttle" was destabilized; it became once again subject--as a denotation--to an unpredictable number of individual meanings or competing ideological interpretations. It was as if the explosion restored the sign's original signified, which could then lead to a series of questions and interpretations of the space shuttle that related to its status as a material object, its design, what it was made of, who owned it, who had paid for it, what it was actually going to do on the mission, who had built it, how much control the crew or others at NASA had over it. At such a moment, the potential exists for the production of counterideological connotations. Rather than "scientific progress," the connotation "fallibility of scientific bureaucracy" might have been attached to the space shuttle; "manifest destiny in space" might have been replaced by "waste of human life"; and "U.S. superiority over the U.S.S.R." by "basic human needs sacrificed to technocracy." (31)

"Ever since the garden," an editorial writer would note, seeking to explain the emotional effect of the disaster, "our lot has been to strive beyond ourselves, to test the broad seas, to scale the skies, to erect ceaseless towers, to unlock all secrets. Who would settle for mere limits?" ("Lessons from Space" 67). At the time of the crash, in Ronald Reagan's second term as president and a year before Irangate would call into question his whole presidency, fallibility remained quite far from our minds, so far in fact that, as Fred Bruning eloquently observed in *Maclean's*, the crash seemed to induce, at least

momentarily, something like national shock, a shock often compared by those who had lived through both to the effect of John F. Kennedy's assassination twenty-three years before.

Those of us who doubted that a space mission could fail so tragically now must confront our own naivete. We believed too strongly in the notion of a boundless American destiny, of a cosmos that was ours for the plucking. We trusted science and industry beyond what was reasonable. Surely we had become complacent and cocksure. . . . Failure simply wasn't perceived as being part of the program. For Americans, failure rarely is. Steadfastly, we hold to the notion of ourselves as an anointed people, safe from the snares of history and happenstance--special, to be sure. (13)

The timing of the *Challenger* explosion was thus anything but auspicious--especially for the White House. Canceling, after some embarrassing indecision, the upbeat, "The Pride is Back," rah-rah-America State of the Union address scheduled for that evening, President Reagan went on national television to eulogize the *Challenger* Seven. At the close of his talk he proclaimed, with attempted poignancy, "We will never forget them nor the last time we saw them this morning as they prepared for their journey and waved good-bye and slipped the surly bonds of Earth to touch the face of God."

Quick to explicate an allusion, the media readily sought to identify the source of Reagan's closing words. We soon learned that they came from the sonnet "High Flight," written by John Gillespie Magee, Jr., who at nineteen, while a volunteer with the Royal Canadian Air Force, had died in action off Britain, December 11, 1941. The next day the *New York Times* printed the poem in its entirety and, if memory serves me correctly, Dan Rather declaimed the sonnet that same night on the *CBS Evening News*. I will attempt here no exegesis of its largely self-explanatory lines. (Indeed, if they were not self-explanatory, indeed cliched, appealing emotively to easily predictable public sentiment, they would probably never have been used in a national television address in the first place.) Heavy with personification ("laughter-silvered wings," "tumbling mirth/Of sun-split clouds," "shouting wind," "eager craft"), laden with hyperbole ("long, delirious, burning, blue," "touched the face of God"), and filled with imagery evoking sound and light, "High Flight," considered simply as a specimen of the art of poetry, could probably pass muster as every bit the equal of, say, Joyce Kilmer's "Trees."

Not often, though, do we hear presidents of the United States allude to poetry--even bad poetry--in their addresses to the nation; nor is it customary for news anchors to read entire poems on national television. The interest the press immediately showed in the source of the allusion was entirely understandable. What interested me at the time of the shuttle disaster, however, was not so much the trivial question of its source, but rather the metaphorical usefulness, both to a president and the media, of this particular poem, of Magee's trite and maudlin lines: its serviceability in paying tribute to fallen heroes, rallying support in a dark time for America's role in space, and (in the case of the president) maintaining a public image as the fearless leader who restored America to its rightful, God-given, manifest destiny as the "last, best hope of Earth."

A *Commonweal* editorial, published less than a month after the crash, noted, however that the tragedy's immediate impact had been quite the opposite of Magee's message of high aspiration:

In an awful moment, our whole world stood naked and still: human aspiration ceased, the computer froze, stock markets fell suddenly worthless.

We had all gone out that morning carrying our shields, our hearts high with anticipation when we thought of a teacher going into space. How could we think of failure when we saw such graceful limbs, such shining faces? We have forgotten that Florida's Sooty Terns, not we, were meant for flight. ("Lessons from Space" 67)

Walter McDougall warned at the time of the explosion that in its aftermath the last thing the nation needed was to "bluff ahead with brave words about human life being the inevitable price paid of technological progress" (Wilford 106), and social psychologist Robert Jay Lifton could be heard on the radio sagely advising that the disaster might perhaps bring home to us an important lesson to which we constantly turn a deaf ear: that our technology does not make us godlike or immortal.

But Reagan and the media showed no such wisdom. Through the aid of Magee's verse cheerleading, our president told us instead that despite the *Challenger* tragedy, the beyond was still our destiny, that we could and should touch "the face of God" through our endeavors (unless we lose our nerve), that we could and should leave behind the "surly bonds of Earth." In the State of the Union address Reagan finally did deliver, he continued to stroke the American people with this rhetoric of aspiration, insisting that "after all we've done so far, let no one say that this nation cannot reach the destiny of our dreams. America believes, America is ready, America can win the race to the future-- and we will."

And the "Monovox" of the media--Nicholas von Hoffman's term for "the voice of official thought and prescribed emotion"--seconded the motion with hardly a moment's thought. As von Hoffman would later write in *New Republic*,

within minutes of Christa McAuliffe's death, the mass media began moving past the work-a-day idiocies of pack journalism. They left behind ordinary news bathos, and took up their role as the voice of the unitary society. As Rather, Jennings, and Brokaw sat in their anchor seats and fingered their space phalluses--those stand-tall model reproductions of the Good Ship *Challenger*--whatever skepticism they may have once brought to their work vanished. They pledged to carry on the "mission" of the seven heroes, now gone to the red, white, and blue Valhalla where America's freedom fighters from Bunker Hill to Cape Canaveral sleep in glory.

Monovox's message, however, was not limited to honoring the dead, for it also "coached the population to strike the correct pose of conformity as America

dedicated, pledged, consecrated, and devoted itself to going on, as the dead heroes and their families wished, to be first in our solar system and then in our galaxy. From every orifice of communication it was repeated that we, living vicariously through the NASA bureaucracy, were scientists, adventurers, space conquerors" (14).

The rallying cries proved in the short run to be successful. Polls taken immediately after the *Challenger* incident showed that an overwhelming majority of Americans still supported not only the American space effort in general but the shuttle program itself. In truth, the American people probably had not required that much persuasion in the first place. As Wayne Biddle, a former technology reporter for the *New York Times*, has noted, "In our society technological optimism is clearly a kind of religion, a matter of faith" (quoted by Boot 29).

The widespread dissemination of the *Challenger* "sick joke cycle"--catalogued and analyzed by folklorists across the United States--clearly demonstrated just how unsettling the disaster had been to America's collective unconscious. In the brutal, scatological, racist, grotesque humor of these jokes, the public mind admitted its disquiet.

In an essay in *Columbia Journalism Review* entitled "NASA and the Spellbound Press," William Boot has presented a telling analysis of the press's role in inducing both our "techno-patriotism" in general and our True Believing in the shuttle. Accusing journalists of "nagging" NASA about launch delays while not really investigating a mounting list of reported problems, Boot concludes that "dazzled by the space agency's image of technological brilliance, space reporters spared NASA the thorough scrutiny that might have improved chances of averting tragedy--through hard-hitting investigations drawing Congress's wandering attention to the issue of shuttle safety." He suggests that "In the pre-explosion days, many space reporters appeared to regard themselves as participants, along with NASA, in a great cosmic quest" (24, 29).

"NASA and the Spellbound Press" begins with a fantasy, in which Boot imagines the space agency postponing a scheduled launch after press investigations reveal possible dangers posed by defective O-rings. "Fantasies along these lines have gone through the minds of more than a few journalists in the months since *Challenger's* fatal explosion," Boot concludes. "If only someone had alerted them to the rocket-booster problem. If only history had a rewrite man" (23-24; my emphasis).

I, too, have a fantasy. I, too, seek a rewrite man. Let us pretend for a moment that a Carbon Chauvinist had been the president's speech writer that fateful day; pretend that somehow an on-the-record critic of Space Boosterism had infiltrated the Oval Office and had the president's ear. (An impossibility, I realize, but let us pretend.)

Let us imagine that I, not Peggy Noonan, had been given the unenviable assignment of preparing a eulogy on a few hours' notice. Let us presume as well that I have been told, as part of my charge, to find an appropriate, moving quotation, preferably some

poetry, to close the speech--one that would ring with sentiment, perhaps (dare we hope?) with wisdom.

Pretend, too, if you will, that it is a president of the United States other than Ronald Reagan for whom I write and that, instead of offering him the technoreligious patriotism of Magee's "High Flight," with its resounding message of ascensionism and infinite aspiration and the indomitable human spirit, I instead constructed a speech (playing Edgar Bergen to the commander-in-chief) that, after suitably honoring the dead, built to a peroration reading and exegesis of a far more subtle and far wiser poem by John Witte, entitled simply "Home": a poem describing the life crisis experienced by a prodigal astronaut on his return to Earth. Allow me, if you will, to sketch that speech's climax here, bearing in mind that what I offer is, of course, pure fiction.

In this time of national mourning, we are struck by the essential irony of the tragedy we witnessed today in disbelief. For the psychohistorical motivations of the space program as a manifest technological enactment of our own cultural dream, never entirely clear even to the dreamers, have now been made palpably apparent. Let us think deeply about the validity and honesty of these motives. Let us contemplate what exactly our destiny as a nation and a species is to be. Let us think about what the poet John Witte tries to tell us in his description of a "fallen" astronaut.

Returning to Earth after his life
of weightlessness, the astronaut cannot
lift the small bouquet of flowers the child gives him.

He cannot raise his head off the pillow, pulled down
by the gravity of a dream.

He remembers nothing, no sound,
in the wild pounding of his baffled heart. He lifted
a building in one hand, a pencil in the other.

This was what he wanted: the world
like a worn stone cast into the water.

He wanted to break the promise of the body
to the Earth, to stop the long descent of everyone
he loved under ground. He wanted
to rise an angel
in a paradise of exact data.

He spills his milk on his shirt. The Earth
has darkness, and then light. The Earth has birds

bickering over the last seeds. His fork slips
clattering on the plate. The road is shining.

The magnolia is shameless in the rain.

Having experienced the giddy freedom of weightlessness, having been strong enough in zero gravity to manipulate an entire building in one hand, Witte's astronaut, feeling godlike, finds readjustment to earthly limitations arduous. Back on the planet's surface, the simplest tasks confound him. He cannot pick up a bouquet of flowers, is unable even to sit up in bed. His "tacit dimension" distorted, perhaps even destroyed, he finds himself enfeebled, childlike, unable to drink from a glass or to use a fork.

NASA has long known of the difficulties of what is sometimes euphemistically termed "space adaptation syndrome": the hazardous adjustment of the human body, the product of thousands of years of coevolution with terrestrial conditions, to the extraterrestrial environment. Witte's astronaut would seem to suffer from something like "Earth readaptation syndrome": like Antaeus, his temporary removal from the Earth has impoverished him, robbed him of his ground, stolen his customary powers--but in his case forever. For it is the Earth that now seems to him the dream, and setting foot on it again does not bring back his strength. Having "slipped the surly bonds of Earth," he finds himself no longer accommodated to its demands.

Yet as Witte makes clear, he can blame no one for his condition but himself. You must be careful what you wish for, the wisdom of fairy tales teaches us, for your wish may be granted, and what the astronaut wished for--wishing not just for himself but on the behalf of the civilization that has sent him as an emissary to the stars--Witte articulates with great clarity, making explicit secret motives that remind us of those promptings we normally hear only in our most private inner ear:

This was what he wanted: the world
like a worn stone cast into the water.

He wanted to break the promise of the body
to the Earth, to stop the long descent of everyone
he loved under ground. He wanted
to rise an angel
in a paradise of exact data.

Now that "worn stone" on which he had longed to turn his back requires from him

the earthy and not the angelic. Now it reminds him that the dualism inherent in the brute fact of incarnation cannot be severed with impunity, for it must be borne and, if wisdom permits, reunited. Now it teaches him that "the promise of the body to the Earth" and the inevitable, literally humiliating "long descent" of us all to the ground of our existence, cannot be reversed, even by Cartesian dreams of rising "an angel/in a paradise of exact data."

Does not the cataclysmic failure today of the space shuttle *Challenger's* "exact data" bring home to us a similar lesson? Does it not demonstrate blatantly that such a dream is foreordained to produce, enantiodromically, contrary results?

As I watched the Challenger consumed in a ball of fire, it was not our infinite aspiration to "touch the face of God" of which I thought. I remembered instead the scene in Joseph Heller's *Catch-22* in which Yossarian tries to help his young tailgunner Snowden, wounded by antiaircraft fire, only to discover that his horrible injuries are fatal.

Yossarian was cold, too, and shivering uncontrollably. He felt goose pimples clacking all over him as he gazed down despondently at the grim secret Snowden had spilled all over the messy floor. It was easy to read the message in his entrails. Man was matter, that was Snowden's secret. Drop him out of a window and he'll fall. Set fire to him and he'll burn. Bury him and he'll rot, like other kinds of garbage. The spirit gone, man is garbage. That was Snowden's secret. Ripeness was all. (377)

The "promise of the body to the Earth" cannot be broken. Never have we known this more clearly than today.

I intend to name soon an investigatory panel to determine the cause of today's disaster and to recommend a future course of action for the shuttle program. But whether it proves to have been a computer malfunction, human error, or a fuel leak that brought about the explosion, I know very well that it was in fact Nemesis that caused this tragedy.

As I said before, all the above is, of course, a hallucination. It could never, never, never happen. Such a speech would never be written and could never be understood. Such a president as Ronald Reagan could never deliver it. And I suspect sometimes that television may be innately incapable of even broadcasting such words. I suspect it does not, cannot operate on this frequency.

In the New York Times of 29 January 1986, at the bottom of the same page that reprinted the complete text of Reagan's nationally televised tribute to the Challenger crew, a brief note announced the Ford Motor Company's cancellation of the advertising campaign for the Aerostar minivan. The ads, which juxtaposed the Ford vehicle with the

shuttle in order to highlight the van's technological precision and aerodynamic shape, had lost their power. The producers of the "soon-to-be-released" summer movie *SpaceCamp* faced a similar problem. In the movie a woman astronaut and five boys and girls participating in a shuttle engine test on the launch pad are unexpectedly sent into space to prevent an on-ground explosion. Despite concern over how the film would be perceived, they decided to release the film as planned. It did only mediocre business.

More than just seven brave men and women and a billion-dollar piece of machinery may have been lost on 28 January 1986. The prime "vehicle" for the metaphors of America's space boosting may also have been obliterated. "Since *Challenger* and Chernobyl," David Ehrenfeld has astutely and conclusively observed, "it is no longer reasonable to doubt that the world is entering a new phase of human civilization. The brief but compelling period of overwhelming faith in the promise and power of technology is drawing to a close, to be replaced by an indefinite time of retrenchment, reckoning, and pervasive uncertainty. At best, we will be sweeping up the debris of unbridled technology for decades, perhaps for a longer period than the age, itself, endured" ("The Lesson of the Tower" 367).

Nonetheless, in fall 1987 my daughter's PTA sent home a "Dear Parents" letter displaying at its top a drawing of the space shuttle ("USA/PTA" is visible on the tail assembly) and beginning, "Successful Space Shuttle Missions depend on their dedicated crews to guide them from liftoff to touchdown. Our PTA is no different." And in the college glossy *Campus Voice Bi-Weekly*, the Air Force saw fit to place an "Aim High" recruiting advertisement with the shuttle on its launching pad as its prominent central image and the headline "Before you work anywhere, take a look at the tools we work with." Such attempts to overcome the post-*Challenger* connotation of the "fallibility of scientific bureaucracy" and reinstate the shuttle as a metaphoric vehicle reek of non-sequitur and would seem to suggest a clear and perhaps contagious case of historical amnesia; yet they testify as well to the resilience of the dream.