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General Editors:

E. Culpepper Clark

Raymie E. McKerrow

David Zarefsky

James L. Kauffman

Selling Outer Space

Kennedy, the Media, and Funding for
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The Kennedy Administration and the New Frontier

The importance of Lewis and Clark's trailblazing on the western frontier, writes Henry Nash Smith, "lay on the level of imagination: it was drama, it was the enactment of a myth that embodied the future."¹ One can say the same of America's trek into the New Frontier of space. Americans demonstrated their fascination with a manned moon mission, encouraging Congress to spend enormous sums of money on the program. In the early 1960s, as historian Walter McDougall has written, Project Apollo was "the greatest open-ended commitment by Congress in history."² To understand this commitment, and the public fascination behind the space program, one must go beyond the political, scientific, military, and economic arguments of the Kennedy administration's public relations campaign to consider how the administration dramatized Project Apollo as a great frontier adventure.

Human beings, storytelling animals, perceive and give meaning to actions through narration. "Not only do we understand our own actions in terms of narrative structure," as Janice Hocker Rushing writes, "but we find purpose and guidance for our lives in accord with the stories told by the society in which we live."³ Cultures return to their stock of stories, or myths, as they interpret the meaning of actions and events. Among the most important of these stories, particularly in the American experience, is the myth of the old frontier. "The essence of all that is genuinely exceptional in American history," notes Richard Slotkin, "is embodied in those

myths that are peculiar to our culture, of which the oldest and most central is the myth of the frontier."⁴ Throughout its history, as Rushing writes, America has relied heavily on the frontier for its "mythic identity." From its initial settlement to its conquest of the western wilderness, America has drawn upon the frontier myth as a source of identity and as a motive for action.

The frontier myth is a distinctly American adaptation of the traditional hero story. Although the frontier myth may differ from the traditional hero story in certain details, the two have in common an essential function: to convey how heroes develop an awareness of their strengths and weaknesses in a manner equipping them for the difficult tasks they will face in their lives. The task of the ego-conscious hero is "to achieve independence from unconsciousness and assert control over it; this battle is typically expressed as a triumphant struggle with the forces of evil."⁵ Although superior to the common person in many ways, archetypal heroes are susceptible to the sin of pride (hubris), or of mistakenly equating themselves with the gods.

The American frontiersman shares many characteristics with the archetypal hero of earlier myths. Like the traditional hero, the frontiersman had evil forces to contend with, both a hostile, unknown environment and the sinister inhabitants lurking within it. The American frontier myth features a rugged, independent pioneer who attempted to conquer the land and its inhabitants, thereby expanding the country's domain and improving its way of life. Using sheer willpower to control his ego and preparing himself for the battle, the frontiersman "demonstrates no emotion, and through practice with weapons, he readies himself for the fight." But the frontier hero, conspicuous by his individualism, frequently becomes alienated from the community he battles to save. Rushing proposes that this tension between individualism and community, "more than anything else, defines the Old West."⁶

President John F. Kennedy evoked the spirit of America's frontier mythology as he integrated his space policies with the general theme of his administration: the New Frontier. In an address on 25 May 1961, which Ralph G. Martin deems the "real birth" of America's space program, Kennedy announced America's commitment to land a man on the moon before the end of the decade, calling it the "exciting adventure in space."⁷ During telephone remarks to NASA's first Conference on the Peaceful Uses of Space, Kennedy expressed America's determination to continue to be "a pioneer in the new frontier of space."⁸ The romance and intrigue of the moon, coupled with the mythology of the frontier, gave Kennedy a way of depicting a march to the moon that was both exciting and concrete.

President Kennedy's New Frontier, writes David Zarefsky, "became a meaningful symbol when it received widespread use and when the related images of discovery, exploration, charting a course, and pursuing the unknown were given expression."⁹ And nothing seemed capable of giving these images more powerful expression than Kennedy's rhetoric on the space program.

According to Rushing, the attempt to relocate the American frontier in outer space changed the basic structure of the frontier myth.¹⁰ She identifies two major differences between the old frontier and the new one. First, unlike pioneers of the Old West, the astronauts could not conquer their new environment, because outer space was limitless or infinite. Second, technology, or the means of traveling into space, by becoming of paramount importance, reduced the astronauts to mere passengers. The astronauts, encapsulated in their crafts, could not act—could not exert control—like pioneers of old. According to Rushing, these differences exemplify an evolutionary change from the old frontier to the new, transcending the distinctions between community and individuality, harmony and conflict.

Rushing's analysis of the relationship between the frontier myth and the space program has provided useful insights into the structure of the frontier narratives and the reasons for their persuasiveness in the American culture. But she says little about the actual impact of the frontier motif on support for the early American space program, for she analyzes, not the rhetoric and events of the time, but a dramatized account of the space program written more than a decade and a half later: Tom Wolfe's *The Right Stuff*.¹¹ As a consequence, Rushing's analysis has little direct relevance to political debate over the space program in the early 1960s; if it has any political relevance at all, it suggests how Wolfe's rendition of the space program might have helped shape political events in the 1980s (such as support for the space shuttle program or John Glenn's candidacy for the presidency). It remains to assess the character and implications of frontier narratives in the actual political debates over NASA's manned space program from 1961 to 1963.

Space: The Final Frontier?

President Kennedy himself led the administration's effort to dramatize the space program as a great frontier adventure. Addressing the employees of the McDonnell Aircraft Corporation in St. Louis, Kennedy characterized the shot as "the most important and significant adventure" in the history of the world.¹² In his speech at Rice

University in late 1962, Kennedy called Project Apollo "the most hazardous and dangerous and greatest adventure on which man has ever embarked."¹³ He made a similar comment while presenting NASA's Distinguished Service Medal to Gordon Cooper in mid-1963, when he described the space program as the "great adventure of the sixties."¹⁴ NASA officials echoed Kennedy's depiction. George Low, director of Spacecraft and Flight Missions, Office of Manned Space Flight, spoke of "sharing the adventure" of space exploration while John Johnson, NASA's General Counsel, referred to it as "a great new human adventure."¹⁵ Americans thus learned to view a manned lunar shot, not merely as a scientific enterprise, but as a great human adventure.

The trip to the moon was to be more than just an exciting adventure. NASA officials also characterized Project Apollo as fulfillment of man's destiny, much as their forefathers had spoken of America's destiny to explore and expand the western frontier. In a speech to the New York Patent Law Association entitled "The New Frontier of Space," John Johnson characterized man as an "explorer by nature" who "demands the unknown be reduced to the known."¹⁶ Man, in short, was compelled by a thirst for knowledge to investigate the mysteries of space. During an awards presentation, NASA administrator James Webb proposed that man faces a new space age—"the age man equally accepts his destiny to advance out into space."¹⁷ Robert Seamans, NASA's associate administrator, offered similar testimony. "Man," he asserted, "is destined to play a vital and direct role in the exploration of the Moon and the planets."¹⁸ Just as Americans had portrayed earlier frontier forays as part of America's destiny to extend freedom in a world full of tyranny, the unlimited bounds of space now constituted what Vice President Lyndon B. Johnson dubbed the "New World of freedom."¹⁹

The Kennedy administration frequently relied upon direct analogies to exploit the powerful myth of the Old West. "What was once the furthest outpost on the old frontier of the West," the president proclaimed, "will be the furthest outpost on the new frontier of science and space."²⁰ Kennedy made even stronger comparisons during 1963, proposing that space exploration brought back a rugged, pioneer spirit. Presenting NASA's Distinguished Service Medal to Gordon Cooper, the president took the opportunity to mention that in America's "rather settled society," the astronauts had "demonstrated that there are great frontiers still to be crossed."²¹ In a speech intended for delivery in Austin, he cautioned that space was "still a daring and dangerous frontier." Texans had battled foes on the frontier before, Kennedy recalled, and they would help him "see this battle through." Kennedy called it a special time in America's

history, "a time for pathfinders and pioneers."²² Vice President Johnson also compared space exploration to a trek into a frontier. At a space center dedication, he called space mankind's "last and greatest frontier."²³ Like Kennedy, Johnson drew a direct analogy between space and the Old West; "We go into space as pioneers came into the West, for one purpose only:" to discover a better life and to secure our freedom.²⁴ Just as the Old West had allowed man to live independently and ensured his freedom, so would space.

The astronauts, of course, played a special role in the unfolding drama. As the principal characters, their words carried special significance. Many of their comments echoed those of the administration. Scott Carpenter described space as "a fabulous frontier," while Alan Shepard explained that he joined the program out of an "urge to pioneer."²⁵ John H. Glenn, Jr., and Virgil I. "Gus" Grissom, like administration officials, compared exploration of the western frontier and exploration of space. Glenn described space flight as the "great exploration of all time."²⁶ The astronauts, Glenn proposed, felt privileged "to serve as the pioneers" of the program.²⁷ They tried "to blaze a trail" for those who would follow them.²⁸ Like Glenn, Grissom wrote of "a spirit of pioneering and adventure." Grissom went even further, however, stating that had he lived 150 years earlier, he might have wanted to "help open up the West."²⁹

Elements of the Frontier Adventure

To ring true, a frontier story must possess specific constituent elements: (1) an identifiable, conquerable geographic location that is (2) unknown and hostile and includes (3) a malevolent antagonist who is thwarted by (4) a heroic adventurer. As Rushing has suggested, space exploration inherently differs from the westward journeys of the real pioneers in at least two important respects: the nature of the "scene" and the role of the "hero."

Central to a frontier adventure is an appropriate "scene"—an identifiable, geographic location to conquer and dominate. Outer space, intangible, infinite, and therefore unconquerable, as Rushing has noted, did not fit the traditional notion of a frontier. Rushing writes that actually space is "infinite." Unlike the "Old Frontier," one cannot eventually conquer or fill up space, "for it has no boundaries. Indeed, the term 'space as scene' is an oxymoron, for 'scene' is inherently a material term."³⁰

In the Kennedy administration's space narrative, however, this difference never proved a significant problem, for the adventure *did* have a concrete, objective goal: landing a man on the moon. Wernher

von Braun, director of the Marshall Space Flight Center, explained the political and dramatic importance of having Kennedy's "crystal clear" goal of landing a man on the moon before the end of the decade.

Everyone knows what the moon is; everyone knows what this decade is; and everyone can understand an astronaut who returned safely to tell the story. An objective so clearly and simply defined enables us to translate the vague notion of conquering outer space into a hard-hitting industrial program that can be orderly planned, scheduled, and priced out. It establishes a sorely needed, firm, nonvacillating goal which alone can serve as a basis for a long-range plan.³¹

As von Braun points out, instead of the vague notion of conquering a limitless, infinite outer space, a moon landing provides a concrete objective. Although one might doubt the economic or scientific value of landing a man on the moon, there is little doubt that it had great rhetorical value in romanticizing and concretizing the "frontier" of space.

With a tangible and, presumably, worthy objective established, administration officials could emphasize the hostile, unknown character of the New Frontier to justify both their failure to "keep up with the Russians" and the need for more funding. Trying to appease anxious members of Congress after Yuri Gagarin's orbital flight, James Webb rationalized the comparatively unspectacular progress of the American program by reminding his audience that in the "unknown area" of space, one finds "hazards." For man, he continues, space is a "hostile environment."³² Webb returned to emphasizing the "hostility" of space during an appropriations meeting in 1963. Seeking additional funding for NASA's advanced research facilities at Ames, Webb asserted that the "hostile environment" of space necessitated such expenditures. The following day, he submitted additional material justifying increased expenditures that described space as a "foreign and hostile environment."³³ The theme of space's "hostility" assumed special emotional force when the astronauts themselves—those who would risk their lives—joined NASA administrators in stressing the hostility of space. In *We Seven*, the astronauts' chronicle of the space program, John Glenn and Alan Shepard also described space as hostile. Glenn wrote of the "hostile elements of space," while Shepard described it as "one hostile environment."³⁴

How could one call space hostile? Hazardous, perhaps, but hostile? Hostile seems to imply antagonistic actions or attitudes—an enemy with malicious intent. The wilderness of the traditional frontier had wild animals one might view as hostile. More impor-

tant, it had the Indians, whom frontier storytellers often portrayed as brutally savage. Space, on the other hand, was devoid of life; it presented only passive and inanimate hazards, like radiation or lack of oxygen. In both "frontiers," man had to battle the forces of nature. A crucial element on the frontier scene seemed to be missing from the "frontier" of space: a tangible, human villain creating obstacles for the hero to overcome.

Thus the Soviets came to play a crucial role in the New Frontier narrative. Although the administration did not always refer to the Soviets by name, they were clearly the malevolent antagonist, much like the Indians of the old frontier. The Soviets, moreover, did not merely seek to defend their native lands, like the Indians of the old frontier; they sought to conquer the world. Therefore, President Kennedy warned that the United States could not permit any nation "to dominate space" whose "intentions" toward it "may be hostile."³⁵ Vice President Johnson metaphorically described freedom as a "sturdy plant" but cautioned that freedom cannot "grow and flower" on earth when the universe enveloping it is "poisoned and contaminated by tyranny."³⁶ Much like cavalry officers explaining possible Indian attacks, American military officials, such as General Bernard Schriever and General Curtis Lemay, also referred to the Soviets as a "hostile competitor," warning of "the growing Soviet space threat" to American security.³⁷ NASA administrator James Webb used the harshest language, however, calling the Soviets "a powerful despotism, bent on burying us along with the basic tenets upon which our society rests and from which it draws its strength."³⁸ How they hoped to use space to accomplish this feat Webb never made clear.

Even more important to the frontier narrative than an appropriate scene and a hostile enemy was a suitable hero: the brave frontiersman. The frontiersman in space had to embody what Americans liked to believe were traditional American values, combining traits of both the Puritans and the pioneers. From the Puritans, one would expect qualities like humility, discipline, and religious devotion. Puritans preached self-control, control of the human appetites and emotions that might lead one astray. Like a boxer preparing for a fight, a true frontiersman would control his sexual urges, forgoing intimacy during his preparation and journey. From the pioneers who settled the western frontier, the new frontiersman would learn courage, patriotism, and fierce self-reliance. In short, the hero of the New Frontier would have to struggle to control himself and his consciousness. To do so, he had to purge himself of emotion; reason must prevail.³⁹

The pioneer of the space frontier had to be part Davy Crockett,

part Buck Rogers. He had to possess not only the traditional pioneer qualities but also the new technical expertise needed to operate in space. From the start, the seven astronauts seemed to have many of the needed attributes. As military men, they exemplified the tension between individual and community. They worked, lived, and even dressed in ways that separated them from the larger community. Moreover, the astronauts came from an isolated and select group of military men; they came from the ranks of test pilots who lived in special military bases set on barren stretches of land. The spartan living conditions, the insufferable climate, and the day-to-day flirtation with death eliminated all but the most rugged individualists. And finally NASA isolated this elite group even further, selecting only the top seven test pilots and cloistering them for physical and psychological examinations.

The astronauts themselves were quick to reinforce their images as unique individuals in the mold of the traditional frontiersman. As test pilots, they reminded the public, all of them had demonstrated both the courage and the skill to face the unknowns awaiting them on the New Frontier. Experienced test pilots, Deke Slayton observed, "run into things no one has yet written a book about."⁴⁰ Scott Carpenter observed that the test pilots had benefited from harrowing experiences, which built up their tolerance of fear and their "ability to face the unknown."⁴¹ John Glenn provided almost identical testimony, insisting that he felt qualified for the program because he had a lot of experience facing "dangerous unknowns."⁴²

A crucial difference, however, imperiled the analogy between space exploration and the old frontier. Pioneers of the past conquered their respective frontiers by actively exerting control over their "unknown," hostile environments. Frontiersmen of the Old West used rifles, axes, and knives, along with their reasoning capabilities, to thwart their foes. Sea captains navigated their ships through uncharted waters by their own intuition and skill. Even the early test pilots controlled their own adventures into "the wild blue yonder." Through their actions, all these earlier "heroes" controlled their own destinies. For the frontier story in space to ring true, the astronauts could not be mere passengers; they too had to appear to exert control during their flights.

The fact was that the early astronauts were merely passengers. As Rushing notes, the astronauts "were not using technology to earn their badges. It was using them. They were literally en-capsule-ated by it . . . and not even able to watch the process of their own manipulation."⁴³ Man served merely as backup. Indeed, even animals could "pilot" the flights, as NASA demonstrated on two occasions. Four months before its first manned suborbital flight, NASA shot a

chimpanzee named Ham 157 miles into the sky—40 miles higher than the first two manned flights. Another chimp named Enos completed a dual orbit of the earth three months before an American performed the feat. The astronauts could not “control” the orbital path or the speed at which the capsule traveled, only the angle at which it floated—sideways, backward, forward. This hardly seemed an appropriate role for a heroic adventurer.

Even the astronauts themselves initially expressed doubts that Mercury flights required anything more than human guinea pigs. Walter Schirra expressed reluctance at throwing away years of flying to participate in what “sounded like a stunt.”⁴⁴ Gus Grissom echoed Schirra’s skepticism, disclosing that the program sounded too much like a “stunt” in search of a “passenger.”⁴⁵ Deke Slayton evinced a similar reaction, recalling that at first he thought the program really needed not “trained test pilots” but a “human body” to tie to a “missile” and fling into space.⁴⁶ Even after they had joined the program, the astronauts occasionally undermined the effort to portray them as crucial to the success of the program. At a press conference in 1959, Alan Shepard admitted that the Mercury flights were “preprogrammed and autopilot, with the pilot’s manual only as backup.”⁴⁷ Walter Schirra pointed out that the astronaut could not change the “orbital path” but could merely maneuver in it.⁴⁸

More often, however, the astronauts promoted the idea that only a select few had the qualifications to “fly” in the space program. Walter Schirra argued that the project required “really good test pilots” to “handle the job.”⁴⁹ Gus Grissom insisted that the flights required a trained pilot and that his initial impressions were wrong.⁵⁰ Deke Slayton announced that after NASA’s initial briefing, he realized only a “test pilot” could “hack this flight.”⁵¹ Maybe NASA’s briefings did indeed persuade the astronauts of their important role in the flight, or perhaps they simply learned the importance of public relations. Whatever the reason, the astronauts ultimately led the way in portraying themselves as “in control.”

NASA officials reinforced the astronauts’ claim of control over their missions in subtle yet crucial manipulations of language. Conveniently, NASA could call the astronauts pilots because of their backgrounds. The label “pilot” conveys the notion of control, and NASA never lost an opportunity to use the term “pilot” when referring to the astronauts. In a 1959 press conference, reporters asked George Low why the astronauts received so much training when their flights would be “limited” and “thoroughly automated.” Low responded, “Even though the flight is completely automated, we feel that the Mercury capsule is still essentially a flying machine.” If something goes wrong, Low added, the astronaut “would

have the possibility of navigating, of controlling the attitude, of taking all the emergency procedures himself.” The intensive training the astronauts receive, Low asserted, would help them “do a much better job of flying.”⁵²

NASA sensitivity to the pilot-passenger distinction may also have led to a subtle change in the label attached to the astronauts’ space vehicle. In 1959, NASA called its Mercury vehicles “capsules.” Sometime between September 1961 and January 1962, NASA erased the word “capsule” from its vocabulary and replaced it with the word “spacecraft.”⁵³ The word “spacecraft” first surfaced during a 1960 budget rehearsal, when a NASA official used it with reference to large “lunar landing vehicles.”⁵⁴ Prior to John Glenn’s flight, NASA began calling his vehicle a “Mercury spacecraft.” Rhetorically, “capsule” and “craft” seem a world apart. “Capsule” implies something sealed, encapsulated, uncontrollable. A craft, on the other hand, plainly recalls navigable boats that one can pilot.

Administration officials sometimes unwittingly betrayed the characterization of the astronauts as pilots. Late in the astronauts’ initial press conference, for example, George Low acknowledged that in orbital flights, NASA would retain control: “We will have the possibility of course to bring him down after one or two orbits.” Interestingly, however, he quickly shifted the attention back to the “control” of the astronaut, adding: “or he [the astronaut] will have the possibility to come down.”⁵⁵

Even Low’s “slip” thus ultimately provides additional evidence of NASA’s concern with maintaining an appropriately heroic image for the astronauts. Combined with the administration’s portrayals of space as a hostile environment, its emphasis on the threat posed by the Soviets, and the individualism of the test pilots, the administration’s suggestions that the astronauts controlled their own destiny completed a structurally coherent narrative of space as the New Frontier. Unfortunately, characteristics of some of the flights and also of the men aboard them on occasion made it difficult to construct frontier narratives that seemed to ring true. In short, the *situation* sometimes created problems for the New Frontier narrative. An examination of the early flights of Project Mercury illustrates how the actual events and personalities of the space program sometimes made it very difficult to “sell” space as a New Frontier.

Situational Constraints and the Frontier Myth

The first two Mercury missions generally failed to evoke the excitement of later flights, and a significant part of the reason may

lie in failures related to the frontier mythology. From the very first flight, the administration attempted to invite an analogy between space and the old frontier. But for a number of reasons, some errors of rhetorical strategy and others involving the character of the flights and the astronauts themselves, the administration's attempts to generate enthusiasm for the first two flights did not succeed.

In characterizing Alan Shepard's suborbital flight of 5 May 1961, the administration heavily emphasized the notion that the astronauts, like frontier heroes, controlled their destiny through their skill and daring. A press release issued one week before the flight emphasized how the astronaut would demonstrate "manual control of the spacecraft attitude before, during, and after retrofire."⁵⁶ Post-flight press releases likewise stressed the necessity of having a man aboard the flight and told how Shepard had controlled the system manually, one axis at a time. "This was done because a pilot had never controlled a craft in space before,"⁵⁷ NASA explained. Shepard's own statements also emphasized how he "had full control of the craft."⁵⁸ The astronaut even exploited the issue of "control" to deprecate the "enemy." Soviet Major Yuri Gagarin had a "fine long ride," Shepard observed in a *Life* article, but "he was a passenger all the way."⁵⁹

By so explicitly stressing the matter of "control," the administration actively focused attention on the greatest difference between the traditional frontier myth and the realities of the space program: the responsibility of the "hero" for his own destiny. In addition, the flight itself, especially in comparison to the Soviets' orbital flight, seemed simply too unspectacular to "sell" as a great adventure into the New Frontier. The flight consisted of Shepard and his capsule being shot like a bullet 116 miles up into the sky and then dropping back down into the ocean. The entire flight lasted only fifteen minutes. Comparing such a short, up-and-down ride with the trail-blazing of Davy Crockett stretched the bounds of imagination.

The decision not to engage in a major campaign of preflight publicity also hindered the administration's ability to evoke the frontier mythology. NASA did not build up Shepard as a "hero" about to embark on a frontier adventure; indeed, the agency even refused to announce prior to the flight that he would serve as the first astronaut. His name was released only after his launch had been canceled at the last minute. When launched three days later, he still ventured into space a relative unknown. NASA's silence about Shepard is understandable. After broadcasting to the world numerous fiery failures by unmanned rockets, NASA may not have wanted the public to become too attached to Shepard. With little knowledge of the man, Americans probably found it difficult to fit him into the

heroic mold. Moreover, Shepard himself seemed to shun the "hero" image. "We were asked to volunteer," Shepard once remarked, "not to become heroes."⁶⁰

Finally, Shepard's flight had no clear objective—no ultimate "scene" to conquer. Kennedy made his speech committing America to a moon shot two weeks after the flight. Without an identifiable, concrete goal like the moon, the parallel between the western wilderness and outer space seems less believable. Before Kennedy's speech, NASA's flights seemed to be headed nowhere in particular. They simply touched the boundaries of infinite outer space. After the speech, the flights became at least small steps toward a concrete goal: landing a man on the moon.

The second Mercury flight, "piloted" by Gus Grissom, thus had at least one advantage over the first. It was to be the first step in the great adventure of landing a man on the moon. Yet numerous other factors once again limited its potential for success as a great frontier adventure. Like Shepard's flight, the second mission seemed simply too unspectacular to stir memories of the great pioneers. Grissom's flight was just another up-and-down affair. As with Shepard's mission, the agency did not disclose the identity of the astronaut until a day before the scheduled launch, thus precluding any buildup of anticipation and excitement among the public. And like Shepard, Grissom rejected attempts to portray him as a hero. "I'm not the hero type," he confessed prior to his flight.⁶¹

Grissom's flight on 21 July 1961 certainly seemed to confirm his lack of heroic qualities. His launch went off without a hitch. But when he landed in the ocean, the escape hatch on his craft mysteriously opened, and the expensive craft sank to the bottom of the ocean. Grissom's comments after the flight reinforced suspicions that he had panicked and blown the hatch open himself. Immediately after the flight, a reporter asked Grissom whether he felt in danger during the flight. Grissom admitted being "scared a good portion of the time." In disbelief, a reporter asked: "You were what?" "Scared!" Grissom retorted. "Okay?"⁶²

Grissom tried to restore his tarnished image after the flight. In an article in *Life* entitled "Hero Admits He Was Scared," Grissom said, "I was scared and I meant it." One would have to be abnormal not to be a "little frightened" by space flight, he continued, but he insisted that "fear never got the better of me."⁶³ In all of his comments after the flight, Grissom continued to insist that he had not panicked and blown the hatch himself: "I was just lying there minding my own business when the hatch blew."⁶⁴ Nonetheless, the damage had been done to his image as a great frontier adventurer. Whatever the truth, the sinking of the spacecraft could hardly be "sold" as a

glorious adventure. Grissom, it seemed, simply lacked the "right stuff."

In another sense, however, Grissom's failure may have worked to NASA's advantage. The nation would no longer view the Mercury missions as merely short, safe rides. Grissom's near-tragic accident brought the important element of danger to the flights, adding a greater degree of credibility to the administration's depiction of further missions as frontier adventures. Grissom's personality and actions, moreover, added credibility to the administration's assertions that the astronaut's character and courage could influence the success of the flights.

Following Grissom's abysmal performance, the administration's frontier adventure became a story in search of a believable leading man, a more exciting plot, and a happier ending. In August 1961, the Soviets did their part to inject some excitement into the plot by sending Gherman Titov on seventeen orbits of the earth. Grasping the significance for the world of Shepard's "control" of his craft, the Soviets countered by portraying Titov as manually controlling his capsule too.⁶⁵ The malevolent antagonist had struck again. Now it was NASA's turn. The agency immediately canceled its one remaining suborbital flight and announced that the next flight would orbit the earth. On 28 November 1961, NASA took one more cautious step, sending a chimpanzee named Enos successfully into a dual orbit. But soon thereafter, the agency announced that the third manned flight would be a triple orbit of the earth lasting more than four hours.

After canceling ten scheduled launches over a two-month period, NASA finally sent its first manned orbital flight into space on 20 February 1962. Millions of Americans watched John Glenn blast off. From the start, Glenn's flight had the makings of a highly dramatic frontier adventure. On the second orbit, NASA received a signal from Glenn's craft that a heat shield was malfunctioning. Without the protection of the shield during reentry, the craft might disintegrate. Later, Glenn reported seeing "thousands" of tiny "fireflies" that glowed in the black sky. Attesting to the unknown element of the space environment, Glenn announced that "the true identity of these particles is still a mystery."⁶⁶ Ultimately, Glenn made a fiery reentry, watching "flaming chunks" six to eight inches long fly by his window. For a short period, NASA lost radio contact with Glenn. "It left me," Glenn wrote, "alone with my problems."⁶⁷ Robert Voas, Project Mercury's training officer, characterized Glenn's reentry as a supreme test of the heroic individual: "Glenn faced his moment of truth inside a fireball."⁶⁸ But when it was all over, the story had a happy ending. Glenn landed safely from his harrowing trip, and instantly he became a national hero.

Not since Charles Lindbergh's completion of the first transatlantic solo flight had the country expressed so much adulation of an American "adventurer." Glenn's flight clearly evoked the spirit of a frontier adventure. Unlike the suborbital flights, his triple orbit was spectacular enough to seem a real adventure. Glenn also emphasized that his flight would "pave the way" for voyages to the "moon and beyond"⁶⁹ and thereby fueled expectations of even greater adventures still to come. The mission's ten delays even contributed to the buildup of the flight and its "pilot." NASA had disclosed Glenn's identity immediately after the flight of Enos the chimpanzee, "a considerable change from the tighter news policy regarding crew selection" in the past.⁷⁰ As Americans became more familiar with Glenn with each postponement, anticipation and anxiety over the mission continued to build.

Most significantly, Americans could easily see that Glenn fit the pioneer role; he was obviously ready to play the part. Unlike Shepard and Grissom, Glenn did not contradict the administration's frontier mythology; he willingly contributed to the image-making. *Life* reporter John Dille wrote that more than any of his colleagues, Glenn had "the most consciously thought-out image of what an 'Astronaut' should be and how he should behave," both publicly and privately.⁷¹ According to Dille, Glenn saw himself as "the first of a new and even heroic breed of men who have the enormous responsibility of serving as symbols of the nation's future."⁷²

Glenn seemed naturally to possess all of the Puritan traits of the traditional heroic adventurer. Americans learned that Glenn cherished traditional Puritan virtues. A deeply religious man, Glenn proposed he had made his "peace" with his "Maker" years ago. His was not a "'fire engine' type of religion," something he called on only in emergencies and then put "back in the woodwork."⁷³ President Kennedy helped Americans interpret Glenn's statements about his faith, saying they reflected "a quality which we like to believe and I think we can believe is much a part of our American heritage."⁷⁴ In addition, Glenn demonstrated his devotion to family, breaking protocol during his speech before a joint session of Congress to introduce members of his family sitting in the audience, especially the "real rock" in his family, his wife, Annie. During training, Glenn opted to forgo the sexual companionship and the comforts of living at home. Instead he stayed in the bachelor's quarters on base, running two miles every morning and, of course, attending church every Sunday. Glenn's self-control and sacrifice evoked memories of early Americans.

Coupled with the Puritan qualities, Glenn demonstrated qualities reminiscent of the early pioneers. Glenn, not "physically afraid," proposed that if an astronaut was "so shook up" he had to stay busy

to remain calm, then he did not belong in the program.⁷⁵ In a postflight interview, Glenn described his feelings upon reentry as "cautious apprehension." Glenn reported he had "some concern" when he learned about his possible emergency.⁷⁶ The word "scared," however, never entered his vocabulary. On the contrary, Glenn called weightlessness "pleasant." He added that one could become "addicted" to space flight "rather rapidly."⁷⁷ Emotionally, Glenn seemed to have proven himself of good pioneer stock. During the long delays and possible emergency, he remained unruffled. He seemed to become emotional only when he spoke of his patriotism: "I still get a hard-to-define feeling inside when the flag goes by—and I know that all of you do, too."⁷⁸

Despite all of his accomplishments, Glenn remained modest. Although he felt "proud" of his trip, he "also felt a certain humility."⁷⁹ Clearly, Glenn had not fallen prey to the sin of hubris—that excess of pride that often plagued other "heroes." Thus, when the Speaker of the House invited Glenn to speak before a joint session of Congress—an honor usually reserved for heads of state—Glenn stressed the accomplishment of the group over his own as an individual. Glenn acknowledged the great "honor" being "shown us."⁸⁰ My flight, Glenn pointed out, "involved much more than one man in the spacecraft in orbit."⁸¹

While Glenn demonstrated humility with talk of the team effort, he never forgot the importance of stressing the need for "rugged individuals" to "control" the capsule in space. Before the flight, Glenn commented, "I know at some point during the mission I will feel very much on my own."⁸² After the flight, he proclaimed that the mission would have failed without a man "aboard to assume control and bring the capsule back."⁸³ "Flying" the capsule "myself," Glenn argued, proved "man's capabilities are needed in space."⁸⁴ As in Shepard's testimony, Glenn tried to characterize himself as a pilot, not a passenger. Never considering a Mercury astronaut as "merely a passive passenger," he stated that his flight had proven that man plays a "key role."⁸⁵ In the future, Glenn predicted, we can "put less automation into the machines" and rely even more on man by making him "a part of the system."⁸⁶

NASA officially echoed Glenn's remarks about the need for brave "pioneers" in the space program. Suggesting that Glenn had succeeded through skill and daring, NASA doctor Stanley White proposed that Glenn's "one big task" during the flight was "control" and that his "manual flying" had exceeded the automatic flying.⁸⁷ D. Brainerd Holmes, director, Office of Manned Space Flight, similarly characterized Glenn's control of the craft as crucial to the mission's success. After discovering the malfunction, Glenn

"assumed manual control of the spacecraft," Holmes explained. Without Glenn, added Holmes, NASA probably could not have accomplished the "full three orbits."⁸⁸

Out of the public spotlight, both astronauts and NASA officials often admitted that the astronauts did not actually "fly" the Mercury capsules at all. As a star witness before the House Committee on Science and Astronautics, Glenn acknowledged that man did not operate in space flight as he did in airplanes.⁸⁹ Indeed, Glenn asked for changes in spacecraft design that would remove a great deal of the automation and place more reliance on man. He described the existing Mercury design concept as one capable of "doing every action that you want done in space and using man as a passive passenger to back it up, a man who only gets called up in case he is needed when a system malfunctions."⁹⁰ Asked whether people are under a mistaken impression that astronauts can control where they go in their crafts, Glenn admitted that the Mercury astronauts could control the craft's "attitude" but cannot "actually alter its flight path." We are looking forward to the time, Glenn added, "when man will really take his real, rightful place in space."⁹¹

The testimony of DeMarquis D. Wyatt, director, Office of Programs, before the House Committee on Appropriations was equally candid. Glenn, observed Wyatt, "did not in fact navigate or guide. All he did was control the stabilization of the spacecraft." In future spacecrafts, Wyatt added, astronauts will "actually fly" the craft in addition to stabilizing it. He went on to describe Mercury flights as "purely mechanical systems."⁹²

In the public mind, there seemed little doubt that Glenn's flight was a great adventure on the New Frontier. Glenn, now the model of the modern frontiersman, had battled the elements, had reacted to setbacks with courage, and had returned unscathed. Unlike Shepard and Grissom, Glenn cherished the image as a heroic adventurer and willingly contributed to the image. Glenn's flight was worthy of a frontier adventure, and NASA publicized the flight and its astronaut prior to the launch, allowing Americans to become familiar with Glenn and to develop needed anticipation and concern for the flight and its "pilot." Before and during the flight, John Dille explained, Glenn "portrayed the perfect image of the modest, dedicated and patriotic hero." He probably did more on 20 February 1962, said Dille, "than dozens of others could have done in months to sell the U.S. space effort to Congress and to the nation."⁹³ Walter McDougall termed America's outpouring of emotion for Glenn's feat "a national catharsis unparalleled in the quarter century of the Space Age."⁹⁴ Glenn brought believability to the story, but the effect of the flight was not permanent, as subsequent events would prove.

Three days after Glenn's flight, President Kennedy anticipated a major theme of frontier mythology when he spoke of the possible temptations and pitfalls awaiting America's new heroes. The astronauts, he said, will learn that "the hazards of space flight only begin when the trip is over."⁹⁵ Kennedy knew that Americans would watch their heroes carefully. Americans knew the story almost instinctively; temptations were always greatest at the top.

Two events in mid-1962 suggested that the astronauts may indeed have succumbed to worldly temptations from an excess of pride. First, questions arose about a contract that the astronauts had signed with *Life* for their stories. Many viewed the deal as unethical, since the astronauts, employees of the government, benefited financially from their assigned duties. Second, the public learned that the astronauts had agreed to accept free homes from a Dallas development group. NASA had to hold a news conference to explain the actions of the astronauts and their attorney. In the wake of substantial negative publicity, the astronauts reversed their position and declined the homes.

Meanwhile, the flights continued, with Scott Carpenter, Wally Schirra, and Gordon Cooper all piloting Mercury missions within the next year. Following "the trail blazed" by Glenn,⁹⁶ Carpenter blasted off on 15 May 1963. Like Glenn, he had difficulty during reentry. Even though his fuel became "dangerously low," he did not panic, enabling him to bring his craft back safely. Schirra, the third American to orbit the earth, attempted to characterize his flight as a "real breakthrough in manned space flight." Schirra asserted that upon liftoff he had turned off all automatic sequences: "The capsule was all mine now."⁹⁷ In the past, continued Schirra, ground stations had kept tight control of the situation. Now they trusted me with "the works." Seeking to magnify the significance of his flight, Schirra declared that nobody had ever "flown a capsule before, much less under full pilot control."⁹⁸

Although both Carpenter's flight and Schirra's flight were successful—even groundbreaking in some respects—enthusiasm for the "adventure" seemed to wane in late 1962. Despite NASA's best efforts to emphasize the importance of man's role in the program, serious questions about the need for a *manned* space program began to emerge.⁹⁹ Glenn's flight and the successful confrontation with Cuba in October 1962 restored the nation's pride, thus eliminating the urgency behind American support for manned space flight and leaving administration officials to take additional measure in 1963 to retain support for Project Apollo.

With the coming of 1963, NASA began preparing to sell its budget

to an increasingly critical Congress. It was in this context that Gordon Cooper's flight—the last Mercury mission—took on additional importance. Concerned with growing criticism, the Kennedy administration went to great lengths to recapture the glorious "frontier" excitement surrounding the flight of John Glenn. NASA conducted an enormous public relations campaign to engender excitement and support for Cooper's flight. The press kit for Cooper's Mercury-Atlas 9 began like most of the others, referring to Cooper "at the controls." Yet it emphasized a transformation in the astronauts. "The astronauts have changed through their flight training and actual flight experiences, proving themselves space pilots rather than spacecraft passengers."¹⁰⁰

The flight itself seemed worthy of the big buildup. Cooper completed twenty-two orbits of the earth, staying in space for over twenty-four hours. During the flight, Cooper lost all automatic controls, and like a true pioneer, he "flew" his capsule back to earth. During his flight, Cooper explained, his automatic control system malfunctioned and he had to assume control. Positioning his craft for reentry and riding the capsule back from space "was going to be up to me."¹⁰¹ Cooper returned to a hero's welcome.

In perhaps NASA's best public relations move yet, the agency scheduled Cooper's flight to coincide with the anniversary of Lindbergh's solo flight across the Atlantic. Further dignifying the occasion, President Kennedy presented NASA's Distinguished Service Medal to Cooper in a White House ceremony.¹⁰² In remarks during the ceremony, Kennedy compared Cooper's flight to Lindbergh's achievement, calling them "equally hazardous" and "equally daring."¹⁰³ Next, the Speaker of the House invited Cooper to address a joint session of Congress. The nationally televised speech gained further exposure for Cooper, NASA, and Project Apollo.

Thus concluded what President Kennedy called "an extraordinary page in American history." Kennedy praised the Mercury astronauts, who had "become part of the American story in a very real way."¹⁰⁴ By sending a man to the moon, Kennedy observed, Americans would assure themselves of "playing their great role, as they have in the past."¹⁰⁵ At the conclusion of the Mercury program, Americans finally seemed firmly committed to continue "playing their great role" in space exploration.

Although manned space exploration did not inherently possess all the constituents of a traditional frontier adventure story, the American people could see enough parallels to conjure up the powerful frontier mythology. The moon presented a tangible, conquerable "scene." To reach it, the astronauts had to journey through the

unknown environment of space and overcome a human villain, the Soviets. The astronauts reacted intelligently in dangerous situations, "flying" their crafts to safety. With each successive mission, the astronauts demonstrated greater and greater control of their crafts, proving the importance of individual "pioneers" to the program.

Various obstacles impinged upon the administration's ability to peddle its first two flights as frontier adventures. Alan Shepard's and Gus Grissom's comments shunning the hero image, the unspectacular nature of their flights, the administration's failure to engage in preflight publicity, and the sinking of Grissom's capsule all made the comparison too unbelievable to sell. With John Glenn's successful orbital flight, the administration evoked the frontier mythology and captured the imagination of the American people. Glenn seemed naturally to fit the mold of the heroic adventurer. But the public's adulation of Glenn did not last indefinitely. After Glenn's flight, excitement for the manned moon mission began to wane. Gordon Cooper's flight, however, recaptured some of the previous excitement, helping the administration quiet serious criticisms of manned space exploration.

Fittingly, the nine new Apollo astronauts, introduced in late 1963, took over where the original seven astronauts had left off, adopting the romantic frontier rhetoric of their Mercury brethren. In a *Life* article cowritten by the new astronauts, Astronaut Elliot See underlined the frontier narrative when describing how his attitude about the moon shot had changed during his Apollo training. "The whole mission," he proposed, "becomes more real to me and less of an adventure into the unknown."¹⁰⁶ The first man on the moon, Neil Armstrong, also supported the administration's view of the manned lunar landing. Initially, he insisted, he did not volunteer for Project Apollo because he was "skeptical" of the program. The success of the flights, however, made him change his mind and realize that he had "underestimated" the astronauts. Armstrong also attributed his initial reluctance to join the space program to a lack of a clear objective. "Another thing that affected my thinking was that there was no moon program in those early days."¹⁰⁷ Still another astronaut, Edward White, who later died tragically in the Apollo fire, adopted the language of an explorer. Calling people of Earth "pretty curious" about the moon's composition, he maintained that man would never "satisfy" his "curiosity" unless man himself went to the moon. Like the Mercury astronauts before him, White stressed the most crucial element of the frontier motif: astronaut control.

"The most important thing," White contended, "is that man—not the automatic machine—is the primary system in space flight."¹⁰⁸

Even with the Mercury and Apollo astronauts echoing the administration's depiction of a manned lunar landing, the group could not sell the moon shot by themselves. The administration had limited opportunities to speak directly to the public. Moreover, most Americans would learn of the space program from the media.

Media Coverage of the Space Program: A Reflection of Values

In assessing the press coverage of American space exploration in its 8 October 1962 issue, *Newsweek* calls the men assigned to interpret the space age “a new kind of journalist,” trained largely in the post-Sputnik era.¹ The amount and complexity of the scientific information they had to master, the “wilting ignorance” of their editors about science, and the roadblocks NASA erected to stop the press from getting information reflecting badly upon the program made the conditions under which these reporters operated “unique.”² The writers, moreover, did not even agree on their function. Should they educate the public in “the intricacies” of the space age or simply report events? Should they serve an adversarial role, or should they celebrate the space program as a great national endeavor? *Newsweek* acknowledged the latter dilemma in the minds of many reporters. As citizens of “a nation whose prestige is at stake in the space competition,” *Newsweek* comments, “the reporters are under the temptation to function as rooters for ‘The Team’—a role abhorrent to most newsmen.”³

Researchers have focused primarily on the press coverage of the early space program and have neglected television coverage for a number of reasons. First, although television undoubtedly played an important role in the impression Americans formed of the space flights, television was still in its infancy in the early 1960s. Not until 1963 did network evening newscasts expand from fifteen to thirty minutes. Thus at the height of the program in 1961 and 1962,

the networks had little time to devote to America’s space efforts. Second, color television was still a thing of the future in the early 1960s. Finally, the central problem with studying television news coverage of the early space program is the lack of videotape in archives.

Scholars who have studied the press coverage of America’s early space program disagree about whether the press was biased in favor of the administration’s lunar landing project. Robert Cirino attacks the coverage of the manned space program, calling the media “the willing partner of the NASA propaganda machine.”⁴ Specifically, Cirino charges that NASA and the press gave the public the impression that favoring the space program meant favoring a moon shot, while opposing the moon landing meant opposing the entire space program. The press “intentionally” failed to inform the public that most of those who opposed manned space exploration favored unmanned space exploration. The news media, according to Cirino, concealed the opposition to the lunar program by ignoring it.

Ronald E. Ostman and William A. Babcock, on the other hand, argue that the media exhibited no “pro-Kennedy bias” in reporting on the space program.⁵ The authors examined three major newspapers’ coverage of the manned space program and found that the vast majority of the articles in the papers presented neutral stories. They identify a handful of articles with detectable biases. The “biased” articles, however, according to Ostman and Babcock, were almost equally split between those for and against Kennedy’s space program.

Thus questions about the role of the media in building support for the Kennedy administration’s space program remain. As Ostman and Babcock point out, Cirino “generalized far beyond the data he presented.”⁶ Although Cirino asserts that one can find media bias in favor of manned space flight from the beginning of the space program, he offers little evidence to support his contention.⁷ But Ostman and Babcock themselves examine only three newspapers, and they altogether ignore newsmagazines and other media. They, too, offer only a limited view of news coverage of the space program in the Kennedy years.⁸ More important, their analysis fails to address Cirino’s contention that the press was biased toward *manned* flight and ignored calls for unmanned space exploration. Ostman and Babcock ask merely whether one can find “a perceptible bias in newspaper reporting of the U.S. space technology and exploration issue.”⁹ They simply overlook the distinction between manned and unmanned exploration.¹⁰

The question of bias in popular press coverage of America’s early manned space program is more complex than described by either

Cirino or Ostman and Babcock. In examining all articles on the space program in the *New York Times* and in the thirty best-selling magazines in America from 1959 to 1963, one finds a variety of critical and uncritical coverage that defies simple categorization as for or against manned space exploration. Certain magazines provided little negative coverage throughout the space program. Rarely does one find an article critical of the manned space effort in *Life*, *Popular Science*, or *Popular Mechanics*.¹¹ Overall, *Time's* coverage supported a manned lunar landing.¹² Yet events in late 1962 and early 1963, more than a change in editorial policy, prompted *Time*, *Newsweek*, *Reader's Digest*, the *Saturday Evening Review*, and the *New York Times* to criticize certain aspects of the administration's program to put a man on the moon. Criticism of the moon shot by respected scientists, the astronauts' signing of a second contract with *Life* for their personal stories, the Government Accounting Office's findings of expensive mismanagement in NASA, NASA's own study of shoddy workmanship by contractors, continuing charges of pork-barrel politics, the president's call for a joint U.S.-U.S.S.R. space effort, the Soviets' apparent withdrawal from the lunar race, and the lack of an American manned space flight after May 1963 all contributed to the press's more critical posture.

From the beginning of the manned space program in 1959, the *New York Times* offered frequent coverage of America's space program. Occasionally, the paper described the minimal "control" the astronauts exerted during their missions. Rarely did it challenge the astronaut's assertions that they "flew" or "controlled" their crafts during their missions, even though its news stories at other times explained that the astronauts could merely "control" the stabilization of their capsules.¹³ Contrary to Cirino's charge, the paper often mentioned unmanned exploration of the moon as an alternative to manned flight.¹⁴ From NASA's inception, the newspaper's editorials and columnists supported the manned space program. By 1963, however, one finds a marked change. The paper began calling for a reexamination of the moon program and its emphasis on manned flight.¹⁵ Interestingly, in the midst of the paper's critical posture in 1963, Gordon Cooper's flight received positive coverage, demonstrating that the drama of manned flights still evoked patriotic pride.

The *Saturday Evening Post*, *Reader's Digest*, and *Newsweek* offered the most critical coverage of the space program. These magazines frequently attacked the military, political, scientific, economic, and technical value of sending a man to the moon. Again, contrary to Cirino's assertions, *Newsweek* discussed unmanned lunar shots as an alternative to manned flights.¹⁶ *Newsweek*, like the

New York Times, showed two faces. Although it attacked Project Apollo and explained the limited role that the astronauts played during their missions, the publication abandoned its critical posture when describing the manned flights. In sum, when examining the coverage of America's manned space program in the popular press from 1959 to 1963, one does find support for manned flight. The press does not, as Cirino charges, ignore unmanned exploration. The press offered both positive and negative coverage.

Thus a simple charge of bias for or against manned space flight does not adequately explain press coverage of America's efforts to place a man on the moon. Rather, the mixture of critical and celebratory coverage reflected certain enduring values in journalism. These enduring values, moreover, predisposed journalists to cover the space program in a way that supported, even glorified, a *manned* space program.

Negative Coverage

Herbert J. Gans proposes that journalism does not confine itself to reality judgments but also "contains value, or preference statements," that underline the news and present a "picture of a nation and society as it ought to be." These implicit values, he adds, often "affect what events become news and even help define the news."¹⁷ One of the most prominent values, according to Gans, dates to Thomas Jefferson's celebration of small-town America. This preference for small-town pastoralism translates into a more general value of the desirability of smallness. One can see bias toward smallness in stories that examine the faults of largeness. "In the news," Gans argues, "big business, big labor, and big government rarely have virtues."¹⁸ Thus, when reporting on the size of NASA, particularly its rapid growth, *Time* lamented that America's space program had "sprouted like Jack's beanstalk, sucking up men and money at a prodigious rate, sending its tendrils into every state."¹⁹ Similarly, Stuart H. Loory emphasized the perils of the program's rapid growth in a 14 September 1963 article in the *Saturday Evening Post*: "Big, blaring, burgeoning in a hundred directions, the space program stands accused today as a monstrous boondoggle."²⁰ Much like muckrakers at the turn of the century, the media during the early 1960s decried the growth of the space program by comparing it metaphorically to a monster. As *Time* put it on 4 October 1963, "Infant space industries [have grown] overnight to monster maturity."²¹

In the enduring value system of American media, bigness goes

hand in hand with waste. Because the program had "grown too rapidly," reported John Finney in the *New York Times*, "waste and duplication" had become commonplace.²² Stuart Loory reflected the same value in the *Saturday Evening Post* when he attacked NASA's "expanding bureaucracy" for creating "confusion and inefficiencies."²³ Other articles in the *New York Times* went even further. An editorial published on 28 June 1963 not only attacked NASA's "waste and duplication" but attributed it to the House Science and Astronautics Committee's misguided fondness for all things large. "The committee's largesse and laxity," the paper stated, "encouraged NASA to act as if there was no limit to what it could spend in the skies."²⁴ As one might expect, the newspaper's solution to the problem of waste was simply to reduce NASA's size. Cuts in NASA's budget, wrote John Finney, would eliminate "waste and duplication" and would tighten NASA's management.²⁵ In short, bigness encouraged waste, and smallness encouraged efficiency. The media had no bias against the space program generally but simply criticized it on occasions when its size seemed antithetical to the values of small-town pastoralism.

The majority of the media's negative coverage of the Kennedy administration's space program focused on alleged self-interest and partisanship infesting the program. Again, one can best explain the coverage as a reflection not of an anti-Kennedy sentiment but of an enduring journalistic value. American news indicates how American democracy should perform by frequently reporting on deviations from an unstated ideal. One may label this ideal altruistic democracy. As Gans observes, "the news implies that politics should be based on the public interest and service."²⁶ Thus nepotism, log-rolling, patronage appointments, financial corruption, and anything generally viewed as a "deal" is always news. Reflecting this value, journalists inevitably criticize any decision "based, or thought to be based, on either self-interest or partisan concerns."²⁷ In covering the space program, the press again found evidence of wasteful spending conflicting with this value of altruistic democracy. In a number of stories, Congress became the target for allegedly failing to examine the space budget critically.²⁸ The press charged that until 1963, Congress served as the space program's "sugar daddy," giving it virtually everything it demanded.²⁹ One can also see this value reflected in stories criticizing administration officials, and even the astronauts themselves, for placing personal rewards above public service. Starting in late 1962, the media raised two specific issues to the top of its space coverage: the astronauts' renewal of a contract for their personal stories and the administration's favoritism in the selection of sites for space facilities.

The astronauts' contract to sell their "personal stories" received widespread coverage in the press. The terms of the contract itself, distinguishing the astronauts' personal stories from their public stories as government employees, made it newsworthy. Although it reported the signing of the astronauts' first contract with *Life* in 1959, the press did not attack it. With the signing of the second contract in late 1962, however, coverage increased and criticism surfaced. The *New York Times* ran numerous editorials blasting the contract. One editorial, for example, proclaimed that the government should not allow the astronauts "to reap enormous private profits" from participating in "a great national effort."³⁰ News stories in the paper also emphasized that the astronauts' personal gain came at the taxpayers' expense. The government followed an "inappropriate" policy, the *New York Times* concluded, when it allowed the astronauts, whose stories belonged in the "public domain," to collect money from "a private payroll."³¹

Not surprisingly, the two leading newsmagazines differed in their view of the contract between NASA and *Life*. Although *Time*, *Life*'s sister publication, did not seriously criticize the contract, its major competitor did. "How much a hero can expect to gain financially and still remain a hero," *Newsweek* observed, "is uncertain."³² *Newsweek* attacked the contract as an "embarrassing financial arrangement" and belittled contract negotiations as "legal bickering" more appropriate to the film *Cleopatra* than to a "serious scientific endeavor."³³ The magazine also blasted *Life*'s portrayal of the astronauts. The program, *Newsweek* declared in its 12 February 1962 issue, had begun to resemble a "Barnumesque extravaganza" and the astronauts, the "cardboard characters of soap operas."³⁴

The media focused even more attention on the alleged favoritism of NASA and the administration in awarding lucrative space contracts. One finds the value of altruistic democracy in the media's attack of the Kennedy administration and Congress for the "aroma of pork-barrel" they allowed "to spring up" around the program.³⁵ Reporters exposed and then attacked partnerships between administration officials and members of Congress. The press questioned, for example, the "coincidence" of NASA's placement of its Manned Spaceflight Center in Houston, the home district of Democratic Representative Albert Thomas, chairman of the House appropriations subcommittee. Not surprisingly, wrote *Newsweek*, "Thomas wasn't very sympathetic to space spending until the question of a new astronaut center came up."³⁶ It did not help matters when Vice President Lyndon B. Johnson, who had previously told reporters Texas would get its fair share of the space contracts, announced the award of the spaceflight center from his Houston office.³⁷

Two individuals attracted a great deal of the media criticism: Senator Robert S. Kerr of Oklahoma, chairman of the Senate Aeronautical and Space Sciences Committee, and NASA administrator James E. Webb. Before assuming his post as administrator, Webb served as the assistant to the president of Kerr-McGee Oil Industries, Kerr's own company. *Time* reported that critics had attacked Webb for awarding space contracts with "a political rather than a scientific eye."³⁸ The Webb-Kerr partnership, reporters charged, amounted to patronage. Although all members of Congress should be equal in the fight to land "juicy space contracts for their home states," *Newsweek* observed, some members are "more equal than others." The magazine added that because of his connections, Kerr was "the most equal of all."³⁹

The press waged its most savage attack on the president and his brother Senator Edward M. Kennedy for a \$50 million electronics research facility that NASA awarded to Boston, Senator Edward Kennedy's home district. The award came only months after Senator Kennedy had successfully campaigned on the pledge that he could "do more" for Massachusetts. What made the facility doubly suspicious, according to media reports, was that NASA broke with its usual practice of establishing formal criteria for the need and location of the site. NASA also failed to have a board review the location. Even more suspicious, the project became a last-minute addition to a budget previously reviewed by the Bureau of Budget.⁴⁰

A *New York Times* editorial on 3 August 1963 suggested that the president himself was probably behind the decision. Observing that Kennedy had kept his hot line to Congress "sizzling" in the past few days with pleas to approve the Boston facility, the editorial explained that the Senate had reversed its earlier decision to reject the facility. "Of course," the paper sarcastically added, "no one would be cynical enough to believe that the calls could have anything to do with the decision."⁴¹

Positive Coverage

The vast majority of the coverage of the space program was positive. Like the negative coverage, the celebratory coverage did not simply reflect a partisan bias. Instead, certain aspects of the space program appealed in a positive way to enduring media values. "One of the most important enduring news values," Gans proposes, "is the preservation of the freedom of the individual against the encroachment of nation and society."⁴² W. Lance Bennett echoes Gans when discussing the journalistic imperative to personalize

news. Bennett defines personalized news as a "bias that gives preference to the individual actors and human-interest angles in events while down playing situational and political considerations that establish the social contexts for those events."⁴³

The media's ideal individuals successfully struggle against adversity, overcoming forces more powerful than themselves. The news particularly seems to celebrate individuals who "conquer nature" without harming it: explorers, mountain climbers, and of course astronauts. With the majority of the news about the space program focusing on the flights themselves, the media's model of the ideal individual predisposed reporters to write of the individual heroically struggling to overcome unknown, powerful forces.

The media's ideal of individualism is most evident in the coverage of the flights of John Glenn, Walter Schirra, and Gordon Cooper. Suggesting that the flights were individual rather than team triumphs, *Newsweek* proposed that the greatest lesson one learned from Glenn's flight came on a subjective level. "The drama of the human spirit—solitary, vulnerable, curious—facing the unknown elements of the universe is as old as mankind."⁴⁴ Glenn, the article adds, demonstrated that Americans still exist who can play the heroic role in this "ageless drama." Notice the similarity of *Newsweek's* description of Gordon Cooper's flight in 1963: "Once more, the ancient drama of the solitary individual against the elements was re-enacted."⁴⁵

Examination of the press coverage of the astronauts before the Kennedy administration came to power demonstrates that the media's depictions of the astronauts and the program reflected not a pro-Kennedy bias but an enduring premium on individualism. In its first issue on the astronauts on 20 April 1959 *Time* described the astronauts in two separate articles as "individualists all."⁴⁶ One can find similar descriptions of the astronauts three years later when the press began emphasizing the astronauts' isolation, even loneliness. On 5 February 1962, for example, *Newsweek* called Glenn "a single remote figure" and compared him to Charles Lindbergh, another "authentic individualist."⁴⁷ Other articles described the astronaut as "alone" and "lonely." *New York Times* writer Richard Witkin, for example, described Gordon Cooper during his flight as "the pilot alone in orbit."⁴⁸ Individualism dictated the *New York Times's* depiction of Gus Grissom's childhood. The paper reported that as a schoolboy, Grissom slipped off for "solitary swims" in quarries, explored limestone caves "alone," and made all-night camping trips "by himself."⁴⁹

Other stories emphasized comparisons between the astronauts and the mythologized "individualists" of the past, including avi-

ators Charles Lindbergh and Orville and Wilbur Wright and the New World explorers Columbus and Magellan. Occasionally the press compared the astronauts to both groups. Richard Witkin, for example, wrote that neither "Columbus' opening of the New World" nor "the Wright brothers' first flight had consequences as profound as may emerge from the first lunar voyage."⁵⁰ More often, the press, particularly the *New York Times*, compared the astronauts to explorers of the New World. An editorial on 11 April 1959 set the tone for future descriptions of the astronauts. The first man to fly into space, the *New York Times* asserted, would "assure himself immortal fame alongside Columbus and Magellan."⁵¹ A *Time* article, written one week later, demonstrated that the editorial was not merely an isolated instance. The astronauts, the magazine proclaimed, were "cut from the same stone as Columbus" and "Magellan."⁵² Years later one finds the media using this comparison, focusing attention on the efforts of a heroic individual in describing the flights or interpreting their meaning. Perhaps the best example comes from *New York Times* columnist James Reston. After Scott Carpenter's flight in May 1962, Reston, in his usual postflight hysteria, asserted that the astronauts "may make Columbus and Vasco de Gama look like shut-ins before they are through, and their exploration may open up more in the heavens than the old sailors did on the sea."⁵³ Reston, moreover, made a similar comparison when first describing the astronauts on 12 April 1959—nearly two full years before Kennedy came to office.⁵⁴

The press' focus on individualism and its comparisons between manned space flights and the exploits of Columbus, Magellan, and the Wright brothers led the media naturally to embrace the space program as a great frontier adventure story. This traditionally American story, with its emphasis on rugged individualists, fit perfectly within the media's celebration of the ideal individualist. In doing so, of course, the media uncritically adopted the perspective of the Kennedy administration's public relations campaign and, in effect, argued against critics of manned space flight or of the scope of America's commitment to space generally. From the start, moreover, the media demonstrated a predisposition toward describing the space program as a frontier adventure. A *New York Times* editorial on 11 April 1959 spoke of the "extreme demands" the Mercury "adventure" would place on the "first pioneers" of space.⁵⁵ Early articles depicted the astronauts as part of a special breed destined for greatness. A *Newsweek* article dated 20 April 1959 proposed that the seven astronauts "bore a special stamp that set them apart."⁵⁶ *Time's* 20 April 1959 issue asserted that the "curious finger of fate" had selected the astronauts to be "hurled into space to make the

supreme test."⁵⁷ In a different article in the same issue of *Time*, the magazine placed the astronauts within a long line of heroic pioneers: "Rarely were history's explorers and discoverers so clearly marked in advance as men of destiny."⁵⁸ Although one can see the brief outlines of the frontier motif in a few articles in 1959 and 1960, tremendous emphasis did not fall on the story until Kennedy came to power.

Couching the story of the space program in terms of "the new frontier," Kenneth Crawford of *Newsweek* stressed how *all* Americans were the "true heirs of a frontier tradition." Crawford placed the program above political disagreements, insisting that Americans *take for granted* that they "shall be the pioneers who take advantage of the opening."⁵⁹ Similarly, *New York Times* Washington correspondent John Finney stressed the virtual inevitability of Americans' exploration of space in terms of frontier mythology: "Just as in ages past, the first explorers can be expected to be followed by the settlers and the military along the new frontier."⁶⁰

Even if the administration had not portrayed manned space exploration as a frontier adventure story, the media might have done so. The story offered two attractions to American journalists. First, it offered conflict, a treasured element in journalism. Using the frontier story to describe the space effort allowed journalists to pit American astronauts not only against Soviet cosmonauts but also against the unknown environment of outer space. Second, the frontier story appealed to one of the most deeply rooted journalistic values: rugged individualism. More than any other story of the times, the space program appealed to the media's interest in stories of individual success, made possible by the old-fashioned virtues of the frontier adventure.⁶¹

The astronauts themselves provided the stories for the media's version of the "frontier adventure" in space, reflecting the journalistic imperative to personalize news.⁶² Rather than the technicians and scientists who made it all possible, the astronaut as frontiersman came to represent the entire program. Thus a *New York Times* editorial in March 1962 credited the astronauts, not the technicians, with being "the young pioneers of the space frontier,"⁶³ *Newsweek* likewise credited the success of the program largely to the fact that the astronauts had a "frontiersman's drive to stake out new territory."⁶⁴ Even *Popular Mechanics*, in its March 1959 issue, seemed more interested in the astronaut as a "Daniel Boone of space" than in the technological heroes of the program.⁶⁵ In virtually all coverage of the space program, it was the astronauts rather than the scientists who were blazing trails for others to follow.⁶⁶

It mattered little which of the astronauts was the center of atten-

tion. A *New York Times* editorial labeled Scott Carpenter "in the tradition of the pioneers of a century ago."⁶⁷ A year later, one finds very similar imaging in *Time's* description of how Gordon Cooper executed a manual reentry. "Like a rifleman with a cross-hair sight," recounted the magazine, Cooper "lined up the horizontal mark on his window with the horizon."⁶⁸ The press even interpreted Cooper's speech following the flight as something from the frontier era, with *Newsweek* praising the "homespun words" of the address.⁶⁹

Clearly, however, one astronaut stood out in the press coverage as a man who best exemplified the whole range of traditional American values associated with both the Puritans and the pioneers. Because he so completely exhibited all the personal qualities that made the space program successful, John Glenn became the quintessential American astronaut.

Media enthusiasm for Glenn went beyond admiration for his flight. The press may well have celebrated anyone who put America back in the space race. "The surprise," reported *Time*, "was that [America] found Glenn the man fully the equal of Glenn the astronaut."⁷⁰ Columnist James Reston agreed: "Glenn himself, is almost as important as his space flight, for he dramatized before the eyes of the nation the noblest qualities of the human spirit."⁷¹ According to *Time*, "Glenn's modesty, his cool performance, his dignity, his witticisms, his simplicity—all caught the national imagination."⁷² To a great extent, the media's ideal of individualism accounts for the emphasis on Glenn's personal qualities. Comparing Glenn with heroic Americans of the past also added credibility to the idea that his personal qualities and character accounted for the success of the entire space program. Placing Glenn in a long line of rugged individualists, the press suggested that success in space was as much a result of individual effort as the opening of the western frontier by individual pioneers.

Readers learned that Glenn exemplified the qualities and character of Americans of yesteryear. He possessed the self-reliance, courage, and patriotism of the pioneers who settled the frontier. *Newsweek* called him a "self-reliant, modest, and courageous man."⁷³ The *New York Times* particularly highlighted Glenn's courage. Arthur Krock deemed him "fabulously courageous," while James Reston asserted that the astronaut "dramatized courage."⁷⁴

Glenn, as described by the press, also embodied the simple character of the American Puritan. *Newsweek* called him an "island of disciplined calm."⁷⁵ The stoic astronaut demonstrated his self-control when it counted: during his flight. Receiving news that his craft might disintegrate upon reentry, according to *Time*, Glenn reacted with "characteristic calmness."⁷⁶ By controlling his emo-

tions, Glenn demonstrated his tremendous discipline. Glenn leads a "life of austere discipline," *Newsweek* observed.⁷⁷ Even his dedication to his physical training set him apart. The *New York Times* said running on the beach was a "routine followed daily by Colonel Glenn and less frequently by some of his six astronaut colleagues."⁷⁸ From the descriptions, one detects almost a masochistic tendency, also reminiscent of the Puritans.

The press reported on a variety of other qualities that also placed Glenn in the tradition of the Puritans. *Time* remarked that "through the whole ordeal of instant heroism, he continued to display a remarkable modesty and control."⁷⁹ His modesty and humility stemmed from his uncomplicated, simple nature that, according to *Time*, caught "the national imagination."⁸⁰ Even Glenn's family could not escape writers' oversimplifications. The Glenn family, wrote Gay Talese in the *New York Times*, possessed the "simplicity" of a "Norman Rockwell" original.⁸¹ Fueled by his "determination," Glenn's dedication "stood out" even among his fellow astronauts. Glenn was the only astronaut, for example, who did not move his family to the training facility; he lived at the base, recalled *Time*, so that "he could better concentrate on the program."⁸²

By far, the greatest amount of description, testimony, and commentary concerned Glenn's faith. To journalists, it must have been inconceivable that Glenn, facing the dangerous unknown all alone, would not have a deep faith to draw upon to sustain his courage and drive. One can see the press's assumptions at work in *Newsweek's* first article on the astronauts. "Inevitably," the magazine declared on 20 April 1959, "the question of religious faith came up."⁸³ Numerous articles in the press described Glenn as "deeply religious," while one went so far as to refer to Glenn's room as his "monastic quarters."⁸⁴ The *New York Times* brought his family's faith into the picture, continually reminding readers that Glenn and his family attended church "every" Sunday.⁸⁵ In sum, to make Glenn conform to traditional views of heroic adventurers, the press focused attention on personal qualities reminiscent of the Puritans and pioneers. This comparison, moreover, became crucial in dictating the terms of the debate over manned versus unmanned space exploration.

Man Versus Machine

Traditional frontiersmen of the past conquered and dominated their respective frontiers by actively exerting control over them. Frontiersmen acted to tame their environments. The frontier narrative's focus on the individual, therefore, dictated portrayal of the

astronauts, like pioneers of the past, as exerting control during their flight. They could not merely serve as passive passengers; they had to pilot their crafts. One can find isolated instances in which the press questioned the amount of control the astronauts actually exerted and even challenged the usefulness of manned flight. John Finney, for example, the Washington space correspondent for the *New York Times*, inadvertently questioned the control exerted by the Mercury astronauts when he described the difference between the Mercury and Gemini capsules. The Gemini capsule, he wrote, will be "under the control of the astronauts rather than automatic instruments. In effect, the astronauts will be flying the capsule."⁸⁶ His description contrasting the Mercury capsule with the Gemini capsule contradicted reports that the Mercury astronauts would actually "fly" their capsules. Richard Witkin more directly challenged the necessity of the astronauts after reporting in the *New York Times* that the Soviet Union had sent Valentina V. Tereshkova into space, a woman with no experience as a pilot. Witkin called America's emphasis on the need for professional test pilots "somewhat misleading."⁸⁷ Harland Manchester of *Reader's Digest* went even further, saying that the "encapsulated man" can do little "but go along for the ride and show whether he can take it."⁸⁸ Interestingly, in one article, *Time* questioned the amount of control space travelers exerted while nonetheless calling forth the frontier motif. "The earth-circling trips of the astronauts and cosmonauts," the magazine explained, "were almost as passive as floating down a river on an oarless raft."⁸⁹ Most of these descriptions, however, occurred during the calm between flights and paled in number by comparison with articles that focused attention on the individual piloting and control skills that the astronauts exerted during their heroic missions. At the time of the space shots, the press never seriously challenged the astronauts' assertions that they controlled their flights. The media's celebration of individualism actually seemed to lead reporters to search for evidence of "control" by the individual "pilot."

Thus *Time* commented that Alan Shepard's flight proved that the astronauts could "operate" the Mercury capsule, which the magazine described as far from "a passive" space vehicle "just up there to coast along."⁹⁰ The media also distinguished between Shepard's flight and Soviet Cosmonaut Yuri Gagarin's flight by focusing on the control each exerted. Gagarin served more as "a passenger than a pilot," the press observed, while Shepard took "control of his ship" and performed "five separate capsule maneuvers."⁹¹ The press went even further in reporting the control that John Glenn exerted. According to John Finney, Glenn's flight "proved" that man "could and

should be more than just a passive passenger aboard an automated spacecraft."⁹² The media depicted Glenn as taking over complete control of his capsule, fulfilling man's ultimate role in the space adventure.⁹³ Similarly, the press focused on the individual effort of Gordon Cooper. In a breathless recounting of Cooper's flight, *Newsweek* proposed that when Cooper's automatic controls malfunctioned, he had to "pilot his spacecraft back from orbit by human skill alone."⁹⁴ John Finney asserted that Cooper's control of his craft played a part in the public's excitement over his flight. Cooper's use of the "manual controls to return his capsule to earth," Finney observed, "explains in large measure the hero's welcome he was accorded."⁹⁵ Robert Heinlein best summarized the view the press presented the public. "The Mercury shots," he proclaimed, "proved that an astronaut can actually control his ship."⁹⁶

Obviously, the perception that the astronauts controlled their crafts was crucial to the coherence of the frontier narrative. The importance of the values clustered around individualism influenced the media's reporting of the space program, causing them to accept depictions of the astronauts as pilots who flew their spacecrafts. This, in part, explains the media's denigration of unmanned space efforts. As Gans explains, "the news often contains stories about new technology that endangers the individual" and deprives human beings of "control over their own lives."⁹⁷ Coverage of the space program provided a clear example of the media's tendency to celebrate man over machine, and this tendency in turn created a bias in favor of *manned* rather than unmanned space exploration.

The press took every opportunity to stress man's superiority to a machine. Man, the media asserted, had unique capabilities that machines could not match. Man could retrieve more information in a shorter time period. One finds an instance of this focus early in the space coverage. "Instruments," *Reader's Digest* proposed in April 1959, "can never bring back as much information as a spaceship with a human crew."⁹⁸ The media also claimed that a human observer could retrieve the increased amounts of information much more quickly than machines. Unmanned probes, Bernard Lovell argued, would take "decades" to find answers "trained geologists" could get "in a few hours on the lunar surface."⁹⁹ Ultimately, man's brain made him superior to machines. A *New York Times* editorial proclaimed that "no instrument on earth" could substitute for "a prepared mind" coming upon "unexpected observations."¹⁰⁰ Lovell pointed directly to the distinguishing characteristic between man and machine. Man must go to the moon, Lovell argued, because machines have "no brain."¹⁰¹

Besides its focus on man's unique ability to reason, the media also

highlighted the individual by denigrating machines. As Gans remarks, the news "always" makes room for "gleeful" stories about machines breaking down. Undoubtedly, pointing out the shortcomings of machines helps individuals to maintain the perception that they retain control in an increasingly mechanized world. John Finney pointed to the American household to make his point. "As any housewife with an automatic washer can attest," Finney announced, "automatic equipment produced by an American industry attuned to mass, rather than quality, production can be exasperatingly unreliable."¹⁰² The press particularly highlighted the failure of machines and the superiority of the individual in its coverage of the flights of John Glenn and Gordon Cooper. During Glenn's flight, "the machinery faltered," quipped *Newsweek*, "never Glenn."¹⁰³ Reporters offered a similar description of Cooper's flight. Cooper had to "take over," *Time* proclaimed, "when the best equipment that the best of science could provide failed."¹⁰⁴

Ultimately, as columnist Raymond Moley pointed out in *Newsweek*, the space program was a triumph of "man," since "his ingenuity created the machines."¹⁰⁵ In late 1963, *Look* published a rare article on space, echoing Moley's sentiments. "As man makes more complex machines to do more unprecedented jobs," writer Ben Kocivar noted, "he must depend for ultimate success on man, himself."¹⁰⁶ Two writers at the *New York Times* went further, characterizing the debate over manned versus unmanned space exploration as a showdown between the individual and the machine. Two articles in particular stand out: an editorial immediately after Glenn's flight entitled "Let Man Take Over," and a piece in the *New York Times Magazine* by John Finney entitled "Astronauts Can't Be Automated." The articles reflect an underlying fear and frustration in the 1960s that machines were encroaching on the freedom and control of the individual.

One almost detects a sense of rage in some of Finney's reporting about the encroachment of the machine on the life of the individual. Ordinary taxpayers, explains Finney, accept the idea of placing instruments in space as a "logical extension of the now accepted practice of thrusting instruments into every conceivable place, explored or unexplored: down human throats, under penguin eggs, into the heart of the atom."¹⁰⁷ Proponents of unmanned space exploration use "the scientific dogma" that America's future "depends on basic research" to silence anyone "bold" enough to question the worth of sending expensive instruments into space. The successful flight of John Glenn changed all that. Days after the astronaut's flight, Finney maintained, Glenn stood on the same Turk Island that Christopher Columbus once explored and announced that in his

triple orbit of the earth, America had succeeded in making man an indispensable part of the spacecraft. Finney labeled Glenn's remark "a turning point in history."¹⁰⁸ Not only did Glenn's flight stand as the first American orbital flight of the earth, it also stood as "a symbolic victory for man in the battle of man vs. machine," a battle now extending into "the infinite domain of space."¹⁰⁹

The fiercest declaration of the sanctity of man came five days after Glenn's flight. The *New York Times* editorialist instructed readers that the lesson one should learn from Glenn's flight was that "we need not be ruled by machines."¹¹⁰ Machines cannot think, the paper reminded its readers; they merely store thought. Human beings remain "masters of the inanimate world," the newspaper added, "and nothing we can make or imagine we can make will take dominion over us."¹¹¹ Human beings would not stand by helplessly as machines took over. On the contrary, the editorialist boldly announced, "we have control of our world and its future."¹¹² People should reject a belief in an "automatic stream of history" over which they have no control. The paper claimed just the opposite, again underscoring the value of individualism: "Let man arise as an individual, working with other individuals but not committed to the machines of blind mass reaction."¹¹³

Although the vast majority of journalists highlighted the struggle between humanity and machinery, a few attempted to reconcile the traditional American hero with the modern world. One finds the best example of this in descriptions of John Glenn. Writers took Glenn's "frontier" stoicism to the extreme, asserting that he functioned like a machine. *Time* stated that Glenn saw himself as "another piece of the machinery in the system."¹¹⁴ *Newsweek* went so far as to entitle one of its articles "John Glenn: One Machine That Worked Without Flaw."¹¹⁵ The *New York Times* characterized Glenn as blending with the machine: Glenn "epitomizes a giant step in that constant, driving process to blend the human being and the machine into a unit of high harmony."¹¹⁶

Describing an astronaut in traditional Puritan and pioneer terms, Americans could read into their history the necessity of looking back to their frontier past. Viewing an astronaut as a machine or as a partner with the machine, Americans could also view their history in terms of progress into the technological future. The views of the astronaut as a machine, as a partner with the machine, and as superior to the machine highlight America's conflict over the relationship between man and machine in the early 1960s. By celebrating the technological accomplishment of the machine, one lessens the impact of America's past as the source of its strength. By emphasizing the American past as the source of America's strength, one

negates the progress of the increasingly mechanized future. A few writers of the time struggled to reconcile the two views, attempting to enable Americans to adopt both perspectives.

News coverage of the space program in the 1960s played a crucial role in shaping the perceptions of the American public. In examining the news coverage of American space exploration from 1959 to 1963, one finds that the vast majority of the stories, and the way journalists reported them, reflect three enduring news values: small-town pastoralism, altruistic democracy, and individualism. The first two of these values help account for much of the negative coverage of the space program: reports that the program had gotten too "big" or that selfish political concerns had taken precedence over "the public interest." But far more often, the media's attraction to stories of rugged individualism led to celebratory stories about the space program. The media's worship of the individual, moreover, created a bias in the controversy over a manned space program versus an unmanned one.

Also, one cannot overlook the natural tendency of American journalists to root for the home team while in the midst of a propaganda race with the Soviets. In part, this loyalty may explain their failure to scrutinize claims made by the administration, NASA, or the astronauts. Journalists, like other members of society, are not immune to the fears and uncertainty of the nation during times of national turmoil. The celebration of the space program reflected the media's desire to renew its faith in the American dream. As Raymond Moley of *Newsweek* observed, "We need this renewal of faith even more than we need to reach the moon."¹¹⁷ At the same time, this desire for a renewal of faith led to a focus on the astronaut and his personal qualities—and on a mythology of the past—that may have distracted America's attention from the political, technical, and economic controversies surrounding the space program's future.

Besides journalists' concern with national pride, one cannot overlook the influence of the pocketbook. *Newsweek* understood the inherent human interest in manned space exploration. "No satellite, no matter how ingenious or scientifically valuable," the magazine observed, "can match the ageless human drama of the individual—solitary, questing, vulnerable—facing the unknown."¹¹⁸ Simply stated, manned space exploration would sell more magazines and newspapers than unmanned exploration would have sold. William Boot, trying to explain the media's inability to see the warning signs of an impending disaster prior to the *Challenger* disaster, reminded the public that journalists have "a vested interest" in manned space flight. "Man-in-space," Boot declares, "makes for a much more readable—or viewable—story than machines."¹¹⁹

Concerns for pride and pocketbook, coupled with the media's reverence for individualism, suggest that the American media were predisposed to favor the administration's program to send a *man* to the moon. Such concerns may have impaired the media's ability to make a fair and accurate assessment of unmanned space flight and may have prompted the media instead to place an undue emphasis on manned flight. In the next chapter, we see the media's predisposition for manned space flight and its concern with its pocketbook reach its peak in *Life's* coverage of the space program.