"Why Are We Telling Lies?" The Creation of Soviet Space History Myths

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On January 17, 1969, right after the landing of *Soyuz-4*, when the cosmonaut Vladimir Shatalov began climbing out of his spacecraft, someone suddenly shouted, "Where are you going?! Get back!" It turned out that a camera-man did not have time to point his camera at the scene. Shatalov obediently squeezed back into his capsule, and then re-emerged, properly smiling and waving. The historic moment was captured on film and preserved for posterity. By climbing out of his spacecraft Shatalov left the realm of history and entered a myth.

Myth-making was part of a venerable tradition of Soviet propaganda. Soviet leaders sought legitimacy of their power and validation of current policies in the construction of historical breaks and continuities, in the overthrow of former idols, and in the creation of new ones. The promotion of state-sponsored myths of the October Revolution and the Great Patriotic War was accompanied by a systematic suppression of contradictory private memories, which often gave rise to counter-myths, such as the Great Terror and the Thaw. The term "myth" is used here without implying the truth or falsity of any particular historical claim, but merely to stress the foundational, identity-shaping character of such claims. Recent scholarship has moved beyond the examination of state policies and has increasingly focused on the interplay of official discourse and private memories and on the active role of multiple actors in political and cultural appropriations of memory.²

¹Iaroslav Golovanov, *Zametki vashego sovremennika*, vol. 1, *1953–1970* (Moscow, 2001), 345 (diary entries of January–February 1969). Unless otherwise noted, all translations are mine.

²On remembrance practices in Soviet and post-Soviet contexts see Svetlana Boym, *The Future of Nostalgia* (New York, 2001); Frederick C. Corney, "Rethinking a Great Event: The October Revolution as Memory Project," *Social Science History* 22 (Winter 1998): 389–414; Michael David-Fox, "Cultural Memory in the Century of Upheaval: Big Pictures and Snapshots," *Kritika* 2 (Summer 2001): 601–13; Geoffrey A. Hosking, "Memory in a Totalitarian Society: The Case of the Soviet Union," in *Memory: History, Culture and the Mind*, ed. Thomas Butler (Oxford, 1989), 97–114; Lisa A. Kirschenbaum, *The Legacy of the Siege of Leningrad*, 1941–1995: *Myth, Memories, and Monuments* (New York, 2006); Denis Kozlov, "The readers of 'Novyi mir,' 1945–1970: Twentieth-century experience and Soviet historical consciousness" (Ph.D. diss., University of Toronto, 2005); Catherine Merridale, *Death and Memory in Twentieth-Century Russia* (New York, 2001); Scott W. Palmer, "How Memory was Made: The Construction of the Memorial to the Heroes of the Stalingrad

The Soviet space program—perhaps an ultimate expression of "technological utopianism"—expanded the Soviet aspirations to dominate and transform nature for human ends from the earthly endeavors of industrialization and collectivized agriculture into the boundless realm of outer space.³ Instead of the American phrase "space *exploration*," the Soviets widely used the terms "*conquering*" (*pokorenie*) and "*mastering* (*osvoenie*) of space." The Soviet space "firsts" of the 1950s and 1960s—from Sputnik to Gagarin to Tereshkova—were quickly turned by Soviet propaganda into tangible proofs of the technological and political superiority of socialism and major pillars of the cult of science and atheist propaganda. To boost its moral and political legitimacy, the Soviet regime sought to imprint the space triumphs in cultural memory, to turn them into powerful historical myths, and to suppress any interfering counter-memories. The Soviet public did not passively receive these messages. Responses ranged from wild enthusiasm to sarcasm and indifference.⁴

Yuri Gagarin's 1961 flight was one of the most vivid and emotional memories of the Soviet generation of the 1960s. But what did people really remember when they remembered Gagarin? A 1986–88 cognitive psychology study showed that within a few years the memories of the *Challenger* disaster evaporated from people's mind and were replaced by "wildly inaccurate" versions. The "Sputnik generation" of Russian citizens in recent interviews acknowledged the formative role of the key events of the Space Age, but had little personal recollection of their reaction to Sputnik or Gagarin's flight.

Recent research in cognitive, social, and clinical psychology and in cognitive neuroscience indicates that our memory is a much more dynamic and malleable process than previously thought. Our memories are not stored in a fixed form; we do not pull them out of permanent storage and then put them back intact. According to the constructivist approach to memory, every act of recollection is re-creation, re-construction of a memory. Every time we "recall" a memory, we relive the event that caused it, we emotionally relate to it, remake that memory, and store a new version, totally overwriting the old one. At the moment of recollection, the memory becomes unstable, and it can be modified and even

Battle," Russian Review 68 (July 2009): 373–407; James V. Wertsch, Voices of Collective Remembering (Cambridge, England, 2002); and a special issue on Soviet memory of Neprikosnovennyi zapas, no. 2 (2009), available at http://magazines.ru/nz/2009/2 (last accessed March 23, 2011).

³Paul R. Josephson, Would Trotsky Wear a Bluetooth? Technological Utopianism under Socialism, 1917–1989 (Baltimore, 2009).

⁴Paul Josephson, "Rockets, Reactors and Soviet Culture," in *Science and the Soviet Social Order*, ed. Loren R. Graham (Cambridge, MA, 1990), 168–91. On the history of the Soviet space program see Asif A. Siddiqi, *Challenge to Apollo: The Soviet Union and the Space Race, 1945–1974* (Washington, 2000).

⁵Ulric Neisser and Nicole Harsh, "Phantom Flashbulbs: False Recollections of Hearing the News about *Challenger*," in *Affect and Accuracy in Recall: Studies of "Flashbulb" Memories*, ed. Eugene Winograd and Ulric Neisser (New York, 1992), 9–31.

⁶Donald J. Raleigh, trans. and ed., *Russia's Sputnik Generation: Soviet Baby Boomers Talk about Their Lives* (Bloomington, IN, 2006).

⁷The idea of memory as a dynamic and constructive process goes back to Frederic C. Bartlett's *Remembering* (Cambridge, England, 1932). For overviews of recent studies see Daniel L. Schacter et al., "The Cognitive Neuroscience of Constructive Memory," *Annual Review of Psychology* 49 (1998): 289–318; Daniel L. Schacter, "Memory Distortion: History and Current Status," in *Memory Distortion: How Minds, Brains, and Societies Reconstruct the Past*, ed. Daniel L. Schacter (Cambridge, MA, 1995), 1–43; and Daniel Schacter, *Searching for Memory: The Brain, the Mind, and the Past* (New York, 1996).

"erased," or a false memory can be planted. Recalling something is essentially similar to making a new, original memory. As a result, we do not really remember the original event; we remember only our last recollection of that event. The more we remember and the more often we recall something, the more we rebuild and alter that memory, getting further and further from the original event.

Linking individual memories into a coherent narrative, which supplies meaning to past events, plays an essential role in the formation of one's self. As the neurologist Oliver Sacks has put it, "We have, each of us, a life story, an inner narrative—whose continuity, whose sense, *is* our lives. It might be said that each of us constructs and lives a 'narrative,' and that this narrative *is* us, our identities." When our present self constructs and distorts our memories of the past, the very fallibility of these memories serves a purpose—to establish continuity between our present and past selves.

The notion of "collective memory," introduced by the French sociologist Maurice Halbwachs, stresses that individual memories are grounded in social interaction. The metaphor of society as a remembering subject, however, may be misleading, as it obscures the active role of individuals in selecting, modifying, and combining various representations of the past, and the dependence of these representations on the concerns and conflicts of the present. James Wertsch suggests the notion of "collective remembering" to refer to both narratives and nonverbal practices of commemoration. Breaking down the umbrella term "collective memory," Aleida and Jan Assmann distinguish between "communicative memory" and "cultural memory" by contrasting "living, embodied," autobiographical memory with culturally sanctioned remembrance, mediated by texts, symbols, and performances. Communicative memory refers to passing everyday exchanges, such as jokes or gossip, while cultural memory is embodied in material objects and social customs. Cultural memory shapes group identity; provides tools for reconstructing the past; forms stable "heritage" formations; involves specialization and institutionalization; and serves educational, normative, and reflexive functions.

Communicative memory actively interacts with cultural memory.¹⁴ The institutionalization of cultural memory by nation-states—the establishment of national archives, the public celebrations of various anniversaries, and the dissemination of favorable historical narratives—often serves the political purpose of reinforcing national identity and marginalizes individual memories and other social identities. Communicative memory

⁸On experiments with "erasing" fear conditioning in rats see Karim Nader et al., "Fear memories require protein synthesis in the amygdala for reconsolidation after retrieval," *Nature* 406 (August 17, 2000): 722–26. On experiments showing the possibility of implanting false memories in humans see Elizabeth F. Loftus and Katherine Ketcham, *The Myth of Repressed Memory* (New York, 1994).

⁹See Jerome S. Bruner, *Acts of Meaning* (Cambridge, MA, 1990), chap. 4; and Ulric Neisser and Robyn Fivush, eds., *The Remembering Self: Construction and Accuracy in the Self-Narrative* (Cambridge, England, 1994).

¹⁰Oliver Sacks, *The Man Who Mistook His Wife For a Hat and Other Clinical Tales* (New York, 1985), 110. ¹¹James V. Wertsch, "Collective Memory," in *Memory in Mind and Culture*, eds. Pascal Boyer and James V. Wertsch (Cambridge, England, 2009), 117–37.

¹²Jan Assmann, "Communicative and Cultural Memory," in *Cultural Memory Studies: An International and Interdisciplinary Handbook*, ed. Astrid Erll and Ansgar Nünning (Berlin, 2008), 113–18.

¹³Jan Assmann, "Collective Memory and Cultural Identity," New German Critique 65 (1995): 125–33.

¹⁴Harald Walzer, "Communicative Memory," in Cultural Memory Studies, 285–98.

reinterprets and devalues certain aspects of organized and ceremonial remembering practices, while private memories become "contaminated by national projects of remembrance." The French cultural historian Pierre Nora argues that the old age of memory and tradition has given way to the new age of history and conscious narrative-construction. "Memory is constantly on our lips," he writes, "because it no longer exists." Recent studies have focused on the origins of historical myths, their deliberate construction by political elites, and their repressive power to marginalize alternative stories and identities. 17

Space history has its own recurrent myths. The historian Asif Siddiqi has identified four cultural archetypes, or "tropes," structuring master narratives of space exploration in different countries: the myth of the founding father (in the Soviet case, Konstantin Tsiolkovskii), the myth of exclusively domestic space technology, the myth of spaceflight as expression of national identity, and various stereotypical justifications for spaceflight—the destiny of humanity, the glory for the nation, national security, economic development, scientific exploration, and benefits to the ordinary people. Every nation develops its own variations, such as the American "myth of presidential leadership" and the triumphal "master narrative," accompanied by counter-narratives of right-wing, left-wing, and conspiracy-theory varieties. The Apollo astronaut myth, as described by the historian Roger Launius, has several key elements: the astronaut represents "everyman" yet personifies the American ideal, embodying the image of a masculine hero, a young, fun-loving, vigorous warrior, guided by an older, wiser leader, and showing the Nation the path of progress toward utopian future.²⁰

Soviet space myths showed remarkable similarity to their American counterparts, with the proper substitutions of the New Soviet Man for the "right stuff" and of the superiority of socialism for the superiority of capitalism. An important difference, however, was the Soviet erasure of any space failures from cultural memory. Bound by secrecy on one side and by propaganda demands on the other, the Soviet master narrative of space history was reduced to a set of clichés: flawless cosmonauts flew perfect missions, supported by unfailing technology. Unlike American public counter-narratives, Soviet counter-memories formed an oral tradition totally separate from written accounts. Counter-narratives are stereotypically

¹⁵Peter Fritzsche, "The Case of Modern Memory," Journal of Modern History 73 (March 2001): 107.

¹⁶Pierre Nora, "General Introduction: Between Memory and History," in *Realms of Memory: Rethinking the French Past*, ed. Pierre Nora (New York, 1996), 1:1. For recent general works on cultural memory in social and cultural history see Alon Confino and Peter Fritzsche, eds., *The Work of Memory: New Directions in the Study of German Society and Culture* (Urbana, 2002); Paul Connerton, *How Societies Remember* (Cambridge, England, 1989), John R. Gillis, ed., *Commemorations: The Politics of National Identity* (Princeton, 1994); Pierre Nora, ed., *Rethinking France*, 2 vols. (Chicago, 2001–6); and Jeffrey Olick, ed., *States of Memory: Continuities, Conflicts, and Transformations in National Retrospection* (Durham, NC, 2003).

¹⁷Peter Fritzsche, "The Case of Modern Memory."

¹⁸Asif A. Siddiqi, "Spaceflight in the National Imagination," in *Remembering the Space Age*, ed. Steven J. Dick (Washington, 2008), 17–35. See also James T. Andrews, *Red Cosmos: K. E. Tsiolkovskii, Grandfather of Soviet Rocketry* (College Station, 2009).

¹⁹See Roger D. Launius and Howard E. McCurdy, eds., *Spaceflight and the Myth of Presidential Leadership* (Urbana, 1997); and Roger D. Launius, "American Spaceflight History's Master Narrative and the Meaning of Memory," in *Remembering the Space Age*, 351–82.

²⁰See Roger D. Launius, "Heroes in a Vacuum: The Apollo Astronaut as a Cultural Icon" (Paper presented at the 43rd AIAA Aerospace Sciences Meeting, Reno, NV, 2005), available at http://klabs.org/history/roger/launius 2005.pdf (last accessed March 23, 2011).

associated with marginalized groups, but the counter-memories of Soviet space history were cultivated by well-known public figures (cosmonauts) and by elite technocrats (space engineers), creating a tension between their private memories and public personae. "True stories" of events hashed up or distorted in official accounts were passed on from one generation of cosmonauts and space engineers to another, giving rise to counter-myths and forming the cultural memory of their professional groups. Counter-memories defined their private identity as much as the master narrative shaped their public image.

This article explores the interplay of cultural and communicative memory of the Soviet space age from the 1960s through perestroika to the post-Soviet era, focusing on memoirs and commemorative events as cultural vehicles for mythologization of history. Instead of seeing Soviet space myths as pure propaganda tools, it examines them as a function of Soviet remembrance practices, both public and private. Drawing on private diaries of space program participants, the article argues that both myths and counter-myths played a constructive cultural role by shaping the identities of cosmonauts and space engineers, by embodying certain moral and political ideals, and by providing a shared symbolic language for public discourse. Furthermore, space myths were not entirely constructed from above. Various historical actors—from the cosmonauts to space engineers to military officials to artists to the general public—introduced their own elements into space mythology, not necessarily consonant with the official version.

MYTHOLOGIZING COSMONAUTS

A handful of flown cosmonauts literally stood—on top of Lenin's mausoleum next to the then-current party leader—for the entire space program. Staged events, such as welcoming ceremonies at Vnukovo airport and mausoleum appearances, produced iconic images of the space era, widely disseminated through television, newspapers, posters, and postcards. Appearing next to the cosmonauts, Soviet leaders basked in their glory and in the meantime loaded the historical record with politically sensitive imagery. When leaders changed, the historical record had to be adjusted accordingly. In the Khrushchev era, scenes where Gagarin and Khrushchev did not appear together were ruthlessly cut from the documentary footage of Gagarin's welcome. When Brezhnev came to power, filmmakers dug up those cut scenes and made them a new visual canon, replacing the footage tainted by Khrushchev's appearance.²¹ The media focus on the smiling faces of cosmonauts produced a series of erasures in the cultural memory of the space era, which were quickly filled with myths.

First, space engineers were prominently absent from public view. The public face of the Soviet space program was just the tip of a giant iceberg whose main body was buried deeply in the bowels of the military-industrial complex. The design and production of space rockets and spacecraft was, at least initially, a secondary mission of design bureaus and plants making Soviet ICBMs. The secrecy regime of the Soviet defense industry fully applied to the space enterprise. An official party and government decree directly prohibited any public appearances or disclosure of the names of top space managers and leading

²¹Iaroslav Golovanov, Zametki vashego sovremennika, vol. 2, 1970–1983 (Moscow, 2001), 55.

engineers, including many chief designers. Media spotlight shone on trusted spokespersons, often totally ignorant of actual Soviet space activities, and on celebrated hero-cosmonauts.²² This public representation inverted the actual power hierarchy within the space enterprise, in which the engineers were the decision-makers, while the cosmonauts played a subordinate role.

Second, similarly absent were realistic depictions of space rockets and spacecraft. As the space rockets were merely upgraded ICBMs, space artifacts were also carefully concealed from public view. Cosmonauts were routinely portrayed with imaginary rockets in the background. Again, the public representation here inverted the actual human-machine relationship. The public image of the cosmonauts as fearless explorers manually guiding their space ships into the unknown directly contradicted their professional experience. The real cosmonauts were thrust in the middle of a complex technological system and were severely limited in their manual control options.²³

Third, the space flights themselves remained shrouded in mystery. With the boundaries of secrecy somewhat blurred, all spokesmen, including the cosmonauts, tried to be on the safe side and to disclose as little as possible. Cosmonauts' public accounts of their flights were remarkably uninformative. The cosmonauts spoke at length about their emotional state but did not discuss any details of their training or actual performance in flight. This gave rise to much speculation about their experiences in space, from incapacitating sickness to spiritual visions.

Secrecy was just one of the factors contributing to myth-making by creating gaps to be filled with products of one's imagination. Another factor—political propaganda—acted in a productive mode by generating tropes on which myths could be built. When placed on top of Lenin's mausoleum, the cosmonauts stood not merely for the Soviet space program, but for a much larger enterprise, the construction of communism.

Just a few months after Gagarin's historic spaceflight, the Twenty-Second Party Congress adopted a new Party Program, which set the goal of completing the foundations of communism in the Soviet Union within the lifetime of a generation. The program's two crucial components included constructing the material and technical basis of communism and bringing up a New Soviet Man who would "harmoniously combine spiritual wealth, moral purity, and a perfect physique." Who better than the cosmonauts could embody this new ideological construct? The Soviet media quickly generated a propaganda cliché: "the Soviet cosmonaut is not merely a conqueror of outer space, not merely a hero of science and technology, but first and foremost he is a real, living, flesh-and-blood *new man*, who demonstrates in action all the invaluable qualities of the Soviet character, which Lenin's party has been cultivating for decades." In August 1962, Khrushchev publicly proclaimed that "hero-cosmonauts are people who even now already embody the wonderful

²²Asif A. Siddiqi, "Unresolved Tensions: Mass Culture and Secrecy in the Soviet Space Program" (Paper presented at the conference on "Cosmic Enthusiasm: The Cultural Impact of Space Exploration on the Soviet Union and Eastern Europe since the 1950s," Basel, Switzerland, 2009).

²³Slava Gerovitch, "New Soviet Man' Inside Machine: Human Engineering, Spacecraft Design, and the Construction of Communism," *OSIRIS* 22 (2007): 135–57.

²⁴Programme of the Communist Party of the Soviet Union (Moscow, 1961), 109.

²⁵Evgenii Riabchikov, "Volia k pobede," Aviatsiia i kosmonavtika, no. 4 (1962): 19 (emphasis added).

traits of the member of the communist society—high intellectual culture, moral purity, and perfect physique. Their deeds are driven by the love for Motherland, sense of public duty, and noble ideals of communism."²⁶

Idealized descriptions of cosmonauts' personal qualities bore close resemblance to the "Moral Code of the Builder of Communism" from the new Party Program, which touted such ethical imperatives as "love of the socialist motherland," "conscientious labor for the good of society," "a high sense of public duty," "collectivism and comradely mutual assistance," "moral purity, modesty, and unpretentiousness in social and private life," and "mutual respect in the family, and concern for the upbringing of children." Evgenii Karpov, the head of the Cosmonaut Training Center, gave the following list of Gagarin's personal traits: "Selfless patriotism. An unshakable belief in the success of flight. Excellent health. Inexhaustible optimism. The flexibility of mind and inquisitiveness. Courage and determination. Carefulness. Diligence. Endurance. Simplicity. Modesty. Great human warmth and attention to people around him." The descriptions matched a bit too perfectly, suggesting that cosmonaut biographers were thoroughly informed by the tenets of political discourse. At the same time, Gagarin seemed to be specifically selected to match the myth he was to embody.

The public image of the cosmonauts was not produced by a single agency, but rather by a multiplicity of agents, not necessarily working in unison. The cosmonauts themselves were both producers and products of this image-making. Lt. Gen. Nikolai Kamanin, an Air Force official in charge of cosmonaut selection and training, carefully scripted cosmonauts' public appearances, wrote their speeches, rehearsed them, and corrected their "errors." Kamanin was a legendary Soviet aviator, a household name in the Soviet Union in the 1930s. In 1934 he was among the first recipients of the newly established title of Hero of the Soviet Union for the daring air rescue of the crew of the *Cheliuskin*, an exploration ship crushed by the Arctic ice.²⁹ Among other famous aviators, he was set up as a role model for the generation of the 1930s. Now he made his own experience as a cultural icon of the Stalin era into a model for his efforts to shape the cosmonauts' public persona. The myth of Soviet cosmonauts thus in many respects followed the precepts of Stalin-era glorification of Soviet aviators, who represented the New Soviet Man in the 1930s.³⁰

Ghost-written cosmonaut biographies largely imitated Kamanin's own 1935 autobiography, written when he was the same age as the cosmonauts. The biographies stressed humble beginnings, childhood burdened by wartime hardship, encouragement by the family and teachers, good education paid for by the Soviet state, a wise mentor who teaches the core communist values, loyal military service, building up character and physical strength through a "trial of fire," achieving the lifetime dream by carrying out an important

²⁶N. B. Chernenko, ed., V kosmose Nikolaev i Popovich (Moscow, 1963), 92.

²⁷Programme of the Communist Party, 108-9.

²⁸Quoted in Iaroslav Golovanov, Nash Gagarin (Moscow, 1978), 272.

²⁹John McCannon, Red Arctic: Polar Exploration and the Myth of the North in the Soviet Union, 1932–1939 (New York, 1998), 68.

³⁰Kendall E. Bailes, "Technology and Legitimacy: Soviet Aviation and Stalinism in the 1930s," *Technology and Culture* 17 (1976): 55–81; Jay Bergman, "Valerii Chkalov: Soviet Pilot as New Soviet Man," *Journal of Contemporary History* 33 (1998): 135–52; Scott W. Palmer, *Dictatorship of the Air: Aviation Culture and the Fate of Modern Russia* (Cambridge, England, 2006), chap. 8.

mission trusted to the cosmonaut by the Communist party, and finally coming back with an important message reaffirming the communist values. The father figure of omniscient Stalin, prominent in Kamanin's account, was gently replaced in cosmonaut biographies by the equally omniscient "Chief Designer" of the space program.³¹

The cosmonaut myth thus combined both Khrushchev-era and Stalin-era heroic imagery, creating subtle inner tensions. The cosmonauts were depicted as exceptional heroes and at the same time as ordinary, even typical Soviet citizens. They were perfectly disciplined, yet capable of taking risks. Their flights were praised as daring feats, while official reports of perfectly functioning automatics did not seem to leave much room for personal heroism. Some media reports of space flights stressed the cosmonauts' personal accomplishments, while others stated that those were collective, rather than individual, achievements.

Applying war rhetoric to spaceflight also produced cultural tensions. With a devastating war fresh in the people's memory, the first cosmonauts—all young fighter pilots—inevitably evoked the imagery of warriors in combat. As the cultural historian Svetlana Boym has noted, "Soviet space exploration inherited the rhetoric of war; it was about the 'storming of space,' and the cosmonaut was the peacetime hero who was ready to dedicate himself to the motherland and, if necessary, sacrifice his life for her sake."32 The martial rhetoric of space conquests also drew upon earlier cultural memories: even in prerevolutionary Russia, aviators were traditionally depicted as "conquerors of the air," direct descendants of Russian fairytale warriors.³³ Placing space exploration in this traditional context ensured the symbolic association of spaceflight with national pride. While introducing cosmonauts at public meetings, Kamanin often presented them as heirs of wartime heroes.³⁴ Since the Soviet human space program was declared to be entirely peaceful, however, the cosmonauts' military uniforms seemed to be sending an ambiguous message. The space program leadership was divided over the question of military imagery. The question whether the first woman cosmonaut Valentina Tereshkova should be dressed in uniform or in civilian clothes on her official photo had to be decided by the party Central Committee. In the end, Tereshkova appeared on the photo in civilian dress.35

The cosmonaut myth played a major role in Khrushchev's attempts to de-Stalinize Soviet society and to reconnect with the original revolutionary aspirations for a communist utopia. In 1961, soon after Gagarin's flight, Khrushchev ordered the removal of Stalin's remains from Lenin's mausoleum in Red Square and the deletion of Stalin's name from its façade. Monuments of the Stalin era were dismantled at the same time as new memorials to the Space Age were being unveiled. As the cultural memory of Stalinist terror was being erased, futuristic visions of space exploration were taking the center stage. Escaping the

³¹See Cathleen S. Lewis, "The Red Stuff: A History of the Public and Material Culture of Early Human Spaceflight in the U.S.S.R." (Ph.D. diss., George Washington University, 2008), chap. 2.

³²Svetlana Boym, "Kosmos: Remembrances of the Future," in *Kosmos: A Portrait of the Russian Space Age* (Princeton, 2001), 91.

³³Palmer, Dictatorship of the Air, chap. 2.

³⁴Nikolai Kamanin, Skrytyi kosmos, vol. 2, 1964–1966 (Moscow, 1997), 39 (diary entry of April 14, 1964).

³⁵Nikolai Kamanin, Skrytvi kosmos, vol. 1, 1960–1963 (Moscow, 1995), 291 (dairy entry of June 15, 1963).

³⁶On Khrushchev's de-Stalinization strategies see Polly Jones, ed., *The Dilemmas of De-Stalinization: Negotiating Cultural and Social Change in the Khrushchev Era* (London, 2006); and William Taubman, *Khrushchev: The Man and His Era* (New York, 2003).

Earth's gravity came to symbolize for many an escape from the Stalinist past: "For the Soviet man, space was also a symbol of total liberation. Stalin was exposed, Solzhenitsyn was published. ... The leap into space seemed as the logical conclusion of liberation and the logical beginning of an era of freedom."³⁷

Different agents utilized the cosmonaut myth for different purposes. Kamanin's goals, for example, did not perfectly align with the objectives of Khrushchev's propaganda apparatus. A devout Stalinist, Kamanin had little sympathy for the de-Stalinization agenda. He knew how to pay lip service to the party line, but was adamant in pursuing his own priority—boosting government support for human space flight. Rather than merely following orders from above, Kamanin often put forward new propaganda initiatives. When his military superiors vetoed his proposal to declare April 12 (Gagarin's flight anniversary) an official "Day of Cosmonautics," he petitioned the Central Committee over their heads. Kamanin arranged for the cosmonaut Gherman Titov to sign the petition; Titov's political clout helped, and the proposal was accepted. While the Soviet leadership exploited space spectaculars for their political ends, Kamanin and other leaders of the space program skillfully manipulated the symbolic capital in their disposal to elicit much-needed support for the space program from the party and the government.

MYTHOLOGIZING ENGINEERS

While Soviet ideologues cultivated an idealized image of the Soviet space program for propaganda purposes, space industry officials had their own reasons to avoid publicity about equipment failures and in-flight emergencies. They were concerned that negative publicity might dampen the Soviet leadership's enthusiasm for the space program. The convenient arrangement, by which the space industry itself controlled public access to information about space, helped the industry leaders exercise considerable control over Soviet public discourse about space. The industry's leading think tank, the Scientific Research Institute No. 88 (since 1966, the Central Scientific Research Institute of Machine Building), was charged with the task of clearing all space-related materials for publication in the open press.³⁹ Numerous equipment failures, failed launches and dockings, crew errors, and canceled projects were never publicly mentioned. The existence of entire programs—for example, the secret manned lunar program—was passed over in silence. As a result, Soviet-era space history was reduced to a set of clichés: cosmonauts were flawless heroes, their missions were always fully successful, and the onboard automatics never malfunctioned.

Leaders of the space industry were acutely aware of the historical significance of their projects, but their vision of history reflected a desire to improve on reality to meet an ideal. As if they were writers of Socialist Realist novels, space engineers strove to depict reality

³⁷Petr Vail' and Aleksandr Genis, 60-e: Mir sovetskogo cheloveka (Moscow, 1996), 25.

³⁸See Iurii M. Baturin, ed., *Sovetskaia kosmicheskaia initsiativa v gosudarstvennykh dokumentakh. 1946–1964 gg.* (Moscow, 2008), 201–2; Kamanin, *Skrytyi kosmos* 1:101–2; and Aleksandr M. Pesliak, "Den' kosmonavtiki: istoricheskie fakty i sovremennyi analiz," *Novosti kosmonavtiki*, no. 6 (2005): 24–25.

³⁹See Iurii A. Mozzhorin, *Tak eto bylo... Memuary Iu. A. Mozzhorina. Mozzhorin v vospominaniiakh sovremennikov* (Moscow, 2000), 298.

as it ought to be, rather than as it was. As Katerina Clark has noted, early Soviet discourse constantly oscillated between "what is" and "what ought to be." In space engineers' view, "what is" was just a messy, error-prone draft, while the history's hall of fame deserved a clean, showcase version of "what ought to be." The chief designer of Soviet rockets and spacecraft, Sergei Korolev, did not admit any journalists to the launch site on the day of Gagarin's pioneering flight, April 12, 1961. 41 Later, however, he sat down in his office for a filming session, pretending to communicate with the cosmonaut in orbit.⁴² Working meetings of the state commission that reviewed flight preparedness were conducted behind closed doors, yet prior to each launch the commission held a special ceremonial meeting, during which all chief designers gave reports and the crew was officially announced. Korolev strongly encouraged extensive photographic and film recording of such ceremonial meetings, as well as other pre-flight rituals.43 Any slips, for example, a mispronounced name of a cosmonaut, were cut out of the recordings.44 As the identities of Korolev and other commission members were a state secret, these recordings were not, of course, publicly released at the time. This record was produced for internal consumption—for the insiders of the space program—and for future generations as a "clean" version of historical events.

Korolev fully appreciated the symbolic meaning of space artifacts. Before the launch of Sputnik, two copies of the satellite were made: one for the flight and one for ground tests and simulations. For engineering reasons—to maximize reflection of solar light in order to avoid possible overheating—the surface of the flight copy had to be polished. Korolev insisted that the test copy be polished as well: "It will be displayed in museums!" He admired the aesthetic appeal of the ball-shaped Sputnik, telling his associates that the Sputnik must look "properly" as a symbol of human entry into space. 45

The media focus on the cosmonauts produced some resentment among the space engineers, and they constantly fought secrecy restrictions to gain opportunities to display their achievements publicly. Soon after Gagarin's flight, Korolev suggested displaying a mock-up of Gagarin's space capsule at an aviation show at the Tushino airfield in Moscow in July 1961. Since Gagarin's *Vostok* spacecraft was still classified, Korolev had to advise his subordinates to "unleash their fantasy." The display included no actual spacecraft, only the last stage of the carrier rocket and the shroud covering the *Vostok*. Perhaps to make the shroud look "properly," Korolev's engineers attached an annular aerodynamic fin to the back of the mock-up. The result looked impressive but revealed little about Gagarin's actual spacecraft.⁴⁷

⁴⁰Katerina Clark, The Soviet Novel: History as Ritual, 3rd ed. (Chicago, 2000), 36-38.

⁴¹Golovanov, Zametki vashego sovremennika 1:399 (diary entries of January–March 1970).

⁴²Nataliia Koroleva, *S. P. Korolev: Otets*, vol. 3, *1957–1966 gody* (Moscow, 2007), 44–46. For an iconic still image from this filming session, still advertised as taken during Gagarin's launch, see http://www.topfoto.co.uk/gallery/YuriGagarin/ppages/ppage14.html (last accessed March 23, 2011).

⁴³Evgenii Karpov, in Akademik S. P. Korolev: Uchenyi, inzhener, chelovek. Tvorcheskii portret po vospominaniiam sovremennikov, ed. Aleksandr Ishlinskii (Moscow, 1986), 472–73.

⁴⁴Kamanin, Skrytyi kosmos 1:137 (diary entry of August 8, 1962).

⁴⁵Mark Gallai, in Akademik S. P. Korolev, 63.

⁴⁶Stal' Denisov, in ibid., 218.

⁴⁷Sven Grahn, "Soviet Space Deceptions – Not So Many After All!" available at http://www.svengrahn.pp.se/histind/Fakes/Fakes.htm (last accessed March 23, 2011); Peter Pesavento, "Sleuthing the Vostok: The Inside

Soviet media skillfully "enhanced" iconic images to stress their ideological message and to eliminate any undesired connotations. For example, the May 1961 issue of the Soviet illustrated magazine *Science and Life* featured a drawing of Gagarin's launch on its cover. The drawing faithfully depicted the actual scene of Gagarin bidding farewell to a group of administrators, officers, engineers, and technicians, with one exception: all the military personnel at the launch pad were magically transformed into civilians, their military uniforms replaced with colorful cloaks. Recent research has uncovered many instances of retouching or cropping cosmonaut photos to erase from group shots "undesirable" individuals (who died in an accident or left the cosmonaut corps)—a venerable Soviet tradition going back to the Stalin-era iconographic erasure of high-profile "enemies of the people." 48

After Korolev's death in 1966, the Soviet space myth turned from the hagiography of cosmonauts to the sanctification of engineers. After his death, Korolev's name and his role in the space program were no longer a state secret. His ashes were publicly buried in the Kremlin wall, and the top Soviet leadership signed his obituary. Korolev's museums and monuments sprang up in his home town, at the Baikonur cosmodrome, on the premises of his design bureau, and in many other locations across the Soviet Union; books and movies came out; streets were named after him. By imprinting Korolev's name in the cultural memory of the space program, engineers were gaining their rightful place in Soviet space mythology.⁴⁹

A string of disasters that hit the Soviet space program after 1966 created nostalgia for the glorious days of Korolev's leadership. The tragic loss of the cosmonaut Vladimir Komarov during the *Soyuz-1* mission in April 1967 and Gagarin's death during an airplane training flight in March 1968 created a sense of general disarray in the Soviet space program. The lunar landing of *Apollo 11* in July 1969 added insult to injury.⁵⁰ The Korolev era was now recalled as a "golden age" of Soviet cosmonautics.⁵¹ Korolev's name came to stand for integrity, unbending will, uncompromising dedication to safety, and resistance to administrative pressure. His historical persona acquired a mythological stature.

As Korolev was gradually turning into a symbol, his image noticeably changed. The mythological Korolev rose above all human frailties and became a visionary. His personal enthusiasm for human spaceflight signified unchained aspiration for technological and social progress of the entire nation. As sites of memory shifted from photographs to monuments and feature movies, mythological Korolev further and further departed from his historical prototype.

Story of the US Intelligence Community's Effort to Understand Korolev's First Manned Program," *Journal of the British Interplanetary Society* 62, suppl. 1 (2009): 2–20, suppl. 2 (2009): 34–47.

⁴⁸See James Oberg, "Cosmonauts and Cosmo-nots: Image Falsification in the Soviet Manned Space Program," available at http://www.jamesoberg.com/cosmonot.pdf (last accessed March 23, 2011). On the Stalin-era political manipulation of iconography see David King, *The Commissar Vanishes: The Falsification of Photographs and Art in Stalin's Russia* (New York, 1997).

⁴⁹Koroleva, in Akademik S. P. Korolev, 150-73.

⁵⁰Even though the Soviet Union did not directly broadcast the *Apollo 11* lunar landing, brief news reports were shown on television. Newspaper publications were delayed, as in the first days after the lunar landing the Central Committee decided to centralize the *Apollo* flight coverage in the hands of the TASS news agency. See Golovanov, *Zametki vashego sovremennika* 1:372 (diary entries of June–September 1969).

⁵¹See Lewis, "The Red Stuff," chap. 4.

Mythologization is literally visible in the 1975 dual monument to Korolev and Gagarin by the sculptor Oleg Komov, later installed in Taganrog. The monument is modeled after a historic 1961 photograph, but the monument subtly deviates from the original image.⁵² In the photo, Korolev and Gagarin are smiling, looking at each other, and are engaged in a lively conversation. On the monument, their faces are somber, they look away from each other and are apparently engrossed in day-dreaming about space exploration. Korolev no longer speaks to Gagarin; he speaks "to posterity."⁵³ Korolev and Gagarin have lost their individuality; they have become ceremonial symbols of an important national program.

The 1972 feature movie *Taming of the Fire* became a staple of the Korolev mythology. For the first time, a Soviet movie showed space engineers at work and featured impressive shots of actual rocket launches at Baikonur. Lofty aspirations for exploring space nicely intertwined with a romantic story line.⁵⁴ The director Daniil Khrabrovitskii invited Korolev's deputy Boris Chertok to serve as a consultant for the film. Chertok soon learned, however, that his role was merely to flash out technical errors, not to help reconstruct the actual story. Chertok's weak attempts to discuss real events and complex interpersonal relations were quickly rebuffed. "I used to say, 'This never happened this way' or "This did not take place," recalled Chertok. "Khrabrovitskii replied that it had to be this way; otherwise, the film would not be released." No mention was made in the movie of Korolev's imprisonment in the Gulag and his subsequent work in *sharashka*, a prison design bureau, in the 1940s.

The myth-making was not entirely imposed from above. Khrabrovitskii was consciously creating a myth. He explained to Chertok that his goal was not to show history as it happened, but as it ought to have happened:

I do not have to venerate the actual character traits and biographical facts about the protagonists. The characters in the movie are mine, not yours, and the viewers will believe me because they will love these characters. I deliberately idealize these people, because I want them to be like that. These do not have to be glossy idealizations, but the viewers must love every one of my characters. ... I admire all of you [space engineers] the way you are, but I want to make you even better. ⁵⁶

Khrabrovitskii made Bashkirtsev and Ognev—the characters portraying Korolev and the chief rocket engine designer Valentin Glushko in the film—close friends, without giving a hint of the actual feud between the two chief designers. "There can be no rivalry between the true friends, Bashkirtsev and Ognev. There must be no such trait in their characters," explained Khrabrovitskii. ⁵⁷ He argued that the viewers must see the protagonists as sensitive, sympathetic, highly cultured individuals, not cold technocrats.

⁵²See "Sergei Korolev and Yuri Gagarin," photograph, September 15, 1961, available at http://www.daylife.com/photo/0499ams5mabvQ (last accessed March 23, 2011); and Oleg Komov, "Sergei Korolev and Yuri Gagarin," Taganrog, 1979, available at http://www.warheroes.ru/hero/hero.asp?id=5022 (last accessed March 23, 2011)

⁵³V. S. Kukushin, *Istoriia arkhitektury Nizhnego Dona i Priazov'ia* (Rostov-na-Donu, 1996), available at http://architecture.artyx.ru/books/item/f00/s00/z0000005/st020.shtml (last accessed March 23, 2011).

⁵⁴Mark Wade, "Taming the Fire," *Encyclopedia Astronautica*, available at http://www.astronautix.com/articles/tamefire.htm (last accessed March 23, 2011).

⁵⁵Boris Chertok, Rakety i liudi, vol. 4, Lunnaia gonka (Moscow, 2002), 490.

⁵⁶Ibid., 496–97.

⁵⁷Ibid., 493.

Gradually Chertok learned the rules of the game and even made a valuable suggestion to introduce a new character to portray the party leader, Dmitrii Ustinov, who supervised the space industry. This turned out to be an excellent move, as Ustinov's support proved crucial in overcoming censorship barriers. Ustinov arranged a screening for Politburo members and secured their approval to release the movie.⁵⁸

Taming of the Fire was a great artistic success, but many who knew Korolev were disappointed by the lack of depth in portraying his life and character. The leading space journalist and Korolev biographer Iaroslav Golovanov wrote in his private diary: "The prototypes are real, but few movies are as saturated with pretty lies as Taming of the Fire." Official Soviet critics did not find any fault in myth-making. On the contrary, they touted the movie as an excellent illustration to the Socialist Realist analytical concept of "artistic truth."

Just as its director intended, *Taming of the Fire* became a pivotal myth of Soviet space history for generations of viewers. In 1972, when the movie was released, it was seen by 27.6 million viewers, and the popular Soviet movie magazine readers named the actor Kirill Lavrov, who played Bashkirtsev, the best actor of the year. Since then, Soviet and then Russian TV regularly showed *Taming of the Fire* every year on April 12, Cosmonautics Day. In cultural memory, the romanticized Bashkirtsev took the place of Korolev. When remembering Korolev, one recalled Bashkirtsev.

The heroic myth of the Soviet space program was literally written in stone—in massive monuments that placed the cosmonauts, the leading engineers, and Soviet political leaders on a pedestal of historical myth. In a revealing symbolic gesture, space industry leadership placed space documents and artifacts in the foundation of an actual monument, "To the Conquerors of Space," unveiled in Moscow in 1964. A recently declassified petition from a group of industry leaders to the Soviet political leadership read:

For the commemoration of the outstanding historical achievements of the Soviet people in the conquest of space and for the eternal preservation of documentation and other materials about the flights of Soviet spacecraft, it would be advisable to place in special sealed containers documents, films, and mock-ups of Soviet artificial satellites of the Earth, of space stations, of space ships, and of the most important research equipment used in flight, and to brick up these containers into the foundation of the monument that has been erected in Moscow to commemorate the outstanding achievements of the Soviet people in the conquest of space.⁶¹

An identical set of carefully selected documents and artifacts was put on display in the museum built underneath the monument. Space history was written once and for all. The master narrative was literally protected from challenge by a stone wall. Yet this master narrative was no monolith: different agents composed different parts of it for their own purposes; inner tensions strained it; and the counter-memories cultivated by space program participants constantly eroded it.

⁵⁸Ibid., 498.

⁵⁹Iaroslav Golovanov, Korolev: Fakty i mify (Moscow, 1994), 453.

⁶⁰ Vasilii Novikov, Khudozhestvennaiia pravda i dialektika tvorchestva (Moscow, 1974), 507.

⁶¹Leonid Smirnov et al. to the party Central Committee, February 2, 1966; Rossiiskii gosudarstvennyi arkhiv ekonomiki, Moscow, f. 4372, op. 81, d. 1944, l. 50.

COUNTER-MEMORIES OF THE SOVIET SPACE PROGRAM

Individual memories that did not fit into the master narrative continued to circulate informally beneath the glossy surface of official history. Myriad private stories formed an oral tradition totally separate from written accounts. Historians have traditionally associated such "counter-memories in the very shadow of the official history" with groups which are "excluded or overlooked." In the Soviet space program, by contrast, the space engineers and the cosmonauts who cultivated such counter-memories were already the focus of official history. It was due to their privileged position that they had access to information concealed from the average Soviet citizen. The "true stories" of historical events that were concealed or embellished in official accounts became an essential part of their group culture. Shared private memories fostered their sense of professional identity as cosmonauts or engineers, while their public persona had to conform to the master narrative.

Counter-memories remained in the private realm largely through self-censorship, rather than overt editorial pressure. For example, when asked by a TASS correspondent about his impressions of Gagarin, the prominent spacecraft designer Mikhail Tikhonravov replied:

I first met Gagarin during exams, not knowing yet that he would be the first [cosmonaut]. He was taking a physics test, and I gave him a B, because he did not know velocity addition. He messed it up; he did not add velocities right. Then someone told me, "This is our best, most promising candidate. Is there any way he could get an A? Test him again. If he answers well, give him an A." So I had to test him again. The second time around he answered everything well, and I gave him an A.

When going over the transcript before publication, Tikhonravov made a note on the margins: "I told this just for you. This should not be published." This memory could circulate only privately, without rising to the surface of public discourse.

The engineers and the cosmonauts resented the obvious gap between their private memories and the official story. Forced to toe the official line in public, they let off their frustration in diaries and private conversations. "Why are we telling lies?" Korolev's deputy Boris Chertok jotted in his notebook, reflecting on multiple launch failures concealed from the public. "All our reports are half-truths, which is worse than a lie," Iaroslav Golovanov, a leading space journalist, wrote in his notes. "While the rest of the world was watching a live report of the *Apollo 8* mission, Soviet television broadcasted a children's

⁶²Catherine Merridale, "War, Death, and Remembrance in Soviet Russia," in *War and Remembrance in the Twentieth Century*, ed. Jay Winter and Emmanuel Sivan (Cambridge, England, 1999), 77.

⁶³On the tension between the professional identity and the public image of Soviet cosmonauts see Gerovitch, "'New Soviet Man' Inside Machine," 149–52. On how secrecy shaped the identity of space engineers see Gerovitch, "'Stalin's Rocket Designers' Leap into Space: The Technical Intelligentsia Faces the Thaw," *OSIRIS* 23 (2008): 189–209.

⁶⁴Mikhail Tikhonravov, interview by A. P. Romanov, August 8, 1968; Arkhiv Rossiiskoi Akademii nauk, Moscow, f. 1546, op. 1, d. 64, l. 2.

⁶⁵Boris Chertok, Notebook #16, September–November 1964, Chertok papers, Smithsonian National Air and Space Museum, Washington.

⁶⁶Golovanov, Zametki vashego sovremennika 1:383 (diary entries of September 1969–January 1970).

movie. "Are Central Committee officials so thick," Golovanov wondered on that occasion, "that they don't understand how foolish and shameful this is?" When the publication of his article on *Apollo 11* was put on hold, he let off steam in his private notebook: "I am tormented with shame. Will they allow such a disgrace again?" ⁶⁸

The same people—journalists, cosmonauts, and leading engineers—both wrote official accounts and shared private counter-memories. A discursive split went right through their souls. Kamanin's private diary revealed his constant oscillation between the public and private modes of expression. For example, in December 1968 he wrote an article for *Red Star*, the Soviet Armed Forces newspaper, about the forthcoming launch of *Apollo 8*. He entitled his article "Unjustified Risk" and harshly condemned American politicians for endangering the lives of astronauts in a mission easily performed by automata. Naturally, he did not even mention that the Soviet Union had its own secret human lunar program. But in his private diary he frankly admitted that the Americans were getting ahead in the lunar race and railed against those whom he saw as the true culprits: party leadership, military brass, and top administrators of the space program who neglected or misdirected the program for far too long. "We have fallen behind the United States by two or three years," he wrote in the diary. "We could have been first on the Moon." of the moon."

In his diary Kamanin condemned the very practices he enforced at his day job. Publicly, Kamanin served as an editor and informal censor of popular publications about space. When Valentina Tereshkova complained to Kamanin that her ghost-written autobiography contained numerous embellishments, which had no roots in real events, Kamanin acknowledged that the journalistic account followed stereotypes and had many discrepancies, but it was too late to make any corrections if the book was to be released by the third anniversary of Gagarin's flight. Privately, he deplored the platitudes in literature about cosmonauts, remarking that "the most interesting things in our cosmonautics are classified." He lamented the official ban on reports about equipment failures and flight emergencies, which he himself had to enforce: "Because of these restrictions, we are actually robbing ourselves by creating an impression of 'extraordinary ease' and almost complete safety of prolonged space flights. In fact, such flights are very difficult and dangerous for the cosmonauts, not only physically, but also psychologically." Kamanin realized that the erasure of accidents from cultural memory gave rise to myths that created a fundamental misimpression of the space enterprise.

Although such sentiments did not translate into an active opposition to the Soviet regime, they indicated a form of defiance among the very groups that were supposed to be the backbone of the Soviet state—the military and the defense industry workers. Space engineers cultivated their own counter-memories. Weary of the constant disruptions from Khrushchev's numerous reorganizations of economic management structures, the engineers

⁶⁷Ibid., 343 (diary entries of September–December 1968).

⁶⁸Ibid., 372 (diary entries of June-September 1969).

⁶⁹Nikolai Kamanin, *Skrytyi kosmos*, vol. 3, *1967–1968* (Moscow, 1999), 335 (diary entry of December 12, 1968)

⁷⁰Ibid., 2:29 (diary entry of March 21, 1964).

⁷¹Ibid., 1:176 (diary entry of October 31, 1962).

⁷²Nikolai Kamanin, *Skrytyi kosmos*, vol. 4, *1969–1978* (Moscow, 2001), 182 (diary entry of June 6, 1970).

began recalling fondly the "iron discipline" of the Stalin era as a sound foundation for powerful industrial development.⁷³

Exchanging their private memories of the Stalin period, the engineers produced the myth of a "golden age" of Soviet rocketry. In fact, in the late 1940s, top defense industry managers similarly complained of insufficient resources and inadequate management. ⁷⁴ Yet the counter-memory of the Stalin era as the epitome of strong management, strict discipline, and personal responsibility became part and parcel of the professional culture of Soviet rocketry.

The cosmonauts, whose private lives were controlled by their military superiors almost as strictly as their public image, had little room to cultivate their private memories. Yet they treasured precisely those moments of their lives that were untouched by publicity. When Yuri Gagarin wanted to give his mother his framed photograph, he did not choose any of the iconic images endlessly reproduced around the world, but asked for a copy of the photo which had been accidentally taken in 1960, before Gagarin performed his spaceflight and became a world celebrity.⁷⁵

While the cosmonauts and the space engineers privately cultivated their countermemories, alternative representations of the space age began to show on the margins of public discourse as well—rumors, jokes, and readers' letters to newspapers and magazines. With the decline of the cosmonaut myth in the late 1960s, the triumphal tone of official reports, which had not changed since the time of Gagarin's flight, began to sound pathetic. The deaths of Komarov and Gagarin led to widespread cynicism toward official reports. The public widely distrusted the vague official statement on the causes of the crash of Gagarin's plane; wild rumors of Gagarin's drunkenness, pilot error, or an assassination by the KGB were often deemed more credible. 76

After the *Apollo 8* circumlunar flight, the Soviet lag in space became obvious. The public now greeted official reports of Soviet triumphs in space not merely with skepticism, but with ridicule. The January 1969 mission of *Soyuz-4 – Soyuz-5*, touted as a great achievement by the Soviet media, quickly became the subject of a popular joke. An elaborate pun on the cosmonauts' names—Shatalov, Volynov, Khrunov, and Eliseev—portrayed them as "hanging about, slacking, doing zilch, and barely landing." Ironically, this mission was one of the few true successes of the Soviet space program in the late 1960s. Rather than "slacking," the cosmonauts showed tremendous courage and skill: Shatalov performed the first manual docking of two piloted spacecraft, and Khrunov and Eliseev did a risky spacewalk to transfer from one space ship to the other. Yet the public no longer saw the difference between true accomplishment and a failure dressed up as a success. The part about "barely landing" was more to the point: Volynov barely escaped death during fiery descent and hard landing in a malfunctioning spacecraft. Although the accident was hushed

⁷³Gerovitch, "Stalin's Rocket Designers' Leap into Space."

⁷⁴Irina V. Bystrova, Voenno-promyshlennyi kompleks SSSR v gody kholodnoi voiny: Vtoraia polovina 40-kh-nachalo 60-kh godov (Moscow, 2000), 244-46.

⁷⁵Semyon Ragozin, interview by Slava Gerovitch; Brighton, MA, January 6, 2009.

⁷⁶Lewis, "The Red Stuff," 312-14.

 $^{^{77}}$ «Пошатались, поволынили, ни хруна не сделали, еле сели» (see Valentina Ponomareva, *Zhenskoe litso kosmosa* [Moscow, 2002], 246).

up as usual, rumors spread quickly, adding to the emerging counter-myth of Soviet cosmonauts.

The public also grumbled about the immense expenses of the space program and the costs of cosmonauts' publicity tours. These topics were not publicly discussed, only occasionally surfacing in readers' letters or private conversations. For example, in June 1960, a youth newspaper published a letter from one Alexei N., who bluntly asked about the space program, "What's in it for me?" "I, for example, on the eve of the launch of a rocket, received 300 rubles salary, and this is what I still receive, in spite of the successful launch. Doesn't it seem to you that the enthusiasm for these sputniks and the cosmos in general is inopportune and, more precisely, premature?" he asked. "Rocket, rocket, rocket—what's it needed for now? To hell with it now, and with the moon, but give me something better for my table. After that, then it will really be possible to flirt with the moon." A 1963 secret KGB report quoted the retired Marshal Georgii Zhukov saying, "They throw billions into space. Yuri Gagarin's flight cost nearly four billion rubles. No one ever asked about the cost of all these receptions, all these trips, guest visits, etc." As foods and goods shortages plagued the economy, the public increasingly questioned the lavish funding of the space program.

The *Apollo 11* lunar landing produced an avalanche of jokes, ridiculing the clumsy efforts of the propaganda apparatus to cover up the Soviet lag in the space race:

Brezhnev invites a group of cosmonauts.

- Comrades! The Americans have landed on the Moon. We have conferred and decided that you would fly to the Sun!
- But we'd burn there, Leonid Il'ich!
- Not to worry! The Party thinks of everything. You will fly at night!80

In the 1970s, jokes about space propaganda revealed widespread cynicism about the Soviet regime in general: "Armenian Radio asked the question: Why is it that the Soviet Union is not sending cosmonauts to the Moon? Answer: There is a fear that they will emigrate." 81

The tensions that brewed under the lid of the master narrative over decades eventually came to surface as the policy of glasnost during Gorbachev's perestroika gave voice to suppressed counter-memories.

REWRITING THE MASTER NARRATIVE

In the late 1980s, public revelations about Stalinist terror led to a swift deterioration of the official historical discourse. Space history was also profoundly affected. Important archival documents came to light, private diaries were published, participants began to speak out, and a totally new picture of the Soviet space program emerged, like a giant iceberg suddenly

⁷⁸Quoted in Josephson, "Rockets, Reactors and Soviet Culture," 185.

⁷⁹V. P. Naumov et al., comp., Georgii Zhukov: Stenogramma oktiabr'skogo (1957) plenuma TsK KPSS i drugie dokumenty (Moscow, 2001), 493.

⁸⁰Andreï Kozovoï, "Eux et nous: La guerre froide dans les histoires drôles soviétiques," *Cahiers du monde russe* 48:1 (2007): 142.

⁸¹Boym, "Kosmos," 94.

lifted out of the water. As Asif Siddiqi has written, "the single narrative of Soviet space history—teleological and Whiggish—fractured into multiple and parallel narratives full of doubt (for the claimed successes of the program), drama (for the episodes we never knew about) and debate (over contesting narratives of history)."82 Veteran engineers, cosmonauts, and politicians began telling stories of multiple failures during Soviet space missions, fatal errors and true heroism, favoritism in project funding, and hidden pressures to launch space missions by a politically motivated deadline.

The perestroika-era exposure of lies and cover-ups in the space program, a flagship Soviet propaganda project, made it a prominent target of social criticism. Gorbachev's policy of glasnost opened the flood-gates of criticisms that reached far beyond what he might have considered appropriate. Some critics explicitly described the failures of the Soviet space program as emblematic of the failures of the Soviet system as a whole. Victor Pelevin's novel *Omon Ra* (1991), for example, presented a gloomy parody of the official history of the Soviet space program. The main protagonist, Omon Krizomazov, inspired by Soviet propaganda, went through grueling cosmonaut training, making many personal sacrifices on the way, only to discover that the heroic one-way lunar landing mission, for which he had been training, was merely a sham played out on an underground stage set. Moreover, he found out that the entire Soviet space program was an elaborate low-tech hoax, underlying the display image of technological utopia. Pelevin's carnivalesque subversion of Soviet values went well beyond the space program: the lunar mission stood here for the entire Soviet civilization, with its empty promises, Potemkin-village technological projects, and real human sacrifice. The novel was dedicated to "the heroes of the Soviet cosmos," meaning not the actual cosmonauts, but all people stuck in the political, geographic, and cultural space of the Soviet system. 83 The novel's mockery of the hagiographic history of the Soviet space program stirred a controversy, and Pelevin reportedly was denied a literary prize because of "insulting the cultural memory."84

As the economic problems of the perestroika period mounted, the space industry began looking for ways to attract foreign customers and partners. Taking advantage of the slackening of secrecy controls, industry managers started advertising the past achievements of their companies, opened exhibit halls for the public, and put on display rare space artifacts. Owned and operated by space companies themselves, these "corporate museums" produced versions of space history that placed these companies in the best possible light. The competition on the market of space goods and services naturally led to competing versions of history, each shored up with its own set of artifacts and corporate collections of memoirs. The memory of the Space Age became atomized and decentralized, or, in Siddiqi's expression, "privatized," along with the old Soviet industry itself.85

Space engineers perpetuated heroic myths, but widely disagreed on the identity of heroes and villains in Soviet space history. The leading figures in the Soviet space program—

⁸²Asif A. Siddiqi, "Privatising Memory: The Soviet Space Programme Through Museums and Memoirs," in *Showcasing Space*, ed. Martin Collins and Douglas Millard (London, 2005), 99.

⁸³ Victor Pelevin, Omon Ra, trans. Andrew Bromfield (New York, 1996).

⁸⁴Jesse Walker, Review of *Omon Ra* by Victor Pelevin, trans. Andrew Bromfield, *American Enterprise* 12 (December 2001): 56.

⁸⁵ See Siddiqi, "Privatising Memory."

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chief designers Sergei Korolev, Valentin Glushko, Vladimir Chelomei, and others-had often engaged in acrimonious disputes and bitter rivalry. Now a loyal team of followers gathered around each of these historical figures and constructed their own versions of history, trying to invalidate their opponents' accounts. Korolev's defenders lay the blame for the Soviet loss in the lunar race on Glushko and Chelomei, arguing that Glushko had refused to build rocket engines for Korolev's lunar rocket, and Chelomei had siphoned off a large part of the resources of the lunar program. Yet their rivals had their own stories to tell. From their perspective, Korolev was often portrayed as a ruthless competitor and a clever political operator. For example, Khrushchev's son Sergei, who had worked for Chelomei, has suggested that Korolev had "focused his energy on what he did best—the elimination of his rivals."86

Nowhere was the "privatization" of memory more evident than in highly personal, often emotional and partisan, memoirs written by veterans of the Soviet space program. Memoirists often aspired to write not merely an account of their own activities within the space program, but to survey entire periods of Soviet space history as seen from their partial perspective. Even though such memoirs purported to articulate counter-memory an alternative to the official story line—in fact they showed a craving and nostalgia for a Soviet-style single master narrative that would elevate their own patron—be it Korolev, Glushko, or Chelomei—above others. 87 "Counter-memory" ended up reproducing the same stereotypes of the master narrative, for it still served a propaganda purpose – if not for the central government, then for a particular group within the space industry.

Comparing memoirs written during the Soviet era to their later counterparts reveals subtle adaptation of individual memories to specific historical contexts.⁸⁸ For example, Oleg Ivanovskii's oft-cited memoirs went through multiple editions from 1970 to 2005.89 Ivanovskii was the lead designer of the Vostok spacecraft and later headed the space industry department of the Military Industrial Commission, the top government body overseeing the space program. The early editions of his memoirs were published under the pseudonym "Ivanov"; he wrote about many leading space engineers but could not reveal their names. In the 1980s he added their real names but still followed a Korolev-centered master narrative. Even in the post-Soviet period, he was not ready to reveal anything about his activity inside the government bureaucracy. In the latest edition, the three-page section on that period of his life was filled entirely with quotations from other people's memoirs.⁹⁰ Without access to many original documents, the world of personal memory became self-referential.

⁸⁶Sergei Khrushchev, "How Rockets Learned to Fly: Foreword," in Von Hardesty and Gene Eisman, Epic Rivalry: The Inside Story of the Soviet and American Space Race (Washington, 2007), xviii.

⁸⁷Siddiqi, "Privatising Memory," 108.

⁸⁸On memoirs about the Soviet era see Beth Holmgren, ed., The Russian Memoir: History and Literature (Evanston, 2003); Irina Paperno, "Personal Accounts of the Soviet Experience," Kritika 3 (Fall 2002): 577– 610; and Barbara Walker, "On Reading Soviet Memoirs: A History of the 'Contemporaries' Genre as an Institution of Russian Intelligentsia Culture from the 1790s to the 1970s," Russian Review 59 (2000): 327-52.

⁸⁹See Aleksei Ivanov [Oleg Ivanovskii], Pervye stupeni: Zapiski inzhenera (Moscow, 1970); Ivanov [Ivanovskii], Vpervye: Zapiski vedushchego konstruktora (Moscow, 1982); Oleg Ivanovskii, Naperekor zemnomu pritiazhen'iu (Moscow, 1988); and Ivanovskii, Rakety i kosmos v SSSR: Zapiski sekretnogo konstruktora (Moscow, 2005).

⁹⁰ Ivanovskii, Rakety i kosmos, 164-66.

Ivanovskii did openly what others did implicitly or even unconsciously—he presented other people's memories as his own.

With crucial archival sources still classified, memoirs became a major source for historical scholarship. Among all the memoirs of the post-Soviet era, the four-volume set of books by Korolev's deputy Boris Chertok was the most ambitious and influential. Well informed and well told, his sweeping and riveting account of the Soviet space program from its origins in the postwar years to the end of the Cold War, nonetheless, was written entirely from the perspective of Korolev's engineering team.⁹¹ In Russia, the reverence for such patriarchal figures as Chertok translated into unquestioned trust in their personal accounts. The recent fundamental, 750-page-long Russian Encyclopedia of Human Spaceflight often drew on memoirs as a major source for its articles. For example, the entry on the Soyuz-15 mission consisted largely of an extended quote from Chertok's memoirs. 92 In 1974, Soyuz-15 failed to dock with the Salyut-3 space station, and an internal controversy erupted over equipment malfunctions and the actions of the crew in that incident. By letting an engineer tell his story unopposed, encyclopedia editors in effect presented a very partial view of that controversy, placing the blame on the crew. 93 When a personal perspective is thus validated and becomes a major reference source, this "counter-memory" of a previously hushed-up episode literally turns into a new master narrative.

POST-SOVIET SPACE NOSTALGIA

In post-Soviet Russia, space myths have been put to new uses—to give comfort to those who are nostalgic of the Soviet past, to provide shared cultural references in public discourse, and to supply a handy ideological construct for those seeking a unifying "national idea." After the collapse of the Soviet Union, the mental blow of losing superpower status and the economic pain of the rapid decline of the space industry due to drastic budget cuts profoundly affected the cultural memory of the Space Age. Different groups have dealt differently with these traumas, each appropriating space myths to heal their wounds.

Space engineers have dramatically transformed their recollections of the Soviet period. The Soviet-era political leadership, often depicted as inept and short-sighted in perestroikaperiod memoirs, suddenly acquires a better image. Stalin, Khrushchev, and Brezhnev are now portrayed as wise leaders who appreciated the importance of space industry and lent it much-needed political and economic support.⁹⁴

⁹¹NASA History Division has sponsored the translation of these memoirs into English under Asif Siddiqi's editorship. Siddiqi has provided an excellent running commentary to the English edition, which places Chertok's story in a wider context. See Asif A. Siddiqi, "Series Introduction," in Boris Chertok, *Rockets and People* (Washington, 2005), ix–xix.

⁹²See Iurii M. Baturin, ed., *Mirovaia pilotiruemaia kosmonavtika: Istoriia. Tekhnika. Liudi* (Moscow, 2005), 209–10

⁹³For an alternative account by the *Soyuz-15* crew see Mikhail Rebrov, "Gor'kii privkus slavy," *Krasnaia zvezda* (September 9, 1994): 2; for an English translation see "Cosmonauts Unfairly Blamed for Failure of Soyuz-15 Flight," JPRS-USP-94-007 (October 5, 1994), 3.

⁹⁴See, for example, Iurii Mozzhorin, "Rol' S. P. Koroleva v razvitii otechestvennoi raketnoi i kosmicheskoi tekhniki za 50 let (1946–1966 gg.)," *Iz istorii aviatsii i kosmonavtiki* 72 (1998), available at http://epizodsspace.no-ip.org/bibl/iz-istorii/rol-kor.html (last accessed March 23, 2011); and Vladimir Syromiatnikov,

After all the discomforting historical revelations of the perestroika period, many Russians view Soviet space triumphs as rare moments of their history that still deserve pride. Very popular in Soviet times, the movie Taming of the Fire has become even more culturally resonant after the collapse of the Soviet Union. For many, this myth provides a mental refuge from attacks on Soviet-era values. "Every time I watch it," confessed one viewer in 2008, "tears block my eyes and a lump rises in my throat. This is a true moment of glory for the Motherland, a breath of fresh air in the stuffy atmosphere of triumphant capitalism. ... The biography of Bashkirtsev differs from Korolev's biography in many ways, but this is the way we wanted him to be and the way we saw him."95 A new biopic, Iurii Kara's Korolev (2007), has tapped into this public yearning for a hero myth to create another larger-than-life stereotype of Korolev. Focusing on episodes from Korolev's biography that were omitted from Taming of the Fire, such as his arrest and imprisonment in the Gulag, Kara's film similarly idealizes the main protagonist. Koroley—a commanding and brazen personality with a complicated private life—is transformed on the screen into a handsome, polite intellectual and an exemplary husband and father. The film director has publicly asserted his privilege to mythologize: "An artist has the right to have his own idea of the protagonist." The film was heavily sponsored by Korolev's former design bureau, the Energia Rocket and Space Corporation, encapsulating the space community's collective urge for the return of a comforting master narrative.

Along with Korolev's efficient management, Gagarin's attractive smile has come to symbolize everything that was good about the Soviet past. The Russians today rank Gagarin's flight as their second proudest historical achievement (91 percent), right behind the victory in World War II (93 percent), and followed by Sputnik (84 percent). Gagarin has been named the top "Russian idol" (35 percent), far outstripping all great Russian writers and controversial politicians. We did not have Gagarin, we would not have been able to look into each other's eyes. It seems we blew everything we could. But we still have Gagarin. We will never lose him," writes one Russian journalist. "Gagarin is the symbol of a Russian victory over the entire world, a symbol for ages to come. We don't have another one and perhaps never will. Gagarin is our national idea." For many, yearning for the Gagarin myth reflects the nostalgia for the Soviet system as a whole.

In post-Soviet culture—a jumble of old Soviet and new capitalist cultural connotations—space myths often take the form of what the cultural critic Natal'ia Ivanova

¹⁰⁰ rasskazov o stykovke i o drugikh prikliucheniiakh v kosmose i na Zemle, vol. 2, 20 let spustia (Moscow, 2010), 31.

⁹⁵Iu. M. Shabalin, "Tiazhkii nedug interpretatorov," *Sovetskaia Rossiia*, April 22, 2008, available at http://epizodsspace.no-ip.org/bibl/sov-ros/2008/tyaj-ned.html (last accessed March 23, 2011).

⁹⁶Interview with Iurii Kara, *Izvestiia* (Moscow edition), October 12, 2007, available at http://www.pressmon.com/cgi-bin/press_view.cgi?id=2124032 (last accessed March 23, 2011).

⁹⁷Vserossiiskii tsentr izucheniia obshchestvennogo mneniia (VTsIOM), Press Release 612, January 18, 2007, available at http://wciom.ru/index.php?id=268&uid=3864 (last accessed March 23, 2011).

⁹⁸VTsIOM, Press Release 1413, January 20, 2010, available at http://wciom.ru/index.php?id=268&uid=13080 (last accessed March 23, 2011).

⁹⁹Ivan Iudintsev, "Rossiia stremitsia v kosmos ... na skripuchei telege proshlykh uspekhov," *HotCom.ru*, vol. 16 (April 12, 2001), available at http://www.hotcom.smi-nn.ru/main/art.phtml?id=5888 (last accessed February 1, 2010).

has termed "no(w)stalgia": neither condemnation nor idealization of the past, but rather its actualization as a symbolic language for discussing today's pressing issues. The "no(w)stalgic" audience turns into "a collective participant and a collective interpreter; a creator of a myth, a part of the myth, and a debunker of the myth; the living past and a trial of the past at the same time." In the early 1990s, for example, youth culture appropriated space iconography for the widely popular "Gagarin Parties," rave dance extravaganzas held at the Cosmos Pavilion in the famed Soviet Exhibition of People's Economic Achievements in Moscow. Giant mock-ups of rockets and spacecraft hung from the ceiling, an enormous portrait of Gagarin was specially produced to adorn the festivities, and real cosmonauts were invited to have drinks at the bar and to mingle with the crowd. Placing old Soviet memorabilia into a youth-party context had a strange liberating effect: space symbols were no longer perceived as ideologically loaded emblems of Soviet propaganda or perestroika revisionism. "The juxtaposition of Soviet symbols with rave symbols, which may seem ironic and absurd," writes the cultural anthropologist Alexei Yurchak, "in fact freed the symbolic meanings attached to Gagarin and the space program from their Soviet pathos and reinvented them, making them accessible for the new cultural production."101

The mixed feelings of pride for the glorious space achievements of the past, shame for losing superpower status, and the mockery of both pride and shame as ideological constructs provide a fertile ground for the semiotic interplay of past/present, reality/simulation, and truth/fiction in post-Soviet art. Aleksei Fedorchenko's film *First on the Moon* (2005), for instance, tells the story of an alleged Stalin-era secret program of human spaceflight to the Moon in the style of a "mockumentary," or pseudo-documentary. The film, which won the Best Documentary award at the 2005 Venice Film Festival, skillfully uses stylization for archival footage to mock both the pride-boosting myths of Soviet space triumphs and the clichés of post-Soviet sensational revelations about Stalinism.¹⁰²

Space myths provide frames for entirely new meanings, serving as a shared language for public discourse. The cultural anthropologist Serguei Oushakine has argued that post-Soviet societies face a "stylistic block, a particular expressive deficiency of postsocialism." "Nostalgic clichés" help "produce an already known and previously encountered effect of recognition, to evoke a shared experience, to point toward a common vocabulary of symbolic gestures." On April 12, 2001, on the 40th anniversary of Gagarin's flight and just three weeks after the controversial de-orbiting of the space station *Mir*, President Putin visited the Cosmonaut Training Center in Star City and gave a speech before the cosmonauts. The center's personnel prepared a special backdrop for Putin's speech—a giant, wall-size portrait of Gagarin in full regalia—a not-so-subtle message to the president, reminding him of the appreciation of cosmonauts' achievements by previous governments. For his part, Putin

¹⁰⁰Natal'ia Ivanova, *No\$tal'iashchee: Sobranie nabliudenii* (Moscow, 2002), 62. See also idem, "No(w)stalgia: Retro on the (Post)-Soviet Television Screen," *Harriman Review* 12 (1999): 25–32.

¹⁰¹Alexei Yurchak, "Gagarin and the Rave Kids: Transforming Power, Identity, and Aesthetics in the Post-Soviet Night Life," in *Consuming Russia: Popular Culture, Sex, and Society Since Gorbachev*, ed. A. Baker (Durham, NC, 1999), 94.

¹⁰²See Cathleen S. Lewis, "From the Cradle to the Grave: Cosmonaut Nostalgia in Soviet and Post-Soviet Film," in *Remembering the Space Age*, 253–70.

¹⁰³Serguei Alex Oushakine, "'We're Nostalgic but We're not Crazy': Retrofitting the Past in Russia," *Russian Review* 66 (July 2007): 469, 481.

also showed historical sensitivity: he assured the cosmonauts that April 12—Cosmonautics Day, commemorating the date of Gagarin's flight—was celebrated not only by the cosmonauts, but by the entire country. To boost the cosmonauts' morale, which was at a historic low after *Mir*'s demise, Putin brought them a gift. Apparently he concluded that nothing could be more valuable to the cosmonauts than reasserted appreciation of space mythology, and he presented them with another portrait of Gagarin. The cosmonauts, in turn, handed the president their own gift: a watch with Gagarin's portrait on its face, and Putin immediately put it on.¹⁰⁴ By exchanging the gifts, the president and the cosmonauts in effect reaffirmed their shared belief in the cosmonaut myth.¹⁰⁵ This co-remembrance of the celebrated past of the Soviet space program reasserted their common identity as Russian heirs to the Soviet glory.

The post-Soviet political elite have appropriated the image of Gagarin as their own ideological symbol, an emblem of national pride and technological prowess, and the inspiration for a returned superpower status. In the same way as President Putin has readopted the Imperial tricolor flag, the double-headed eagle coat of arms, and the Soviet-era national anthem with new lyrics to infuse grandeur into post-Soviet national symbols, the Soviet-era space myths are enrolled in the service of the state-sponsored project of boosting Russia's shaken prestige. Russian President Dmitrii Medvedev has recently declared the year 2011, the 50th anniversary of Gagarin's flight, "the Year of Russian Cosmonautics." 106 In December 2009, Prime Minister Putin chaired a meeting of the organizing committee for Gagarin's flight anniversary celebrations. In his widely publicized speech, Putin called the Vostok flight "a genuine national triumph, which rallied and unified the entire nation." He called for using this opportunity to "remind the world community once again about Russia's key role in space exploration," called for a comprehensive review of school textbooks to roots out "falsifications" of space history, and railed against books and video games that promoted the American space achievements over the Soviet ones. 107 A long list of state-sponsored commemorative projects included new awards and medals; the construction and renovation of museums and monuments; new books, movies, television and radio programs; conferences; youth programs; and artistic and sporting events. 108 The Russian government thus tries to re-appropriate space myths for its own propaganda purposes, both to shore up its domestic support and to improve its image abroad. The government's proclaimed intention to fight the "falsifications" of space history echoes President Medvedev's recent decision to set up the Presidential Commission of the Russian

¹⁰⁴V. Davydova et al., "40 let pervomu poletu cheloveka v kosmos!" *Novosti kosmonavtiki*, no. 6 (2001), available at http://www.novosti-kosmonavtiki.ru/content/numbers/221/01.shtml (last accessed March 23, 2011).

¹⁰⁵On the Soviet tradition of gift-giving, particularly on gifts to political leaders, see Nikolai Ssorin-Chaikov, ed., *Dary vozhdiam/Gifts to Soviet Leaders* (Moscow, 2006).

¹⁰⁶Decree by the President of the Russian Federation No. 1157, July 31, 2008, available at http://document.kremlin.ru/doc.asp?ID=047303 (last accessed March 23, 2011).

¹⁰⁷Meeting of the Organizing Committee for the preparation and implementation of the celebration of the 50th anniversary of Yu. A. Gagarin's space flight, December 22, 2009, available at http://premier.gov.ru/events/news/8678/ (last accessed March 23, 2011).

¹⁰⁸Draft list of main events commemorating the 50th anniversary of Yu. A. Gagarin's space flight, available at http://www.federalspace.ru/main.php?id=90 (last accessed March, 23, 2011).

Federation to Counter Attempts to Falsify History to the Detriment of Russia's Interests. ¹⁰⁹ While *detrimental* historical narratives are to be rooted out, space myths *beneficial* to the interests of the Russian state are apparently bound to thrive.

The Soviet space program occupies a prominent place in postwar Soviet history—as a formidable technological project, a significant military development related to ICBMs and reconnaissance, and a political and cultural symbol of Soviet achievements or failures. Through the prism of space history, one can observe major political and cultural shifts. Changing priorities of Soviet space policy reveal a larger Cold War agenda; popular representations of spaceflight reflect Soviet ideological constructions of science and technology; the cosmonauts' public image reifies the abstract concept of the New Soviet Man; and private discussions of space failures indicate the degree of mass skepticism of official propaganda. The Soviet space program played such an outstanding symbolic role due to the systematic efforts of different agents to create and disseminate space myths, suppress counter-memories, and privately cultivate counter-myths. This article has attempted to explore this dimension of space history through different periods in Soviet and post-Soviet history.

In order to remember, we have to create our memories. And we create them out of the myths and symbols of our culture. Soviet space history myths are an odd mixture of propaganda clichés and private memories of space program participants. While journalists creatively interpreted official reports and added romantic overtones to the ideological message, private stories solidified individual biases and got their share of embellishment as they passed from one generation to another. During perestroika and the early post-Soviet period, Soviet-era counter-myths of space failures were reworked into a new master narrative. Most recently, the state-sponsored propaganda of national pride again colored individual memories. Most cosmonauts got so used to wearing their assigned mask in public that it permanently attached to their faces. For example, in 2003, Tereshkova's Soviet-era ghost-written autobiography was republished without any changes. Layers of symbolism gradually covered original memories, and remembrance and myth-making seamlessly merged.

The Communist party and the Soviet state actively encouraged the creation and dissemination of space myths, but these myths were not entirely imposed from above. Different agents—military officials, engineers, cosmonauts, writers, movie directors, and many others—actively participated in reshaping the myths to suit their own agendas. Often the same people, the insiders of the space program, were involved in creating both official versions and counter-myths, drawing on their private memories. Both types of myth were addressed to specific audiences—whether the public or a narrow professional circle—and embodied specific political and cultural values. Both types of myth played a constructive

¹⁰⁹Decree by the President of the Russian Federation No. 549, May 15, 2009, available at http://document.kremlin.ru/doc.asp?ID=52421 (last accessed March 23, 2011).

¹¹⁰Cf. Valentina Nikolaeva-Tereshkova, *Vselennaia – otkrytyi okean!* (Moscow, 1964); and Valentina Nikolaeva-Tereshkova and Viktor Khrapchenkov, *Zhenshchina veka* (Iaroslavl', 2003).

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role. The public myths greased the wheels of the propaganda machine, gave tangible representations to the ideological concepts of socialism and nationalism, and cemented the identity of a nation. The counter-myths, for their part, reinforced the professional identity of cosmonauts and space engineers and provided a vehicle for carnivalesque subversion of the official discourse by the public.

Cultural myths should not be seen merely as distorted memories. It is precisely these "distortions"—cultural adaptations and appropriations of symbols—that give different groups their individuality, their unique character, and distinct perspective. Just as one's personal memories reveal more about one's current identity than about one's past, historical myths provide a valuable insight into the society or a specific group that produces them. For example, today's widespread nostalgia for the glory of Soviet space triumphs and for such powerful leadership figures as Korolev indicates something deeper than merely an interest in space history. It reflects pervasive post-Soviet yearning for a paternalistic regime led by a competent and authoritative, perhaps even an authoritarian, leader. By shifting the focus from debunking myths to examining their origins and their constructive role in society, we can understand memory as a dynamic cultural force, not a static snapshot of the past.