



NASA HISTORY PROGRAM OFFICE

Office of Communications

Second and Third Quarters 2012

Volume 29, Number 2-3

From the Chief Historian

We've received a lot of positive feedback on the Space Shuttle Program special edition newsletter and



also on our last newsletter's coverage of the rollout of *Rockets and People, Volume IV.* For that success we owe a big debt of thanks to our newsletter editor, Giny Cheong. Unfortunately, my late submissions and last-minute changes have continued to push the actual publication dates of the newsletter out of synch with the dates on the masthead. To get us back on schedule, we've decided to combine the second- and third-quarter editions this year into this single newsletter. Hopefully, you'll find that the quality this year will make up for the drop in quantity.

Based on the success of the Shuttle Program special edition, we've decided to make the final newsletter each year into a focused thematic issue. For 2012, the theme will be planetary exploration. The first successful planetary mission, Mariner 2, happened 50 years ago this fall, and we are marking this anniversary in a number of ways throughout the year. Our first two quarterly lunch brownbag speakers this year (more about this inside) have talked about planetary exploration. We've also been updating materials on our Web site and tweeting more about planetary exploration topics. Most importantly, our annual history symposium, "Solar System Exploration @ 50," is devoted to the subject. Cosponsored by the National Air and Space Museum, the National Aeronautics and Space Administration (NASA) Science

continued on next page

Berlin Symposium on Outer Space and the End of Utopia in the 1970s

By Friederike Mehl, Universiteit van Amsterdam, Friederike Mehl@gmx.de

Did the end of the Space Age in the 1970s really mark the end of outer space as a field for humankind's visions, longings, and projections? The termination of the Apollo program and the cessation of piloted space exploration could be regarded as proof that with the beginning of the decade started an age of limitations and boundaries that was at odds with formerly close connections between outer space and futurity. Or should we rather understand this premature "end" as yet another part of the grand narrative of decline through which the history of this "inbetween decade" is so often interpreted? A number of developments in the 1970s, such as the foundation of the European Space Agency and the U.S.-Soviet Apollo-Soyuz Test Project in 1975, the upsurge of robotic space exploration missions, the renewed interest in space colonization, and the flourishing astroculture of the period, discourage all-too-easy conclusions.

At the conference "Envisioning Limits: Outer Space and the End of Utopia," held in Berlin, Germany, from 19 to 21 April 2012, more than 60 international scholars from a wide range of disciplines investigated the complex history of outer space, spaceflight, and extraterrestrial life in the 1970s. Alexander C. T. Geppert, William R. Macauley, and Daniel Brandau of

continued on next page

In This Issue:

From the Chief Historian	1
Berlin Symposium on Outer Space and the End of Utopia in the 1970s	1
News from Headquarters and the Centers	6
"E"-Prepared for History	21
Other Aerospace History News	25
Solar System Exploration @ 50 Planned Program	26
Recent Publications and Online Resources	28
Upcoming Meetings	33
Image in Aerospace History	34

From the Chief Historian (continued)

Mission Directorate, and the Jet Propulsion Laboratory, the symposium will be held in Washington, DC, on 25–26 October. You can read more about the symposium in this newsletter.

Do you have an idea for what our theme should be for newsletter number 4 in 2013? I'd be delighted to hear it. Just drop me a note or give me a call.

In the meantime, Godspeed,

William P Barry

William P. Barry Chief Historian

Berlin Symposium on Outer Space and the End of Utopia in the 1970s (continued)

the Emmy Noether Program (The Future in the Stars: European Astroculture and Extraterrestrial Life in the Twentieth Century project at the Friedrich-Meinecke-Institut of the Freie Universität Berlin) organized the three-day event, during which the decade was discussed as well as the nature of the boundaries that appeared to characterize it. Many of the participants had already taken part in an earlier international symposium entitled "Imagining Outer Space, 1900–2000," organized by Alexander Geppert, at the Universität Bielefeld's Zentrum für interdisziplinäre Forschung (ZiF) in February 2008.¹

Three feature presentations and nine panels provided a multifaceted analysis of astroculture as a predominant topos in the cultural imagination as it shaped the sociopolitical discourse, not only in Western Europe and the U.S., but also in the USSR and in developing countries. In the course of investigating ideas of limits and limitlessness against the backdrop of the all-too-real boundaries in a world marked by "the arms race, environmental deterioration, the population explosion, and economic stagnation," the question was discussed whether the 1970s were indeed a period of transition, an intermission, or, for that matter, an intelligible unit at all.² What happened to spaceflight and astroculture in the 1970s, and how could these developments be positioned in the wider context of this decade that is currently so eagerly debated? In order to produce viable answers to these questions, all participants took the limits theme to heart and went far beyond the mere title of the conference with their inquiry. For one, historiographical limits, such as periodization and historical trends, were scrutinized. Furthermore, thematic limits—the range of objects of study as well as the range of disciplines involved were decidedly widened. And lastly, geopolitical limits were called into question, regarding both national borders and the dividing lines between Earth and outer space.

¹ Alexander C. T. Geppert, "Space in Europe, Europe in Space: Symposium on 20th-Century Astroculture," *NASA History News & Notes* 25, no. 2 (2008): 1–2, 6–12.

Donella H. Meadows et al., *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind* (London: Universe Books, 1972), p. 17.

At a conference about the history of outer space during the 1970s, a crucial point was of course the choice of timeframes and their explanatory potential. Accordingly, Martin Collins (Washington, DC) set the agenda when proposing that the most challenging aspect of historical research into the 1970s was that the decade had been thoroughly theorized by philosophers like Fredric Jameson, Jean-François Lyotard, and cultural studies scholar David Harvey long before it was historicized. Subsequently, the decision to concentrate on the 1970s, a period that has recently been described as marking both "the end of certainty" and "the shock of the global," as well as a time "after the boom," was complicated by a series of developments and events in space history.3 Robert Poole (Lancaster, U.K.) outlined how Stanley Kubrick's legendary film 2001: A Space Odyssey could well be interpreted as a cultural critique of the scientific self-understanding of progressivist narratives of human development. John Krige (Atlanta) took Europe's guarrels with the United States regarding technological cooperation as the marker of more profound shifts in the United States' global position. The breach of the American monopoly on access to space caused by the development of the European Ariane launch vehicle series, Krige argued, should be regarded a historical turning point. Further detailed readings of historical contexts of the United States were provided by Matthew H. Hersch (Philadelphia), Neil M. Maher (Newark, New Jersey), and Peter J. Westwick (Los Angeles) in their complementary accounts of U.S. domestic politics. In the end, Debbora Battaglia (South Hadley, Massachusetts) neatly synthesized the discussion regarding the periodization of the 1970s when she urged that instead of looking toward what appeared as a period of confusion or transition, we should rather pay heed to the "interdiscursive density" resulting from diverging discourses that "intersect in the idea of space."

In addition to engaging with the limits of periodization, participants also transcended limits when it came to the range of disciplines. Investigations of large-scale space science projects and their political implications were combined with questions regarding the cultural imagination of, as well as the search for, meaning in space. Andrew Jenks (Long Beach, California) termed this bridging of the division between science research and sociocultural subjects the "techie-fuzzy dialogue."

Indeed, historians of science, scientists, and representatives of space research institutions were joined by cultural theorists, literary studies scholars, and design researchers in what emerged as a veritable crucible of interdisciplinary exchange. Conceptual innovations in the field of the history of science were proposed in a joint presentation by Lisa Messeri (Philadelphia) and Janet Vertesi (Princeton), in which they identified the two "greatest missions never flown," the Mars Sample Return and the Terrestrial Planet Finder, and argued that these should be evaluated in their capacity to shape scientific communities as well as technological

³ Konrad H. Jarausch, ed., *Das Ende der Zuversicht: Die siebziger Jahre als Geschichte* (Göttingen, Germany: Vandenhoeck & Ruprecht, 2008); Niall Ferguson et al. (eds.), *The Shock of the Global: The 1970s in Perspective* (Cambridge, MA: Belknap Press, 2010); Anselm Doering-Manteuffel/Lutz Raphael, *Nach dem Boom: Perspektiven auf die Zeitgeschichte seit 1970* (Göttingen, Germany: Vandenhoeck & Ruprecht, 2008).

Berlin Symposium on Outer Space and the End of Utopia in the 1970s (continued)

developments. Regina Peldszus (London) explored astroculture's filmic expressions; Florian Kläger (Münster) interpreted cosmological metaphors in 1970s novels as a literary topos for sense-making and self-reflexivity; and Christina Vatsella (Paris) discussed satellite art projects as they created a sense of global immediacy and collective identity in a politically divided world. A more exotic expression of astroculture surprised with its familiarity when Thore Bjørnvig (Copenhagen) presented his research on the design of LEGO's space theme series. Also, the general economic development from generous national budgets for big science until the 1960s, through economic crisis in the 1970s, to the subsequent commercialization of spaceflight that would eventually result in space tourism in the early 21st century, crystallized in a number of talks. The broad range of disciplines present at the conference was underscored by Agnes Meyer-Brandis's (Berlin) most intriguing account of the raising and training of "Moon geese" inspired by Francis Godwin.

The discussion of geopolitical limits, the limits between nations and power blocs as well as the limits between Earth and outer space, was the most avid, if also the most speculative. The Cold War context appeared to privilege clear geopolitical definitions resulting from the binary opposition of the two superpowers, but this assumption was soon complicated. Andrew Jenks's talk about the Association for Space Explorers as they attempted to create a terrain for cosmopolitanism in the midst of competing superpowers highlighted the intricate relations between geopolitical borders, spacefaring, and the transcendence of limits. Also, the geopolitical boundaries of Earth and outer space were explored, especially regarding the conquest of space and historic visions of space colonization that were fuelled by the economic crisis and the environmental concerns of the period. Gerard O'Neill's visions of outposts in outer space were outlined by Gonzalo Munévar (Southfield, Michigan), as well as W. Patrick McCray (Santa Barbara, California). Especially telling as to his historic context was O'Neill's concern that the Earth's human population had used up most resources and done much environmental damage in the process, which led him to conclude that space colonization was a necessary consequence. To an extent, Luca Follis (Lancaster, U.K.) addressed colonial thinking, too, in his discussion of the legal problematic of "sovereigns without subjects." Follis's analysis resonated with Philippe Ailleris's (Noordwijk, Netherlands) investigation into the history of serious public contemplation of the existence of UFOs and extraterrestrial life, a debate that climaxed throughout the 1970s, when attempts were made to communicate with the as yet unknown exobiological species, but was then abandoned. This ultimate rejection of other than anthropocentric explanatory models of outer space was underscored by David A. Kirby (Manchester, U.K.) when he concluded that "from a human perspective, there is no outer space; there are just the spaces that humans inhabit." Even when leaving Earth's orbit, whether in reality or imagination, people were confronted with their inability to escape human subjectivity.

All in all, it was a most engaging conference that highlighted the importance as well as the fruitfulness of interdisciplinary research regarding the history of space exploration, extraterrestrial life, and astroculture. The sense of the excitement

generated by the exploration of new fields at the edge of traditional disciplines is probably the most characteristic feature of this emergent research area. Geppert announced that there would be a third conference of similar scale in 2014.

If outer space remained the place for projections and visions of the future throughout the 1970s, the projections were more Earth-related, the visions more shortterm. Instead of an alternative to Earth, outer space developed into part of the solution to the more pressing challenges that living on Earth brought with itself, such as the prospect of environmental catastrophe and new legal, geopolitical, and military strategies vis-à-vis changing national relations. Accordingly, cultural producers started to question progressivist narratives and Cold War dichotomy thinking and to explore the impact of technological advance on the human condition. Visions of encountering the alien other, be it extraterrestrials or different forms of exobiology, gave way to self-reflection mediated through cosmology, subversive artistic use of satellites, or explorations of human limits in outer space. Therefore, while the 1970s did not mark the end of space exploration and futurity, space enthusiasm and the spirit of national progress, or technological optimism and military prowess, the causal link between them was decidedly weakened, if not dissolved. This suspension was caused by the gradual realization, following successes in human spaceflight, that the future was neither in outer space nor in a different time; it was suddenly much closer, in the present, back on Earth.

A more comprehensive version of this article can be found at http://hsozkult.geschichte.hu-berlin.de/tagungsberichte/id=4303; for a detailed program, abstracts of all presentations, and biographical information on all speakers, please consult http://www.limits.geschkult.fu-berlin.de.

