Space Memoir as Literary Artifact: A Cross-Cultural Comparison of Soviet/Russian Cosmonaut and American Astronaut Memoirs

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October 2022

A dissertation submitted to McGill University in partial fulfillment of the requirements of the degree of Doctor of Philosophy.

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Abstract

Astronaut and cosmonaut life writing can be considered a niche sub-genre of contemporary life writing. Beginning with commemorative volumes containing first-hand accounts of early manned space missions and continuing with full-length autobiographical accounts of space farers' lives, these books continue to be published and read today both in the United States and Russia. Writing by space farers occupies a compelling intersection between individual memory, national interest, and pan-national cooperation. By comparing these memoirs and asking what role these texts play for the reading public, I aim to better understand the relationship between the individual selves created during the process of writing these memoirs and the larger state in which those individuals are embedded.

This dissertation is built upon a comparative analysis of two representative corpora of American astronaut and Soviet/Russian cosmonaut memoirs. The memoirs are treated both diachronically and synchronically. I examine major themes and the ways in which space farers describe themselves both as individuals and as representatives of the larger group of astronauts and cosmonauts and ultimately as citizens as the United States or the USSR and later the Russian Federation.

By comparing astronaut and cosmonaut memoirs over time, I trace shifting generic conventions for memoirs and suggest that the ways in which individuals create selves through writing are influenced by their relationship to the state. I examine the ways in which national memoir writing traditions have influenced these works and hypothesize that Russian and American memoirs of space travel are becoming increasingly similar as part of a transnational popular culture movement.

This dissertation examines memoirs that have previously not been given detailed scholarly attention as literary objects. The comparative methodology I utilize allows for a cross-cultural approach to understanding the role these memoirs play as cultural artifacts. In addition, I utilize digital literary textual analysis tools, in particular topic modeling, to better understand the trends present in these works over time.

Résumé

Les mémoires des astronautes et des cosmonautes peuvent être considérés comme un sous-genre de l'écriture autobiographique contemporaine. Des volumes commémoratifs contenant des récits directs des premiers vols spatiaux habités jusqu'aux récits autobiographiques complets de la vie des astronautes, ces livres continuent d'être publiés et lus aux États-Unis et en Russie. Les écrits des spationautes se situent à un carrefour fascinant entre la mémoire individuelle, l'intérêt national et la coopération pan-nationale. En comparant ces mémoires et en demandant quel rôle ces textes jouent pour le public, je cherche à mieux comprendre la relation entre le soi individuel créé au cours du processus d'écriture de ces mémoires et l'état plus-grand dans lequel ces individus sont intégrés.

Cette thèse est construite sur une analyse comparative de deux corpus représentatifs des mémoires d'astronautes américains et des cosmonautes soviétiques/russes. Les mémoires sont traités à la fois d'une manière diachronique et synchrone. J'examine les thèmes majeurs et la manière dont les voyageurs de l'espace se décrivent à la fois en tant qu'individus, en tant que représentants du groupe plus grand des astronautes et les cosmonautes, et finalement en tant que citoyens des États-Unis ou de l'URSS et plus tard de la Fédération de Russie.

En comparant les mémoires des astronautes et des cosmonautes au fil du temps, je retrace l'évolution des conventions génériques des mémoires et je suggère que la manière dont les individus créent leur identité par l'écriture est influencée par leur relation avec l'état. J'examine la manière dont les traditions nationales d'écriture de mémoires ont influencé ces travaux et j'émets l'hypothèse que les mémoires russes et américains sur les voyages spatiaux deviennent de plus en plus similaires dans le cadre d'un mouvement transnational de culture populaire.

Cette dissertation examine les mémoires qui n'ont pas encore fait l'objet d'une attention scientifique détaillée en tant qu'objets littéraires. La méthodologie comparative que j'utilise permet une approche inter-culturelle pour comprendre le rôle que ces mémoires jouent en tant qu'artefacts culturels. En outre, j'utilise des outils d'analyse textuelle littéraire numérique, en particulier la modélisation des thèmes, pour mieux comprendre les tendances présentées dans ces œuvres au fil du temps.

Note on Translation and Transliteration

All translations from Russian to English are my own unless noted otherwise. I have followed the Library of Congress method of transliteration. I have not included diacritic marks except for ë for the Russian letter ë. I have also used commonly accepted transliterations for names and terms that are recognizable in the English language. These include Yuri Gagarin (not Iurii), Salyut (not Saliut), Soyuz (not Soiuz), Gorky (not Gorkii), and Lunacharsky (not Lunacharskii).

Acknowledgments

I am deeply grateful for the support of my PhD supervisors Prof. Laura Beraha and Prof. Cecily Raynor for their guidance, comments, and enthusiasm for my project. Prof. Beraha was an invaluable support to me as I developed the central argument in my dissertation, providing insightful comments that helped me deepen my understanding and clarify my thinking. She was also instrumental in completing the final edits of my dissertation. Prof. Raynor provided crucial insight into digital humanities methods and helped me create meaningful visualizations of the topic modeling sections of this dissertation.

I would also like to extend my sincere thanks to Prof. Stéfan Sinclair for his initial support in helping me develop my thesis project and his insistence that I begin working on my dissertation early in my PhD. I would also like to thank Prof. Geoffrey Rockwell for supporting me with advice about how to balance family and academia.

I would like to acknowledge the Fonds de recherche du Québec for their financial support. I would also like to thank Sara Parker for her assistance with editing my French language abstract.

Many thanks to my family for their excitement for my project and support in the form of popcorn and cupcakes. Special thanks go to my husband Aaron for his unwavering support of me during my PhD and his willingness to read drafts of my dissertation, discuss ideas with me, and push me to keep writing. Finally, many thanks to my son Eric for giving me a firm deadline to finish my PhD and reminding me of the most important things in life.

Contribution to Original Knowledge

This dissertation examines a body of writing, astronaut and cosmonaut life writing, that has received little scholarly attention, particularly in the field of literary studies. While astronaut memoirs have been analyzed by historians and social scientists, to date there has been no large-scale study of this body of literature. Furthermore, there has been little comparative analysis that considers both astronaut and cosmonaut memoirs. My approach brings two little-studied corpora into dialogue with each other to examine the role memoirs published by veterans of both the Soviet/Russian and American space programs play as cultural artifacts.

My methodological approach combines close and distant reading and utilizes digital textual analysis to make sense of my corpora. Topic modeling is gaining popularity in the humanities but remains an under-utilized technique for exploring larger data sets. My decision to combine close and distant reading strategies suggests that both kinds of analysis can be used in tandem to make conclusions that close reading or digital textual analysis in isolation cannot.

Contribution of Authors

Kaylin Land is the sole author of all chapters of this dissertation.

List of Figures and Tables

Introduction

Astronaut Terry Virt's recently published memoir *How to Astronaut* (2020) opens with a section entitled "Not Your Father's Astronaut Book: But He'll Like It Too!" Virts's memoir of his time as a NASA astronaut onboard the International Space Station openly acknowledges its place in a long line of so-called "astronaut books." Beginning in the 1960s with commemorative volumes containing first-hand accounts of early manned space missions and continuing with full-length autobiographical accounts of astronauts' lives and how they found themselves in space, these astronaut books continue to be published, sold, and read. Similar volumes have been published and consumed just as enthusiastically in Russia. Indeed, an entire publishing house, *Kosmoskop,* founded in 2003, is devoted to space writing and regularly publishes popular science, biography, and memoirs of cosmonauts. Writing by astronauts and cosmonauts occupies a compelling intersection between individual memory, national interest, and international cooperation. By comparing memoirs written by astronauts and cosmonauts and asking what role these texts play for the reading public, I aim to better understand the relationship between the individual selves created during the process of writing these memoirs and the larger states in which those individuals are embedded.

While memoirs written by astronauts and cosmonauts have been considered by historians, sociologists, and psychologists, scholarship has largely ignored the cultural relevance of these texts. While initially these memoirs may seem to occupy a niche position in the book publishing market, their enduring popularity and prevalence over time suggests that these works hold cultural value for readers. Why do people read space memoirs? The obvious answer is that space still captures our popular imagination. Readers want to know what it is like "up there" and read the memoirs as they would any armchair travel memoir. However, space is not like any

destination on Earth and readers looking for detailed descriptions of landscapes, cultures, and people will obviously be disappointed. And yet, these volumes continue to be published and consumed by the public. Space memoirs are about larger stories than an individual journey and must be read within a larger, national context. Astronauts and cosmonauts are not ordinary citizens. They are perceived both within American and Russian society as exemplars who have achieved something extraordinary. Thus, these memoirs are stories both of individual success and national triumph. How the authors of these works navigate the tension between the individual and the collective is at the centre of this dissertation.

Autobiography as a genre has long been associated with the creation of the self. The act of writing about oneself becomes a modality for creating the self. Early examples of the genre frequently cited in scholarship on autobiography including Augustine's Confessions (circa 397-400), Rousseau's *The Confessions* (1790), and Franklin's *Memoirs of the Private Life of Benjamin Franklin, Written by Himself* (circa 1771-1790) are all given as examples of the connection between writing about oneself and the development of the conception of the individual in the West. This understanding of autobiography is of course connected to specific historical and cultural roots and should be recognized as such. In the Russian context, the earliest example of autobiography comes from hagiography. The saint's life of Avvakum (*Zhitie protopopa Avvakuma* 1672-1675), written, counter to tradition, in the first-person, suggests a connection between Russian Orthodoxy and the development of self in the Russian context. However, later examples of Russian autobiography were largely influenced by Western examples including the archetypical works cited above. Both astronaut and cosmonaut memoirs can thus trace their lineage to this Western tradition of self-making.

Of course, the process of creating oneself through writing is not straightforward and one of the prominent questions in autobiography studies is the process through which selves are created in the postmodern context and the ways in which society, culture, and history impact this process of self-creation. In the Soviet and post-Soviet context, scholarship has emerged examining the role of the state on individual experience in autobiography and life writing.[1] My dissertation asks to what extent astronauts and cosmonauts can create their own version of themselves when the public perception of space farers is so firmly tied to aspirational cultural values like bravery, heroism, and tenacity. In addition, I examine the role of astronauts and cosmonauts as national figures whose identity is firmly tied to their citizenship and the ways in which their stories are written and read as examples of successful national heroes. The tension between the individual self and the larger collective story of national success in space exploration is thus central to the examination of the memoirs considered in this dissertation.

This dissertation is built upon a comparative analysis of two representative corpora of American astronaut and Soviet/Russian cosmonaut memoirs. A detailed explanation of the corpora is given in the methodology section below. I have chosen to treat the memoirs both diachronically and synchronically, comparing themes and trends as they emerge over time from the publication of the first memoirs in the 1960s and continuing to the present. For each period, I examine major themes and the ways in which space farers describe themselves both as individuals and as representatives of the larger group of astronauts and cosmonauts and ultimately as citizens of the United States or the USSR and later the Russian Federation.

[1] See Paperno, Irina. *Stories of the Soviet Experience: Memoirs, Diaries and Dreams*. Cornell University Press, 2009.

Chapter One deals with early memoirs of space exploration. These memoirs were published shortly after the first manned space missions by government-sponsored or owned publishing houses or by mass media corporations. The involvement of the actual astronauts and cosmonauts in the creation of these texts was limited; the texts were highly edited and censored and written by ghost writers. The created self that emerges in these texts is consistent with the idealized image of the astronaut and cosmonaut in 1950s and 1960s United States and the Soviet Union. Both countries utilized the image of the astronaut and cosmonaut as an ideal citizen. In the Soviet Union, this image was formally connected with the New Soviet Man. In the American context, the astronaut was lauded as a hero with specifically "American" traits like bravery, strength, and perseverance.

In both the American and Soviet contexts, astronauts and cosmonauts were presented to the public both as exemplars of a category of selfhood to which citizens should aspire and as individuals with unique traits. The tension between perceiving the space farers as individuals and as part of a larger group is present in the works published in the early period of manned space exploration. Perhaps surprisingly, early discourse on the memoirs of the Mercury Seven, the first group of American astronauts chosen in 1959, treat the astronauts largely as a group and less as individuals. It is in the Soviet context of state-sponsored memoirs that we find idolization of individual Yuri Gagarin as the first man in space. In this chapter I examine the interaction between the individual and the group in early space memoirs. I argue that although individual traits of the space farers are described in the texts, the self that emerges is still a two-dimensional representation of an ideal type of person whose identity is strongly linked with national ideals.

The early space memoirs were instrumental in creating a master narrative of space exploration in the USSR and the US. In both countries, human stories of the astronauts and

cosmonauts form a cornerstone of the mythical era of space exploration (as contrasted with later periods that saw space travel as more routine) that began in the 1950s and continued up to the height of the Space Race in the 1960s. In this chapter I explore the mechanisms used in early memoirs to create an enduring narrative of space exploration that is still alive in both the American and Russian contexts. I utilize the concept of the master narrative from Slava Gerovitch's research on memory and the Soviet space program and suggest that this concept can be similarly applied in the American context. I also examine the genre conventions applied to early memoirs, asking how closely early Soviet memoirs fit into the socialist realist paradigm and suggesting that American memoirs make use of some of the same tropes found in socialist realism.[2]

Chapter Two focuses on the first group of so-called "tell-all" memoirs that offer a retrospective of the early manned space flight missions. These memoirs were first published in the American context after the tenth anniversary of the Apollo missions when open discussion of the lived experience of the early astronauts was more acceptable. In the Soviet context, tell-all memoirs could not be published until the beginning of glasnost (a period of openness beginning in 1985 initiated by Mikhail Gorbachev) at the end of the 1980s. The memoirs published during this period are different from their predecessors. The presence of the individual author is more strongly felt in personal stories and descriptions of lived experiences and the prevailing motivation for writing these memoirs is to correct or tweak the master narrative of the early manned space missions. Many of the memoirs claim to offer something that was previously not accessible to the public—the astronaut or cosmonaut's thoughts and emotions. For example, Michael Collins suggests in the introduction to his memoir that he will address how space flight

[2] Socialist realism was the official aesthetic ideology of the Soviet period. Elements of socialist realism will be discussed in greater detail in Chapter One.

affected those who were involved on an emotional level and describes his own feelings in connection with the space program (xv).

The popularity of these more individualized stories suggests a changing attitude in the way these memoirs engage with the master narrative of space exploration. Memoirs from this period emphasize the hidden or unspoken elements of the space programs and offer the public an insider's view of the space programs in which the individual, not the state, is the main actor. This is particularly relevant in the cosmonaut memoirs of the late Soviet glasnost period that directly challenge the official Soviet version of space history and suggest that elements of the space program were hidden from the public.

Chapter Three discusses memoirs written during the period of international cooperation in space beginning with the Apollo-Soyuz Test Project (1975) and continuing to the present day. I focus specifically on a subset of memoirs published in the 1980s and 1990s that addresses the changing goals of space travel in the context of international cooperation. Authors of these memoirs express the desire to find greater meaning in space travel than success for the nation or individual achievement and focus on a global perspective. I call this global focus pan-national from its usage in the social sciences meaning nationalism that aims to overcome state boundaries in the goal of uniting people for a higher purpose. In this case, pan-nationalism extends across state boundaries entirely and astronauts and cosmonauts write about uniting all of humanity regardless of national affiliation.

This chapter addresses the so-called overview effect, a term coined by Frank White in his monograph *The Overview Effect: Space Exploration and Human Evolution* (1987) to describe the change in perspective and philosophy experienced by astronauts who have seen the Earth from space orbit. Memoirs from this period overtly address the idea of the overview effect by

attempting to put into words a space farer's changed understanding of the Earth after going to space. For some astronauts and cosmonauts, this change is expressed in religious terms and reflect the space farer's involvement with organized religion. For others, the discussion is not overtly religious but metaphysical, focusing on man's place in the universe and asking questions about what space travel means to humanity. Either way, the focus shifts in these memoirs from the national to the pan-national as astronauts and cosmonauts describe viewing a world without political boundaries.

These memoirs were written and published in a political environment that questioned the opportunity costs of space exploration and shifted the focus of space programs from exploring the "new frontier" to living in Earth's orbit aboard space stations. Funding was prioritized for projects that focused on "good stewardship of the Earth's resources" and justifications for space exploration increasingly focused on the benefit of scientific experimentation in space for people living on Earth. The memoirs in this section reflect this changing atmosphere as well as the overall anxiety about the continuation of space exploration. I suggest that these memoirs attempt to find greater purpose for spaceflight partly as a response to declining public and political support for space programs.

Chapter Four focuses on the most recent memoirs published as part of the memoir boom beginning in the late 1990s and continuing to the present. I question why such memoirs of space flight continue to be published even as space travel is becoming more and more routine. I look at the ways individual authors differentiate their stories from those by other astronauts or cosmonauts and the ways in which these memoirs follow similar structural patterns and thematic tropes. I also ask how these memoirs address earlier narratives of space exploration. I argue that the memoirs written in the last twenty years have become increasingly formulaic, usually

attempting to answer frequently asked questions the public has about space (for example "How do you go to the bathroom in space?") while telling the astronaut or cosmonaut's life story as a linear narrative of personal success.

Many contemporary memoirs offer up the astronaut or cosmonaut as an exemplar to which ordinary citizens should aspire. However, it is not the heroic or exceptional qualities of space farers that these memoirs celebrate. Rather, they advocate for individual qualities like self-reliance and suggest it is individual agency that leads to success rather than support from the state. In this way, these memoirs can be read as part of a larger self-help trend that has been tied to the memoir boom by scholars like Megan Brown. These memoirs reflect a neoliberal understanding of the role of the individual citizen vis-à-vis the modern state.

By comparing astronaut and cosmonaut memoirs over time, I trace shifting generic conventions for memoirs and suggest that the ways in which individuals create selves through writing are influenced by their relationship to the state. I examine the ways in which national memoir writing traditions have influenced these works and hypothesize that Russian and American memoirs of space travel are becoming increasingly similar as part of a transnational popular culture movement.

Historical Overview

To conceptualize memoirs of space travel in their historical context, I provide a brief overview of the space programs in the United States and the USSR and Russia focused on manned space flight missions. This overview is not meant to be comprehensive but rather to demonstrate the ways in which both space programs changed over time according to the political, financial, and public support they received. This overview is also meant to highlight the

interdependence of both space programs on each other and the ways in which the Space Race and Cold War politics deeply influenced the development of manned space exploration.

The launch of the first Soviet Sputnik satellite in 1957 is generally recognized as the beginning of the Space Race between the USSR and the United States. Both the United States and the USSR had pledged to develop artificial satellites for Earth orbit. The launch of Sputnik-1 on October 4, 1957 led to immediate reciprocal action by the United States. President Eisenhower signed the National Aeronautics and Space Act in 1958 formally establishing the National Aeronautics and Space Administration (NASA). From 1958 the United States space program was entirely channeled through NASA, a national organization with a centralized structure and funded by the United States government.

In contrast, the Soviet space program, despite outward appearances, was never centralized: "Barring a few isolated proposals, there was, in fact, no Soviet space program in 1957" (Siddiqi, *Sputnik and the Soviet Space Challenge* 171). Instead, a series of design bureaus competed with their own programs, each led by a head or chief engineer. The most well-known of these design bureaus was the OKB-1 (opytno-konstruktorskoe biuro or experimental design bureau) led by Sergei Korolev. It was this design bureau that created the first intercontinental ballistic missile (ICBM) in 1957.

Although the Soviet program was not centralized, efforts to move towards manned space flight began formally as early as July 1951 when vertical launches were made with dogs onboard rockets. Siddiqi recognizes this project as "the first concrete step in a larger thematic direction of piloted space exploration" (Siddiqi, *Sputnik* 180). However, as late as 1959 there was no "macro-level policy or priority on the Soviet space program" and the major focus was still on ballistic missile development (205). Indeed, during this time a series of chief engineers including Korolev

were deeply concerned about the lack of a central policy and sent letters to Soviet leadership advocating for the creation of "management and industrial infrastructure to exclusively support a space program" (205). It was Korolev who persuaded Soviet Premier Nikita Khrushchev to launch a satellite after the United States announced its intention to do so. After the success of Sputnik, Korolev was charged with producing spacecraft for manned space flight.

From 1958-1960 a series of proposals emerged in the USSR aiming to influence the direction of the space program and gradually it "began to emerge as a separate field ready for exploitation and support" (Siddiqi, *Sputnik* 243). As was the case in the United States, Soviet development of the space program was tied to the military and the first cosmonauts chosen for manned space flight were selected from the ranks of the military. The United States chose seven aviators from test pilot backgrounds in the Navy, Air Force and Marines. A team of twenty military test pilots was chosen for the Soviet group of cosmonauts and twelve eventually made it to the final round of testing for inclusion in the program (247).

The US manned spaceflight program formally began in 1958 with the creation of the Space Task Group tasked specifically with managing human spaceflight programs. The late 1950s was a period of competition to see which power would launch the first man into space orbit. As T.A. Heppenheimer puts it, "The question…became one of shooting an astronaut into space in the quickest possible way" (156). On April 12, 1961, Yuri Gagarin became the first man in space onboard the Vostok spacecraft. The American reaction was one of dismay and President Kennedy reportedly met with his advisors two days later claiming that the United States might never catch up but vowing to find a goal American astronauts could claim as a first by landing on the Moon (193). The development of Projects Gemini and Apollo was the result of this

conversation and on May 25, 1961, Kennedy asked Congress to commit federal funding and support to a program to land a man on the Moon by the end of the 1960s.

The Apollo program is generally recognized as the zenith of American power in space and is still widely celebrated as one of the United States' greatest victories. The Apollo 8 program flew astronauts around the Moon in December 1968, followed by the historic Moon landing of Apollo 11 in July 1969. Meanwhile, the Soviet Union continued to build on its successes, sending additional cosmonauts into flight including the first female cosmonaut Valentina Tereshkova in 1963. The Soviet Union was also actively pursuing the Moon shot as well although the death of Korolev in 1966 dealt a blow to the program. A full examination of the race to the Moon is impossible to provide in detail here but it is necessary to understand the high level of involvement by both the United States and Soviet governments in both projects.

After losing the race to the Moon, the Soviet Union deployed a number of robotic spacecrafts to the surface of the Moon (Ellis 54). This shift towards remote exploration of space challenged the United States to respond with their own goals in the post-Apollo era. In 1969 the President's Space Task Group was convened to determine future directions for American space exploration (55). The group advocated for "further lunar missions, a 100-man space station, and a fully reusable space shuttle to build the logistical basis for eventual crewed missions to Mars" (55). The Soviet space program shifted its focus towards orbiting space stations that would host rotating crews and eventually allow for travel to other planets (55).

President Nixon took NASA in a new direction as part of his efforts to come to a détente with the Soviet Union. A series of cooperative projects in space between the United States and the USSR were discussed and delegates between the two countries met in both Moscow and Washington between 1970 and 1972 (Ellis 62). The Apollo-Soyuz Test Project came out of these

cooperative meetings when the Apollo CSM (Command Service Module) and Soyuz spacecraft rendezvoused and docked in Earth orbit in July 1975. This period of cooperation allowed for more interaction between American and Soviet space farers with visits by both parties to each other's respective countries.

1975-1981 was a period of hiatus for NASA. However, it was a highly successful time for the Soviet space program with a series of crewed missions to the Salyut 5 and Salyut 6 space stations (Ellis 104). These missions allowed for the development of robotic docking capsules that delivered supplies to the space stations and established the infrastructure needed to rotate personnel. Further cooperation between the US and USSR deteriorated during President Ford and President Carter's tenures in office and fears of the Soviet Union's ascendancy in space were re-ignited (105).

The United States began developing its Space Shuttle program in 1972 as a revolutionary technology that would open space travel for "new industries and new communities high above the Earth's surface" (Woods 27). The first manned Space Shuttle launch of Columbia took place on April 12, 1981 (the twentieth anniversary of Gagarin's space flight). Over the course of the Space Shuttle program (1981-2011), 135 missions were flown. Columbia and Challenger both suffered accidents in which the entire crew was killed. The Challenger disaster took place in January 1986 and was closely followed by the launch of the new Soviet space station Mir, an event that "prompted widespread lamentation about American space leadership" (Ellis 175).

The development of the Energiia-Buran rocket and shuttle program in the USSR in the 1980s allowed for the servicing of the Mir space shuttle. Energiia launched in 1987 and was at the time "the most powerful rocket in the world" (Harvey 6). During this time, the space station Mir continued to orbit and sponsor missions as long as six months while the Space Shuttle

missions lasted only a few weeks at a time (6). However, things shifted with the introduction of Gorbachev's glasnost campaign. After a Mars probe (Phobos 2) was lost in 1989, scientists openly questioned the management of the program (something that would have been inconceivable previously) and "demanded that the truth be brought out into the open" (6). During the 1989 elections, politicians called for cutting the space program budget and in April 1990 the Soviet government cut the space budget dramatically (6). The end of the 1980s saw the Soviet space program suffer significant setbacks and fall into disarray (Ellis 211).

The dissolution of the Soviet Union only added to the downfall of the Soviet space program. In 1993, the Energiia-Buran program was cancelled, and the space program lost thirty percent of its workforce that year (Harvey 8). The space program continued to suffer throughout the 1990s with the collapse of the ruble. Soviet space memorabilia were sold to foreign private collectors throughout the 1990s in an attempt to raise funds (Siddiqi *Sputnik* 103). Russia turned to commercial space tourism to fund its space program and flew astronauts from the European Space Agency to the Mir space station for between twelve and forty million US dollars per mission (Harvey 14).

The Russian Space Agency (Rosaviakosmos/Roskosmos) was created in April 1992 and "functioned as a rough counterpart to NASA, both a coordinator of space programs and procurer of technical systems" (Krige et al. 159). This was the first time the Soviet Union or Russia had an organization dedicated solely to the space program entirely independent of the military (159). In 1992, President Bush suggested a collaborative mission between the United States and Russia to exchange an astronaut with a cosmonaut on the Mir and Shuttle respectively (159). The so-called Shuttle-Mir cooperation was the beginning of a period of more intense collaboration between Russia and the US and led to the International Space Station Program (165). The United

States and Russia agreed to collaborate on the construction of the International Space Station in 1993 and Russian space companies (now operating independently) began to collaborate with American and European companies (Harvey 16). By 2000 Russia was again launching more satellites than any other country (16).

The 2000s and 2010s represent a period of cooperation between the United States and Russia on the International Space Station. The ISS was launched in 1998 and has been continuously inhabited by space farers from a variety of national backgrounds since 2000. The United States and Russia are the two biggest contributors to the ISS. The current goals of the ISS from NASA's perspective include "providing benefits to those on Earth, advancing exploration of space beyond Low Earth Orbit (LEO), developing and maintaining international partnerships, and enabling a commercial demand-driven market in LEO" (Ruttley et al. 1160). Roskosmos summarizes the goals of the ISS as follows: "The ISS project brings together resources, scientific and technological achievements and the experience of Western countries and Russia, facilitates the development of national economies and the effective use of the cosmos in the interests of international community and mutual understanding between governments" (*Mezhdunarodnaia Kosmicheskaia Stantsiia [The International Space Station]*).[3] Currently, 155 astronauts have visited the ISS from the United States and 52 Russian cosmonauts have spent time on the ISS.[4]

Corpora Overview

I consider two corpora in this dissertation—a corpus of American astronaut memoirs and a corpus of Russian cosmonaut memoirs. Works were chosen based on their authorship. Any

[3] «Проект МКС объединяет ресурсы, научно-технические достижения и опыт западных стран и России, способствует развитию национальных экономик и эффективному использованию космоса в интересах мирового сообщества, взаимопониманию государств.»

[4] The relationship between the United States and Russia as concerns cooperation in space has changed since the invasion by Russia of Ukraine in February 2022. Future cooperation in space between the US and Russia is currently in question.

book-length, first-person life writing composed by a former or current space farer who participated in either the American space program (NASA) or the Soviet and later Russian space program was considered for inclusion. Only published works were considered (excluding self-published works). Chosen works were intended for a general, non-specialist audience with no assumed knowledge of space travel, astronomy, or aeronautics. While there are some works written by astronauts and cosmonauts for academic audiences (for example dissertations), these works were not considered as they are not life writing.

The American corpus contains works ranging temporally from *We Seven: By the Astronauts Themselves* (1962) to *How to Astronaut: An Insider's Guide to Leaving Planet Earth* (2020). In total, I have curated forty-one examples of astronaut life writing. The majority are memoirs written by an individual astronaut, either by themselves or with the aid of a co-author (also known as a ghost writer). Publishers range from academic presses (including the University of Nebraska, Purdue University Press, and the MIT Press), popular science publishers (National Geographic and Smithsonian Books), major publishing houses (Simon and Schuster, McGraw-Hill, and Houghton Mifflin Harcourt), and minor publishing houses (Piñata Books, Your Space Press). The American astronaut corpus includes works written by astronauts who were part of the Mercury, Gemini, Apollo, Apollo-Soyuz, Mir Space Station, Space Shuttle, and International Space Station missions. The intended audience of most of the memoirs is the general public with an interest in space travel.

The second corpus used for comparison consists of Russian cosmonaut memoirs. Temporally similar to the American corpus, it spans from *Golubaia moia planeta* [Blue is My Planet] (1963) to *Kosmos i MKS: Kak vse ustroeno na samom dele* [Space and the ISS: How It's All Actually Organized] (2019). The corpus is made up of 28 memoirs written by members of

the Soviet or Russian space programs.[5] Prior to 1991, the memoirs were published by state publishing houses including Krasnaia zvezda, Pravda, and Molodaia gvardiia. Post 1991, publishers include privately owned and operated AST, Veche, and Logos. The authors include cosmonauts who were part of the early manned space flights on Soyuz rockets, longer missions on the Salyut space stations, members of the Apollo-Soyuz mission, the Mir Space Station and the International Space Station. The intended audience is specified as a wide circle of readers (для широкого круга читателей) or sometimes more specifically for those interested in in the history of cosmonautics and rocket technology (for example: "This book will be of interest to all lovers of cosmonautic history and rocket technology.")[6]

The Russian corpus can be divided temporally into two distinct sections: works written beginning in the 1960s beginning with Yuri Gagarin's space flight and continuing to glasnost (beginning in 1985) and the subsequent dissolution of the Soviet Union and works published after 1991 in the Russian Federation. These temporal groupings reflect completely different approaches to writing and publishing under two different political systems. Briefly, the Soviet Union's publishing industry as founded in the 1930s was state-run and "based on planned centralized publishing and distribution according to long-term programmes" (Lovell and Menzel 43). The number of books published was motivated by state interests, not reader demand (43). Furthermore, the main goal of the publishing policy was creating and educating "a homogenized society through the controlled publication of a clearly shaped canon of literature" (44). This system remained largely unchanged until the 1980s. Indeed, until the 1980s there were only approximately 100 state publishing houses in the entire Soviet Union (42). It is important to

[5] The discrepancy between the number of titles in the English and Russian corpora is largely indicative of difficulty obtaining Russian titles due to the COVID-19 pandemic and library closures.
[6] «Книга будет интересна всем любителям истории космонавтики и ракетной техники.»

briefly note the prominence of underground dissident writing and publishing that took place in the Soviet Union (part of a longer tradition of underground writing in the Russian context) through *samizdat* and *tamizdat*. As Beth Holmgren writes, memoirists like Evgeniia Ginzburg and Nadezhda Mandelstam circulated their work through underground publishing in the USSR (*samizdat*) and had their works printed abroad (*tamizdat*) (xxiv). Their memoirs challenged the official press and anticipated the reading of memoirs as "historical 'truth'" that was only available through "private, officially illicit connections and articulated by a personal voice uncompromised by official allegiance" (xxv). Many of the cosmonaut memoirs published after glasnost and perestroika display similar relationships to history and the state; however, all the memoirs in my analysis were published by commercial publishing houses and thus are distinct from the underground memoirs of the post-Stalin Thaw and Brezhnev stagnation eras. Indeed, the economic ties between author and publisher in the post-1991 context plays a large role in my understanding of the motivations for writing and publishing cosmonaut memoirs.

With the arrival of glasnost, the narrative began to change as cosmonauts and engineers were able to write their accounts of what occurred during the Soviet space program and challenge the official narrative.[7] This change took place in the larger context of rewriting history, a phenomenon that saw the publication of texts that directly or indirectly challenged the Soviet narrative of history. This phenomenon will be discussed in more detail in Chapter Two but briefly the relationship between the Communist Party and history changed dramatically as evidence and texts that went against *partiinost'* ("party-mindedness or writing that placed 'redness' before competence") became acceptable and publishable (Banerji 93).The late 1980s were a period of challenges to the *partiinost'* version of history as cosmonauts joined other

[7] This dissertation focuses on accounts written by cosmonauts but I include engineers because particularly in the Soviet context engineers were a large part of the rewriting of history that occurred in the context of glasnost.

writers and historians and came out with books that openly and actively challenged the understanding the Soviet public had of the space program. The cosmonauts, as individuals who had "been there" and seen the space program firsthand, were viewed as more reliable sources of the "truth" than the official Party accounts that had come before them.

Irina Paperno writes about the "massive appearance of personal documents at the end of the Soviet epoch" and suggests that such documents reflected a larger trend that gave Soviet citizens the ability to claim a "personal, individual, or private perspective on a historical epoch" (1, 9). One category Paperno recognizes as part of this trend is celebrity memoirs, driven either by public demand or publisher's commissions (1). Although Paperno does not mention cosmonaut memoirs explicitly, they are certainly part of this trend as Soviet cosmonauts, like American astronauts, were largely public figures about whom there was a strong public desire to know more. Thus, the cosmonaut memoirs published during glasnost and in the early post-Soviet years reflect public desire for information about the "truth" of the Soviet space program as it became increasingly clear that the official narrative had left out many details.

The entirely restructured publishing system after the collapse of the Soviet Union in 1991 quickly changed the landscape for cosmonaut memoirs. No longer circulated by state publishing houses, cosmonaut memoirs needed to be commercially successful and grab the attention of a changing reading public. As Menzel recognizes, after 1986 the quantity and types of literature read in the Soviet Union and later Russian Federation were changing: readers were increasingly interested in non-fiction titles, in particular advice books (50). New publishing houses were commercial operations and subject to the demands of readership. Publishing houses were increasingly interested in series of titles either written by a single author (like Boris Akunin) or centreed on a particular theme. We can see this trend at play in the cosmonaut memoirs

published in the post-Soviet period. For example, Aleksei Leonov's memoir entitled *Vremia pervykh: sud'ba moia—ia sam…* [Era of the Pioneers: My Fate I Myself…] (2017) is part of a larger series published by AST, one of Russia's leading commercial publishers, entitled Exclusive Biographies (Ekskliusivnye biografii) which includes Edvard Radzinskii's bestseller biography of Stalin.[8]

The most recent cosmonaut memoirs include titles written by younger cosmonauts who have spent most or all their careers in the Russian space program and are distanced from the Soviet space program. Many of these titles offer the reader a different kind of memoir than their predecessors. For example, Oleg Arter'ev's *Kosmos i MKS: Kak vse ustroenno na samom dele* [Space and the ISS: How it Actually Works] offers readers answers to practical questions like: How does one become an astronaut? What does the International Space Station look like from the inside? What do cosmonauts do in their free time? As we will see in the overview of the American corpus of astronaut memoirs, this structure mirrors similar titles written for an American audience. Similarly, Sergei Ryazanskii's *Mozhno li zabit' gvozd' v kosmose i drugie voprosy o kosmonavtike* [Can You Hammer a Nail in Space and Other Questions about Cosmonautics] (2019) offers answers to similar questions like "Is there internet on board the ISS?".

The Russian corpus therefore can be neatly divided into two parts based on the modes of production under which the works were written. However, as we will see later in this dissertation, this does not mean that there is necessarily a clean break between these two groups of texts or that the master narrative of space exploration is abandoned after 1991. Chapter Two

[8] The series title alludes to the series *Zhizn' zamechatel'nykh liudei* [The Lives of Remarkable People] popular during the Soviet era.

will examine in more detail the relationship between this narrative and the memory of the space program in the memoirs published during glasnost and after the collapse of the Soviet Union.

The American corpus does not have a temporal division analogous to that seen in the Soviet context, but we can still trace clear changes over time that reflect the evolving American space program. Certainly, memoirs published after the United States and the Soviet Union and later Russian Federation began cooperating in space show a different treatment of the relationship between the two countries and present a different picture of Cold War themes and the Space Race. The first American life writing account of the space program was published in 1962 and like early Soviet cosmonaut memoirs, was published by a news outlet, in this case by *Life* magazine as a standalone volume. In Chapter One, I compare early space memoirs from both the American and Soviet context and argue that both were instrumental in creating a master narrative of space exploration in both contexts.

Beginning in 1979, the tenth anniversary of the Apollo 11 lunar landing, a new type of American astronaut memoirs began to emerge. Hersch argues that 1979 represents a turning point for the American space program and marks a shift from a master narrative focused on astronauts as infallible heroes towards a more realistic understanding of astronauts as "imperfect human beings with an almost alien [other-worldly] work culture" (6). Hersch credits this change to "a string of articles and memoirs" that "cracked the door on tell-all space biography" as well as the publication of Tom Wolfe's book *The Right Stuff* (1979). Hersch includes Buzz Aldrin's *Return to Earth* (first published in 1973), Michael Collin's *Carrying the Fire* (1974) and Walter Cunningham's *All-American Boys: An Insider's Look at the US Space Program* (1977) as part of this trend.

In the early 1990s we begin to see restored interest in autobiographical titles written by Mercury and Apollo astronauts including *Deke! US Manned Space Flight* by Donald Slayton (1994), *Schirra's Space* by Walter Schirra (1995), and *John Glenn: A Memoir* (1999). These titles were published by larger publishing houses than earlier works and coincide with the beginnings of the memoir boom in the American context. Interestingly, during the 1990s we also see a series of titles discussing cooperation between the US and Russia, perhaps because of decreased tensions between the United States and the former Soviet Union after 1991. For example, Jerry Linenger's *Off the Planet: Surviving Five Perilous Months Aboard the Space Station Mir* (2000) and *Two Sides of the Moon: Our Story of the Cold War Space Race* co-written by Soviet cosmonaut Aleksei Leonov and astronaut David Scott (2001) both discuss joint projects between the two countries.

Tom Jones's *Sky Walking: An Astronaut's Memoir* (2006) is an excellent example of the ways in which astronaut memoirs were quickly integrated into the growing memoir boom and marketing to the reading public. During the 2000s more and more titles appeared that clearly align with characteristics of the memoir boom including titles that offer self-help advice or offer the experience of becoming an astronaut as a metaphor for finding one's purpose or dream in life.[9] Increasingly, these titles are tied to astronaut's roles as motivational speakers and are promoted at speaking engagements. Astronauts who have flown on the International Space Station have again become public personalities but increasingly represent themselves or are represented by agencies that build brands celebrating their ability to inspire others. For example, Mike Massimino, author of the best-selling *Spaceman: An Astronaut's Unlikely Journey to*

[9] See *Reaching for the Stars: The Inspiring Story of a Migrant Farmer Turned Astronaut* by José Fernandez (2012), *The Ordinary Spaceman: From Boyhood Dreams to Astronaut* by Anderson Clayton (2015), *No Dream is Too High: Life Lessons from a Man Who Walked on the Moon* (2016) by Buzz Aldrin.

Unlock the Secrets of the Universe (2016) offers speaking engagements in which he "leaves his audiences understanding the value of having passion for what you do, or perseverance in achieving a goal, of building a team to meet great challenges, and of creativity and innovation in problem solving" ("Speaker"). These trends will be further explored in Chapter Four.

Thus, like cosmonaut memoirs, astronaut memoirs have changed over time to reflect the evolving relationship between the state, space programs, and the individuals involved in those programs. In both cases, early works of life writing celebrated a master narrative of space travel and was less a reflection of individual experience than an expression of national pride and power. We can trace a parallel trend between the freedoms of glasnost and the emergence of "tell-all" astronaut life writing after the tenth anniversary of the Apollo missions in which space farer writing starts to challenge the master narrative of space travel. Finally, with the rise of the memoir boom, the focus shifts to the individual and their lived experience in space and the ways in which that experience can be used by readers for inspiration.

Literature Review

Definitions

This dissertation examines two corpora of firsthand accounts of space travel. In order to understand how these corpora fit into broader generic categories, I briefly examine the differences between the terms *life writing, autobiography*, and *memoir*, and their current usage in scholarship. Establishing working definitions for these categories will help situate the argument I make for the reading of the works in my corpora as dependent on the cultural conditions in which they were written and published. Particularly in Western society, autobiography has been linked with the development of the conception of the self and how that self interacts with larger institutions (Wang). I examine writing by astronauts and cosmonauts to understand how these individuals understand and create their selves in writing but also how their writing describes the relationship between the self and the state. Ultimately, I argue that we can trace changing understandings of the role of the individual and the state by identifying larger temporal trends in the writing published by astronauts and cosmonauts between the 1960s and the present day.

Life Writing: *Life writing* as a term comes from the eighteenth century and has always been a "more inclusive term" than autobiography and memoir and historically included both biography and autobiography. Thus Marlene Kadar provides the following definition: "Life Writing…is a less exclusive genre of personal kinds of writing that includes *both* biography and autobiography, but also the less 'objective', or more 'personal', genres such as letters and diaries" (196).[10] I utilize *life writing* as an umbrella term for the works in my corpora to include any kind of first-person account of the space program.

[10] Kadar suggests that instead of a generic definition of life writing, scholars move to a conception of life writing as a critical practice. This critical practice produces the following definition: "Life Writing comprises texts that are written by an author who does not continuously write about someone else, and who also does not pretend to be

Autobiography: *Autobiography* is notoriously difficult to define. Paul de Man claimed in 1979 that autobiography "empirically as well as theoretically…lends itself poorly to generic definitions" (Eakin viii). Similarly, Avram Fleishman (1983) rejected autobiography as a genre, claiming works belonging to this grouping contain no formal similarities nor are they uniform in their linguistic register and audience effect (viii). Nonetheless, the term *autobiography* is frequently used in literary studies and is, according to Smith and Watson, "the most commonly used term for life writing" (2). In its most basic expression, autobiography is understood to be "self life writing" or writing written by oneself about oneself (1). Smith and Watson importantly recognize that the term *autobiography* is rooted in a "particular historical juncture," the pre-Enlightenment West. They identify the emergence of this terminology in the late eighteenth century in both England and Germany. Subsequently, autobiography refers not only to writing about oneself, but a particular kind of "generic practice" that "privileges the autonomous individual and the universalizing life story as the definitive achievement of life writing" (Smith and Watson 2-3). We can see expressions of this dynamic between an outstanding individual and a universal representative of an entire nation in the cosmonaut and astronaut memoirs I consider. In the same vein, Lejeune defines an autobiography as a "retrospective prose narrative written by a real person concerning his own existence, where the focus is his individual life, in particular the story of his personality" (4). In the Russian context, Iurii Zaretskii similarly defines autobiography as "[t]he story of a person about themselves and the events of their life; a kind of

absent from the [black, brown, or white] text himself/herself. Life Writing is a way of seeing…it anticipates the reader's determination on the text, the reader's colour, class, and gender, and pleasure in an imperfect and always evolving hermeneutic – classical, traditional, or postmodern" (202).

historical testimony, the main distinguishing feature of which is its personal-subjective character (108).[11]

Such definitions of autobiography link the development of the genre to specific, historically rooted and culturally driven conceptions of the development of the self. As Gabriele Jancke writes, most (Western) scholarship of autobiography focuses on the individual who is both the writer and subject of the text with little critical examination of the cultural context of individuality from which the author is writing (359). Thus, "autobiographical discourses are defined in a way that is supposedly timeless and transepochal; they simply provide a faithful portrait of a person's life, including her/his feelings and experiences" (360). Jancke argues that many scholars of autobiography accept a tacit link between the development of the conception of the individual and autobiography and continue to draw on this conception of the individual (rooted in pre-Enlightenment Western thought) and use it across different cultural and temporal contexts (360). My analysis challenges this approach and suggests that the cultural context of individuality is critical to understanding how selves are written in memoir and that far from being timeless, conceptions of individuality are firmly tied to the historical moment from which they arise.

Part of the reason that autobiography has become so entrenched with Western conceptions of the self is due to the tradition of Western autobiographical criticism that celebrates seminal autobiographical works as exemplary in the genre (Marcus 1–2). It is nearly impossible to escape Augustine's Confessions, Rousseau's *The Confessions,* and Franklin's *Memoirs of the Private Life of Benjamin Franklin, Written by Himself* cited earlier. Much scholarship takes for granted that the purpose of autobiographical writing is "to want to tell

[11] «Рассказ человека о себе и событиях своей жизни; вид исторического свидетельства, главной отличительной особенностью которого является субъективно-личностный характер.»

others about one's [singular, individual] experiences" (Yagoda 31).[12] This critical tradition celebrates autobiography not merely as recording an individual's life story but as creating a deliberately coherent version of the self. Thus, the idea emerges that "the true autobiographer is…driven by an inner compulsion to write of the self, and that the autobiographical act must involve a degree of difficulty and struggle, both in 'grasping' the self and in communicating it" (Marcus 4). But as Jancke argues, "[t]his model of the 'individual' and of 'autobiography' takes Western modality as its basis, presuming its validity as a normative standard" (361). As I consider the works in my corpora, I thus understand autobiography to be a particular kind of life writing embedded in Western conceptions of individuality and the self. My dissertation seeks to avoid this approach and read the works in my corpora to understand not only what they tell us about the individual, but also what they tell us about the society to which those individuals belong. My approach adds nuance to the question of creating coherent versions of the self to suggest that writers of autobiography cannot remove themselves from their cultural and historic contexts. Thus, I examine the relationship between the individual and larger institutions, most prominently the state.

In her comparative work on Chinese autobiography and Western autobiography, Qi Wang traces the development of the Western conception of the self from antiquity to the present day, summarizing cultural historian Karl Weintraub's work on the individual in autobiography. Wang argues that one of the major changes to the genre of autobiography was in fact predicated on the relationship between the interplay of the self and the external society it experiences and how this relationship has changed in Western culture over time (40). Early examples of

[12] Yagoda at least recognizes that this might be a Western trait but quickly backtracks: "It is a Western, or possibly human, trait to want to tell others about one's experiences, and people have done so in their various ways since time immemorial" (31).

autobiography from the age of classical antiquity and the Middle Ages feature stories of model figures who outline for the reader "culturally valid norms, expectations, and specific lifestyles for individuals" (39). The self in these stories is less an individual than a representative of a category like lives of knights, philosophers, or monks (39). These selves are presented as didactic examples whose fate is predetermined by either destiny or nature. The interplay between the self and the larger world is formed on normative ideals. It is not until the Romantic period that the self is seen as a unique personality or individual with personal distinctiveness. This self interacts with the world differently than the self of antiquity: the interplay between the self and the larger institutions in which it functions is a foundational element of how that self is created and conceptualized (40).

Qing contrasts Western autobiography with Chinese autobiography. Like Qing, I utilize a comparative approach in my consideration of American and Russian cosmonaut memoirs. Qing does not define what she considers "Western" per se. When considering Russian and Soviet autobiography, I am careful not to automatically consider these texts as Western. However, like other scholars of Russian autobiography and memoir, I do recognize influences of Western autobiographical conceptions of the self in the works in my corpus. I discuss the culturally specific development of Russian and Soviet autobiography below.

Gabrielle Jancke undertakes a comparative analysis of autobiography in different cultural contexts. Jancke is less concerned with the "individual" in autobiography and argues it is necessary for scholars of autobiography to consider a cultural "concept of the person" (348). The "person" in autobiographical texts is distinguished from the 'self', 'I', 'ego', 'individual' or 'author/writer' (350). Jancke is concerned with avoiding Eurocentric readings of autobiographical texts as well as with recognizing the interweaving of the autobiographical

protagonist and other persons, social institutions, objects, "generalized observations on topics, such as politics, religion and history…and other important aspects of life" (349). In this way, Jancke argues for the role life writing has in bringing society into view: "The persons in such texts are situated beings: defined and specified in temporal and spatial terms as well as by name and family and localized, connected, involved, acting and interacting, entangled in relationships and webs of wider networks and structural connections" (350). I employ Jancke's approach of examining the self as entangled in larger social institutions and in particular examine the ways in which astronauts and cosmonauts understand themselves as members of the state and how this relationship changes over time. For example, in the Soviet/Russian context cosmonaut memoirs initially align completely with state mandated socialist realism but undergo changes during glasnost when cosmonauts and engineers begin to question the version of history presented by the state and their role in that history.

Another element usually present in definitions of autobiography is a truth claim. For example, Elizabeth Bruss provides a definition of autobiography based on three rules: 1) the autobiographer has a dual role in being both the "source of the subject matter and the source for the structure to be found in his text"; 2) the events the autobiographer presents "are asserted to have been, to be, or to have potential for being the case [true]"; and 3) "the autobiographer purports to believe in what he asserts" (10–11). Bruss's definition calls into question the truth claims made in autobiographical texts and suggests that the validity of an autobiographer's account is an important element of autobiography. Ben Yagoda similarly includes truth claims in his definition of autobiography: "a book understood by its author, its publisher, and its readers to be a factual account of the author's life" (1). However, Kadar recognizes the importance of contemporary scholarship that challenges distinctions between fiction and non-fiction as well as

fiction and autobiography and suggests that it is necessary to understand that "the 'real' accuracy" of autobiographical works "cannot be proved and does not equate with either 'objective' or 'subjective' truth" (202). Thus, autobiography is not necessarily non-fiction writing and should not be read by literary scholars for truth claims in the same way a historian might. I am concerned with the truth claims in the works in my corpora only insofar as they engage with larger historical narratives. I am interested in the ways astronauts and cosmonauts reflect upon, contradict, and re-write official versions of history but not concerned with how "accurately" they record the events of their lives.

Memoir: The distinction between *memoir* and *autobiography* is not universally recognized. The terms are sometimes used interchangeably. Lejeune recognizes memoir as closely related to but separate from autobiography (4). Couser traces the historical usage of autobiography and memoir in the English and French traditions and claims that until the late twentieth-century memoir was used to describe minor (non-literary) autobiographical writing while autobiography was reserved for literary works. Prior to the eighteenth century in Europe, memoirs were written by "people who wanted to record their lives in relation to others…or in relation to a historic event" (Rak 4). These writings were not usually published. Wang similarly claims that memoir as a genre focuses on public matters and external events with the writer as an observer of history (40). Autobiography for Wang is distinctive from memoir in that it is focused inward on inner reflection or meaning (40).

Rak recognizes the development of memoir as a published piece of writing in connection to "scandalous memoirs" produced by former French courtesans who published stories of their affairs to pay for court cases (5). These memoirs were published with the sole purpose of making money and thus linked memoir with the novel as something entertaining but not literary (5).

Over time, autobiography thus became seen as a literary form of life writing, "something that could be read and appreciated for its style and substance" while memoir was connected to the market and seen as a mass-market product (6). In the Russian context, Tartakovskii recognizes a distinction between memoir (*memuaristika*) as a lesser form of autobiographical writing and reminiscences (*vospominaniia*) as fully-developed, literary works (10). Such a distinction mirrors the Western European terminology of memoir as the literary lesser equivalent to autobiography. The distinction between memoir and autobiography has thus often been a distinction of perceived literary merit. I am not primarily concerned with the literary quality (however loosely defined) of the works considered in my corpora and will not distinguish between autobiography and memoir on the grounds of literary quality. However, I do find the discussion of memoirs as works written for the market to be a fruitful way to conceptualize the works in my corpora.

While sorting the texts in my corpora based on generic definitions is not a central element of my dissertation, where appropriate I do consider whether the texts fit more squarely within the generic expectations of autobiography or memoir as defined by Rak and Wang. That is to say, I consider the relationship between the self and the external world and its institutions, in particular the state, as the defining feature of these works for my analysis. The earliest examples of life writing I utilize in both the Soviet and American context mediate the relationship between the individual and the state in much the same way early autobiography from classical antiquity understood individuals as ideal role models. Works from the period I call American tell-all memoirs and Soviet and post-Soviet glasnost memoirs formulate the relationship between the state and the individual differently, as do contemporary works written in the twenty-first century.

Contemporarily, the term *memoir* has come to be associated with the current publishing phenomena known as the "memoir boom." The term refers to "a period roughly spanning the

first decade of the twenty-first century, when the production and public visibility of American and British memoirs by celebrities and by relatively unknown people sharply increased" (Rak 3). To take one representative period, sales in personal memoirs increased 400 percent from 2004 to 2008 in the United States (Yagoda 7). Beth Holmgren recognizes a similar explosion of memoir writing in the Russian context (xxv). Initially Holmgren credits the boom to "individual attempts to amplify or refute official Soviet historiography" but recognizes that beginning in the 1990s memoir became equally important as a commercial product in the context of a Russian book market centreed on entertainment (xxv).

The memoir boom encompasses an explosion of life writing published by popular presses for a wide audience. This writing is important as a market product as well as culturally. In the American context, Ben Yagoda recognizes that memoir has become "a part of discourses about personal identity that appear in many aspects of American life" (quoted in Rak 6). Yagoda goes so far as to argue that memoir is now "the central form of the [American] culture" (28). Critics who use the term *memoir boom* sometimes suggest that the profusion of new memoirs written at the turn of the twenty-first century represent an evolution of the autobiography. For example, Larson colorfully describes the process by which memoir, the "child" of autobiography, "ran off to find its own path in the world, going a little crazy with experimentation and daring" (xi). This understanding of the memoir boom suggests that memoir is becoming its own distinct genre from autobiography. However, as Rak recognizes, memoir has a long history, and its production has long been connected to the market (12). Thus, one plausible definition for memoir is simply "marketable writing about the self" (12). In this dissertation, I invoke this understanding of memoir.

National Life Writing Traditions

Distinctions must be made between the American life writing tradition and its Russian counterpart. Here I consider the relationship between the state and the individual in both contexts as it is this relationship that is central to my comparative analysis of Soviet/Russian and American space memoirs.

Russian Context: In the Russian context, the relationship between the individual and the state is a common theme in life writing. As Holmgren recognizes, Russian life writing developed "in tandem and in a tug of war with the modern Russian state" (xxii).[13] Prior to Peter I, "collective identity" and the family were seen as paramount to the individual (xvi) In other words, life was organized around family units and the individual was less important than the collective. With the introduction of Peter I's reforms, new conceptions about the relationship between the individual and state were formed. Peter I's Table of Ranks (1722) changed the terms of government service and created an expectation that individuals would serve the state and be rewarded for their service (xvi). Such a relationship between the state and the individual "enabled Russians to conceive of and honor individual identity" (xvi). However, this sense of individuality was conflicted in that it tied individuality and the development of the self to government service and mediated individuality through recognition by the government (xvi). Tartakovskii recognizes Catherine the Great's personal writings as an early example of Russian autobiography, although they were not written to be published or consumed by the Russian public (6-7). Another early example of Russian life writing is Alexander Radishchev's anonymously published *A Journey from Petersburg to Moscow* (1790), which blurs the

[13] *Житие Аввакума* (The Life of Avvakum) is typically recognized as the first memoir written in proto-literary Russian language (Tartakovskii 7). However, both Holmgren and Tartakovskii see the work as an exception to the dominant "medieval historical narratives" circulating before Peter I (xvi, 7). This is consistent with Avvakum's Old Believer affiliation.

distinctions between travelogue and memoir and offers criticism of serfdom and censorship. Holmgren sees Radishchev's work as a "dangerous anomaly" and indeed Radishchev's subsequent arrest and exile certainly suggest both the power of memoir as a form to criticize the state and the willingness of the state to punish those who used it. This function of memoir (to criticize the state) can be seen in glasnost cosmonaut memoirs that criticize elements of the Soviet space program.

Beginning in the nineteenth century a first boom of memoirs occurred in Russia in conjunction with the Napoleonic wars as a result of the desire to celebrate the "great men" involved in the conflict. The motivation for the publication of these memoirs was often a sense of "historical and national obligation" (Holmgren xvii). Furthermore, authors of these memoirs could count on wide readership and popular support for their works. Alexander Pushkin began promoting memoir to his contemporaries in the 1830s and suggesting that members of the gentry write about their experiences in what Holmgren calls a "mild form of political subversion" (xviii). Members of the gentry could skirt state censorship and exert influence on the reading public by circulating manuscripts. Also beginning in the 1830s and 1840s a trend emerged, first in France, of everyday people of all classes writing about their lived experiences because of the social upheaval of the French Revolution. This trend made its way to Russia as "merchants, clerks, lowly officers, [and] nonnoble intelligentsia" began writing their memoirs (xviii). Irina Paperno points to the "rise of historical consciousness" that began between the French Revolution and the Napoleonic Wars and reached its nexus between the 1840s and 1860s (9). Memoirists began to exhibit this historical self-consciousness, defined by Paperno as "the sense of self derived from the coincidence of personal life and world history" (9). This intersection

between self and history would become particularly important during the Soviet and post-Soviet eras.

Memoir provided a space for Russians to write their own version of reality which could be different from the version of reality professed by the state. Of course, government censorship prohibited outright criticism of the tsar or the government, but memoir still gave an opportunity for interpreting reality and thus was a "fearsome potential weapon against a univocal authority [the state]" (Holmgren xix). Thus, memoir writing in the Russian context has long been connected with challenging and opposing the state and this trend continued and was perhaps strongest in the Soviet period. Barbara Walker's work on the so-called "contemporaries' genre" (*vospominaniia sovremennikov*) provides critical clarification for life writing in the Russian context. Walker identifies such writing as part of "a very distinctive genre and tradition of modern Russian memoir-writing" and claims it has its roots as early as the eighteenth century (329). Works written in the contemporaries' tradition are distinct from other forms of life writing in that the author's attempts at self-explanation and self-exploration are formed not through inward reflection but "by focusing outward with an intense gaze on one particular community as it is located in time" (Walker 329). Here Walker refers to the intelligentsia circle or *kruzhok* (330). By tracing the development of the intelligentsia as it was imagined by writers of contemporaries' memoirs, Walker effectively highlights the power of life writing in forming concrete intellectual circles, establishing status and power for authors, and controlling "the culture of intellectual life" (330). Early examples of the contemporaries' memoir arose in the late eighteenth and early nineteenth centuries and were largely memoirs written by members of the gentry. These memoirs were not published and were written for family members to strengthen family history. They also importantly drew attention to "the intersection of private family life

with the life of the state and even of the nation" (331). Here we see examples of memoirs dealing with state service of the kind mentioned above. We can see examples of contemporaries' memoirs in many of the cosmonaut memoirs examined in this dissertation. While this is not a primary element of my analysis, it is an important generic convention in the Russian context that helps explain the form of many of the Russian cosmonaut memoirs.

Walker also recognizes Radishchev as a transitional figure for Russian life writing but focuses not on his *Journey from Petersburg to Moscow* but rather on the *Life of Fedor Vasil'evich Ushakov* (1789). Although written as a biography of Ushakov, we see in this work many features of the contemporaries' memoir. Radishchev focuses on his relationship with Ushakov (one of Radishchev's contemporaries and a fellow student in Leipzig) and discusses his involvement with Ushakov and other members of their intellectual group. Here Radischev's personhood is created not through introspection but rather through "association and partisanship" (334). Walker traces the contemporaries' tradition through the memoir boom of the 1830s and 1840s to the turn of the century and the development of published collections which brought together articles, excerpts from memoirs and letters of individuals like Dostoevsky, Gogol, and Tolstoy (338). In the Soviet context, Walker recognizes the ability of the state to utilize the contemporaries' tradition to canonize key figures in Soviet history including Gorky, Lunacharsky, and, of course, Lenin. A lull in this type of writing coincided with Stalin's years in power as all other major figures were systematically co-opted or eliminated (345). However, in the Thaw years of the 1950s, a new group of intelligentsia emerged who "sought a new vision of history that was an alternative to the Stalinist version" and figures like Il'ia Erenburg, Nadezhda Mandelstam and Evgeniia Ginzburg penned life writing that has clear connections to the contemporaries' tradition (347).

For the purposes of my research, I utilize the contemporaries' tradition to understand the form and content of many of the memoirs that make up the corpus of Russian-language life writing written by cosmonauts. Many of these works include recollections by a group of cosmonauts or engineers and incorporate different formal elements apart from the recollections of a single individual. In some cases, the influence of the intelligentsia is expressly felt as in the case of Boris Chertok's four-volume memoir entitled *Rakety i liudi* [Rockets and People] (2000). I also draw on Walker's acknowledgement of the importance of understanding the ways in which memoirs written in the contemporaries' tradition make sense of personhood and the society to which persons belong.

Irina Paperno's work on Soviet memoirs, diaries and dreams is also critical to my project. Paperno recognizes a "steady stream" of personal accounts of the Soviet era appearing in print beginning in the late 1980s and continuing to the present day (xi). She identifies the connection between the Soviet state and the production of the life writing she examines, maintaining that "Soviet power restructured private life, reshaping intimate experience in a variety of intended and unintended ways" (xii). In her examination of the nexus of public and private lives, Paperno argues that Soviet memoirs, diaries, and dreams offer a space for intimate experiences to be brought into the public realm and digested by others (xii). She asks what the "massive appearance of personal documents at the end of the Soviet epoch" might mean and what this trend can tell us about the Soviet experience. In her formulation, she seeks to understand the "motives, uses, and meanings of the explosion of publication of personal writings in Russia in the last two decades" (1). Similarly, I ask what the space memoirs written during glasnost and in the years following tell us about the intersection between the public experience of the space

program and the private lives of those who participated in the program and were unable to speak publicly about their experiences.

American Context: The relationship between the state and the individual can also be traced through American memoirs. Indeed, life writing has been suggested as a particularly American endeavor precisely because of the connection (real or imagined) between democracy as a political form and autobiography as a literary form (Couser, *Altered Egos: Authority in American Autobiography* 13). Autobiography gained popularity in the Western world at precisely the same time the French and American Revolutions led to massive political changes on both sides of the Atlantic. According to James M. Cox, these revolutions "were the convulsive acts which released the individual as a potent political entity and gave us what we are pleased to call modern man" (quoted in Couser 13). Thus, according to this narrative, the rise of American democracy and the conception of individuality as a key element of American culture and identity are inextricably linked. As Couser recognizes, the values of both life writing and American culture are "in close congruity" giving life writing "special authority in America" both for its celebration of the individual and for its justification of democracy (14). I explore the relationship between memoir and democracy in astronaut memoirs further in Chapter Four.

Couser suggests that the development of American memoir differed from other national traditions, particularly British memoir, in its relationship with so-called "literary genres" (Couser, *Memoir: An Introduction* 3). Whereas in Great Britain the rise of the novel and the autobiography were closely linked (so much so that the two were sometimes "indistinguishable"), precursors to American life writing were generally non-fictional accounts linked to "the exploration and colonization of the continent" (3). American life writing from the beginning, then, related to unique themes including exploration, settlement, captivity, and

conversion (4). Couser recognizes a distinct American literary tradition based on these themes and uses the adjectives *nonfictional*, *utilitarian*, and *instrumental* to describe this kind of writing (5). We can see echoes of these themes in astronaut memoirs that utilize the tropes of exploration and religious conversion to organize their narrative structure.

Protestant conversion narratives represent one cornerstone of American life writing and have their roots in the earliest works published in the American colonies. Oral declarations of conversion were an important part of the process to gain full membership in New England Puritan congregations (Couser 8). Jonathan Edwards's *Personal Narrative* (1740) is one example of a prototypical American conversion memoir and Couser traces the continuing influence of this kind of narrative in contemporary American life writing like Elizabeth Gilbert's *Eat, Pray, Love* (2006). Several of the American astronaut memoirs I consider make use of conversion narratives and connect the experience of going to space with the experience of finding God or some other kind of spiritual awakening.

To return to the larger question of the state and the individual, Couser suggests two foundational American documents as openly encouraging or evoking autobiography: the Declaration of Independence and the Constitution (9). In particular, the Constitution "encourages autobiography…by instituting a nation where individuals (in theory) will be free, equal, and self-governing" (9). Benjamin Franklin's memoir cited above *The Autobiography of Benjamin Franklin*, originally published in French as *Mémoires de la vie privée de Benjamin Franklin* (1793) can be read in this vein. It celebrates Franklin's life in conjunction with the fate of the United States of America (10). In the text, Franklin examines his life and his behaviour and suggests ways in which he sought to improve himself. An entire section of the work is devoted to Franklin's "Plan for Attaining Moral Perfection" and the enumeration of thirteen virtues he

considered “necessary or desirable” (Franklin 66). Couser sees Franklin’s self-discipline as “contrary to the Puritan sense of sin” in that Franklin sees himself as the final arbiter of his behavior, a “self-governing individual” (10). In this way, Franklin’s memoir is a “self-reflective, secular mode of life writing” that can be traced in later examples of American life writing (11). The astronaut memoirs I consider frequently invoke tropes that echo Franklin’s quest for perfection and invite the reader of the memoirs to glean from the writer virtues or traits that will make them as successful as the author. This element of memoir as a guide to readers is one of the major themes I trace. Just as Franklin identified the virtues he considered necessary to lead a moral life, many of the astronauts identify traits that allowed them to be successful or overcome hardships. For example, Buzz Aldrin’s *No Dream is Too High: Life Lessons from a Man Who Walked on the Moon* (2016) explicitly points to summative lessons for achieving one’s dreams. In Chapter Four I explore this topic further.

Conclusion

In conclusion, my dissertation examines the relationship between the created self and larger societal networks, most significantly the state. The literature I have reviewed allows me to situate the works in my corpora in their national and historical context and to formulate frameworks of the self as it relates to the state in life writing.

Methodology

My methodology is interdisciplinary and utilizes approaches from literary studies, digital humanities, and cultural studies. Broadly, I apply a combination of close and distant reading strategies to make sense of space farer memoirs within their larger cultural context.[14] I consider American astronaut memoirs and Soviet/Russian cosmonaut memoirs both independently and in comparison with each other. I utilize a transcultural framework articulated by Gabriele Jancke in her comparative study of autobiographical writing. This framework compares "self-narratives from different cultural contexts beside each other" in order to analyze them "according to similar, symmetric sets of questions" (Jancke 351). To apply this framework to my corpora, I consider the following research questions:

1. *Themes and topics.* What topics do space farers write about in their memoirs and do these topics change over time?

To better understand the content of my corpora, I ask which major topics are addressed in the texts. I use topic modeling, a computer assisted method for identifying words in a corpus of documents that statistically are more likely to co-occur and "as a result share some sort of semantic relationship" (Jockers 211). Through topic modeling, I obtain a list of topics that are prevalent across my corpus. As the themes are semantically linked, the English- and Russian-language corpora are analyzed separately. However, by comparing the topics, I can identify major themes across the texts when the corpora are taken as a whole.

[14] *Distant reading* is a digital humanities term meant to distinguish from the traditional analytical method close reading. Distant reading involves examining a text or corpus of texts for larger patterns usually identified by a computer as opposed to closely reading a single passage.

2. *Memory and the state.* How do individual space farers remember their participation in the space program and how do their memories engage with the official version of memory touted by the state?

I consider how the memoirs in my corpora interact with what Slava Gerovitch has termed the "master narrative" of space exploration ("'Why Are We Telling Lies?' The Creation of Soviet Space History Myths" 463). Gerovitch discusses the tensions between cultural and communicative memory, arguing with Aleida and Jan Assmann that communicative memory is living, embodied and autobiographical while cultural memory is officially sanctioned and mediated by texts, symbols, and performances (462). Nation-states actively work to establish cultural memory. This leads to tensions with communicative memory which "reinterprets and devalues certain aspects of organized and ceremonial remembering practices" (463). On an individual level, private memories become "contaminated by national projects of remembrance" (463). To understand the ways in which the memoirs in my corpora engage with this tension, I ask how they interact with the master narrative defined by Gerovitch in the Soviet/Russian context. Gerovitch suggests the master narrative of the Soviet space program was built on four cultural archetypes: the myth of the founding father; the myth of exclusively domestic space technology; the myth of spaceflight as an expression of national identity; and stereotypical justifications for spaceflight including the destiny of humanity, glory for the nation, national security, economic development, scientific exploration, and benefits to ordinary people (463). A similar master narrative can easily be identified in the American context, albeit with different cultural and political undertones.

To establish the existence of a master narrative in both the Soviet and American contexts, I utilize early life writing from the first manned spaceflights. In Chapter One, I compare the

memoirs of Yuri Gagarin and Gherman Titov published by *Pravda* and a collection of recollections made by the Mercury Seven astronauts published by *Life* magazine, both examples of cultural memory production. In so doing, I look at the language used in both contexts to describe the figure of the astronaut or cosmonaut and focus on the personal qualities attributed to the space farers. Furthermore, I highlight moments of tension between the image of the astronaut or cosmonaut as part of a collective group of "heroes" and the individuality of each member of the space program and the ways in which these texts reconcile (not always successfully) these two.

To better understand the ways in which later space farer memoirs question or challenge the master narrative of space travel and state-promoted cultural memory, I focus on a sub-set of my corpora published between 1979 and 2000. Memoirs published during this period directly engage with questions of memory and the challenge the state master narrative of space exploration by challenging the cultural memory of the space programs in both the United States and the USSR. In the American context, such memoirs were published after the tenth anniversary of the Apollo missions. In the Soviet context, memoirs published during the glasnost period offer counter-narratives to the master narrative while still being influenced by this narrative. Chapter Two focuses on these so-called "tell all" memoirs and asks how individuals engage with both cultural and communicative memory in their accounts of the space program.

3. *Transcendence and the universal self.* How is the relationship between the individual and the state different when the individual is removed from the referents that mediate this relationship? How do space farers make sense of their selfhood when in space?

Chapter Three explores this question by engaging with Frank White's theory of the "Overview Effect." First coined in his 1987 monograph *The Overview Effect: Space Exploration*

and Human Evolution, White claims the experience of seeing the Earth from space gives space farers "a different philosophical point of view" and calls this perspective the Overview Effect (4). White uses astronauts' own writing and speech to argue that the experience of spaceflight has a profound impact on how those astronauts think about the world. He suggests that the Overview Effect erases boundaries between nations and peoples but also claims it has the ability to erase individuality or the self. In my close reading of astronaut and cosmonaut memoirs, I look for examples of transcendent discourse where the individual is subsumed by the universal self. This idea of the transcendent universal self is articulated by Denice Turner in her work on American pilots (2011). Similar ideas are articulated in *Earthrise: How Man First Saw the Earth* (Poole).

I do not argue for or against the existence of the Overview Effect but rather examine how it provides the linguistic tools needed to describe space travel and to argue for its purpose (White's work focuses on a larger discussion about humanity's evolutionary journey and has been criticized for being a religious, not historical or cultural, theory).[15] This argument is particularly salient in the political and historical context of the memoirs considered in Chapter Three. I examine the ways authors of memoirs utilize transcendent language to make sense of themselves as individuals and ask whether describing the Earth as a whole leads to conceptions of the person less as an individual and more as a universal part of humanity in the name of pan-nationalism.

4. *Citizenship and personhood.* How do individual astronauts and cosmonauts understand their role as citizens of a larger state and how do their memoirs tacitly or overtly demarcate what it means to be a successful citizen?

[15] See Thore Bjørnvig "Outer Space Religion and the Overview Effect: A Critical Inquiry into a Classic of the Pro-Space Movement," *Astropolitics* 11, no. 1–2 (2013): 4–24, https://doi.org/10.1080/14777622.2013.801718.

While the Overview Effect suggests the experience of space travel is a transcendent, universal one that erases citizenship and national differences, the markers of citizenship are clearly present in memoirs published during the contemporary memoir boom (1990-present). Chapter Four considers the ways in which American and Russian space farers discuss their citizenship in these texts. Julie Rak argues that popular memoirs (defined as those written for mass-markets and published by big publishing houses) "are implicitly about citizenship" ("Popular Memoir and the Roots of Citizenship: Rousseau, Mountaineering, Autobiography" 10). Rak claims that popular memoirs should be read in the context of citizenship both because it is a category of identity that is often assumed to exist without any discussion of how it "works in autobiography discourse" and that popular memoirs which situate individuals within the context of important historical events help create "the ideology of liberalism, its view of the modern state, and the idea of the citizen's obligations…" (12). This argument proves useful when considering the role of citizenship in astronaut and cosmonaut memoirs, both of which fit Rak's category of popular memoirs written in the context of major historical events.

Close Reading and Topic Modeling

I use a combination of close reading and digital textual analysis in my dissertation. The justification for utilizing computer-based digital literary text analysis is that by using computational tools, I can seek out larger trends in my corpora that cannot be ascertained by close reading alone. By using digital textual analysis, I test hypotheses based on the questions listed above. In other words, I derive my methodology from the theoretical concerns I have examined in preparation for this work. Such an approach to digital humanities projects is discussed by Ted Underwood who sees the need to begin with "an interpretive hypothesis…and invent a way to test it" rather than work backwards from a place of exploration to analysis (17).

This methodology differs from other practitioners of digital humanities who celebrate "screwing around" and play as forms of knowledge production (Hoover 2016, 243). This is not to criticize the practice of play but to acknowledge that I approach the corpora I have gathered with specific hypotheses and questions I answer through both traditional analytical methods like close reading, what I will call computer-assisted close reading (in keeping with Hoover), and distant reading.[16]

In order to perform digital textual analysis on these texts, I have collected digitized versions of the texts where available. In the American context, newer titles are available as .epub or .azw3 (Kindle books). I have converted these file types to .txt files for textual analysis. In the Russian context, many of the books are available online through crowd-sourced space enthusiast websites like epizodyspace.ru. Digitized books are available for download as either .html files or .pdf files. I have converted these files to .txt files for analysis. Finally, in the case of books that have not been digitized, I have scanned and performed optical character recognition (OCR) on the files to convert .pdf files to .txt.

I have chosen to perform topic modeling on my corpora to gain a better sense of which semantically linked terms astronauts and cosmonauts use in their memoirs. Topic modeling was chosen given for its ability to synthesize a large number of texts. Other computational language models could have been used including sentiment analysis but topic modeling provided a concise way to identify trends across my corpora.[17] Topic modeling is a digital text analysis tool that is frequently used in corpora with large numbers of documents to give an idea of the "relative

[16] Hoover makes a distinction between distant reading methods such as those used by Franco Moretti and "close readings…of digital humanities—work that very often features detailed, minute, and hypothesis-driven analysis of texts" (2016, 244). In other words, Hoover argues for the necessity to differentiate between distant reading projects that seek out large, sweeping trends (most frequently changes over time) and computer-assisted close reading tasks that are hypothesis-driven.

[17] *Sentiment analysis* is a method used for mining texts for their overall tone, typically using a list of "positive" terms and "negative" terms and identifying if the text in question contains more positive or negative terms.

importance of topics in the composition of each document, as well as a list of the most prominent words in each topic" (Templeton). Topic modeling is an algorithmic process by which the computer produces a list of topics that occur across different texts in a corpus. The topics are merely lists of terms; the computer does not assign names to the topics. Thus, while the computer groups words together based on how frequently they appear together across a corpus, it is up to the researcher to find connections in those groups of words and to decide if the topics are useful units for analysis.

I chose to perform topic modeling over other digital text mining methods because topic modeling directly addresses one of my central research questions: what topics do astronauts and cosmonauts address in their memoirs? Topic modeling is useful when dealing with a large corpus of texts that are unlabeled, meaning not marked up by a researcher or computer in any meaningful way (for example marked for parts of speech) (Dobson 552). Topic modeling considers the context of words' usage across corpora. Rather than identifying which words in a corpus occur with the highest frequency, topic modeling identifies words that "tend to occur together in multiple places in multiple texts" (Hammond 116). This means that in using topic modeling, we can analyze not just individual terms but clusters of terms that might suggest literary themes or motifs. Matthew Jockers suggests such an approach: "If our goal is to understand the narrative subject and the recurrent themes and motifs that operate in the literary ecosystem, then we must go beyond the study of individual n-grams [units of linguistic meaning], beyond the words…in order to capture what is at once more general and also more specific" ("Theme" 4). To see this principle in action, consider the most frequently used terms in my corpora. The most frequently used nouns in the Russian corpus are: polët/flight (6097), korabl'/ship (4998), and chelovek/person (4767). The top three most frequently used terms in the

American corpus are: space (10525), time (8704), and flight (6220).[18] While we can certainly ascertain that both of these corpora address topics related to manned space flight from these terms, by themselves they do not suggest meaningful topics or themes in the corpora beyond the basic theme of space flight. Now consider one of the topics produced through topic modeling. For example, the topic I have named "Perspective and Thought" in the American corpus includes the following terms: world, space, information, experience, human, time, people, years, nature, process, universe, energy, mind, sense, matter, life, science, work, perspective, and thought. In this topic we see some of the most frequently used terms in the corpus including space and time. But the topic gives us far more information about the context in which these terms were used. The topic can be used for further analysis and suggests not just that these terms are frequently used in the texts in the corpus, but that they occur together and represent an enduring theme.

Another benefit to topic modeling is that it is unsupervised, meaning the computer is not given anything to look for in advance (Jockers, "Theme" 123). The only way for the computer to look for specific themes or terms in advance is for a human to tell it to look for those things. Thus, topic modeling produces lists of themes that are entirely divorced from the researcher's ideas about what might make up a topic. This can lead to confusing lists of terms that a human reader would not identify as belonging to the same category but limits the interference of the researcher in prescribing themes based on intuition or assumption.

I used a tool called MALLET (Machine Learning for Language Toolkit) to perform my topic modeling (McCallum). MALLET is frequently considered the go-to topic modeling tool for humanists because it is freely available and relatively simple to use. To prepare the texts in my corpora for topic modeling, I created custom stop word lists to remove terms that skewed the

[18] These are the most frequently used terms when a stop-word list is applied to both corpora, eliminating many of the most commonly used words that may not prove useful for analysis.

results and were not analytically useful.[19] Ted Underwood suggests this method in his 2012 blog post and recommends removing common personal pronouns and names from texts (Underwood, "Topic Modeling"). Thus, I removed common names (generated from a list of the names of the astronaut authors in my corpus) and frequently used contractions like "it's", "I'm", and "can't." Including these terms would have produced topics that would not have been particularly useful for analysis because such common contractions occur frequently across the texts but offer little thematic meaning. For the Russian corpus, I similarly removed frequently used common names of cosmonauts and their family members. One of the main decisions a researcher needs to make when using topic modeling is to determine the number of topics to instruct the computer to produce. I began my analysis with twenty topics. To determine whether twenty topics was an appropriate number, I analyzed the distribution of a given topic across all the individual texts in the corpus. For each text in the corpus, we can thus determine what percentage of the words in that text are represented in each of the twenty topics. We can also identify across all the texts in the corpus which topics were represented evenly, and which topics were confined to only a few texts.

After running MALLET on the English astronaut corpus, I considered the distribution of the resulting twenty topics by eliminating occurrences where a topic was represented less than one percent of the time in a text. This process removed extremely small percentages such as a document containing a topic 0.00000106% of the time (i.e., the topic words rarely appear in the text). After filtering these texts, six of the twenty topics still showed the topic words composed more than one percent of all twenty-nine texts. This suggests these six topics are commonly

[19]Stop word lists contain commonly used terms that are generally considered not useful for analysis. The list instructs the computer to disregard those terms so that, for example, they will not be included in the results of topic modeling.

repeated and representative of the themes that the corpus contains. Furthermore, after filtering, there were four other overarching topics that were common in the texts but were only present in eleven of the texts. Additionally, some topics were only present in a smaller number of texts; however, these topics accounted for a larger percentage within the corresponding texts suggesting a common theme relevant for specific individual works. For example, one topic related to astrophysics was only represented in two of the texts suggesting this topic was not representative of the corpus as a whole but was covered extensively in two of the memoirs.

A common question in topic modeling is whether the algorithm is overfitting the text, thus returning too many topics from the analysis (Graham et al.). One approach is to reduce the number of topics and analyze whether the topics are comparable between the two analyses. When I constrained my analysis to ten topics, there was a more even distribution of texts across topics, as expected. After filtering, three out of ten topics contained all twenty-nine documents in the corpus with the topic at a rate of greater than one percent in the text. Unlike the larger analysis, even the topic covered by the fewest number of texts was still relatively representative of the corpus, being present in five of the twenty-nine texts. This suggests that the ten topics identified by the computer can be said to be representative of the corpus as a whole.

When we look at the topics themselves when the astronaut corpus was run with ten topics, clear patterns emerge:

Table 1 Results of Topic Modeling on American Corpus

Topic	# of Documents that Contain Topic 1% or Higher	Words in Topic Across 10 Topics
Lunar Landing	25	Moon, time, back, lunar, apollo, houston, great, life, surface, made, felt, knew, people, spacecraft, wanted, began, god, thought, module, man

Space Flight	29	time, flight, earth, back, make, good, flying, day, feet, air, left, side, training, days, inside, ground, water, pilot, suit, work
Space Shuttle	23	shuttle, space, mission, back, astronaut, flight, team, work, crew, hubble, nasa, launch, time, training, astronauts, telescope, eva, office, center, houston
International Cooperation	27	space, time, station, day, astronaut, people, back, russian, life, nasa, mission, crew, good, work, night, shuttle, part, astronauts, iss, great
Space Shuttle Atlantis	5	shuttle, crew, astronaut, sts, nasa, astronauts, space, mission, launch, flight, fight, cockpit, taco, office, wanted, orbit, first, rocket, atlantis, payload
Apollo, Space Shuttle, Space Station	28	shuttle, space, mission, landing, system, launch, crew, station, orbiter, control, nasa, made, flight, lot, sts, apollo, feet, center, test, vehicle
NASA Missions	21	apollo, crew, flight, spacecraft, time, gemini, nasa, space, mission, astronauts, program, astronaut, lunar, back, years, pilot, test, module, fly, manned
Identity and Self	29	call, hand, position, system, body, long, final, face, find, career, quickly, story, past, man, step, question, personal, begin, experience, voice
Perspective and Thought	28	world, space, information, experience, human, time, people, years, nature, process, universe, energy, mind, sense, matter, life, science, work, perspective, thought
Everyday Life	29	space, told, school, air, nasa, asked, program, day, made, years, home, force, looked, gave, life, flew, people, president, house, left

To give some meaning to the topics generated through topic modeling, we can first examine the outlier topic that was only represented in five texts in the corpus at a rate higher than one percent. This topic includes words related to later space launches including the space shuttle missions (numbered using the STS system), and specifically the Atlantis space shuttle.[20] When we look at the distribution of this topic across the texts arranged chronologically, this topic is concentrated on a small sample of texts published between 2006 and 2014 (Figure 1). Tom Jones's *Sky Walking: An Astronaut's Memoir* (2006), Mike Mullane's *Riding Rockets: The Outrageous Tales of a Space Shuttle Astronaut* (2008), Jerry Ross's *Spacewalker: My Journey in*

[20] STS stands for "Space Transportation System" and references the Space Shuttle flights beginning in 1984.

Space and Faith as NASA's Record-Setting Frequent Flyer (2013) and Clayton Anderson's *The Ordinary Spaceman: From Boyhood Dreams to Astronaut* (2015) are the texts that most represent this topic. All four of these astronauts served on Space Shuttle missions and thus it is not surprising that their works represent terms specific to such missions like "sts", "shuttle", and "atlantis." This topic also includes the seemingly out of place term "taco." Examining the usage of this term in context in the texts, we quickly find an explanation: Taco is a nickname given to Ken Cockrell, an astronaut and CAPCOM (communications control) for numerous space flights between 1990 to present.[21] This topic is easily demarcated as a temporally based topic.

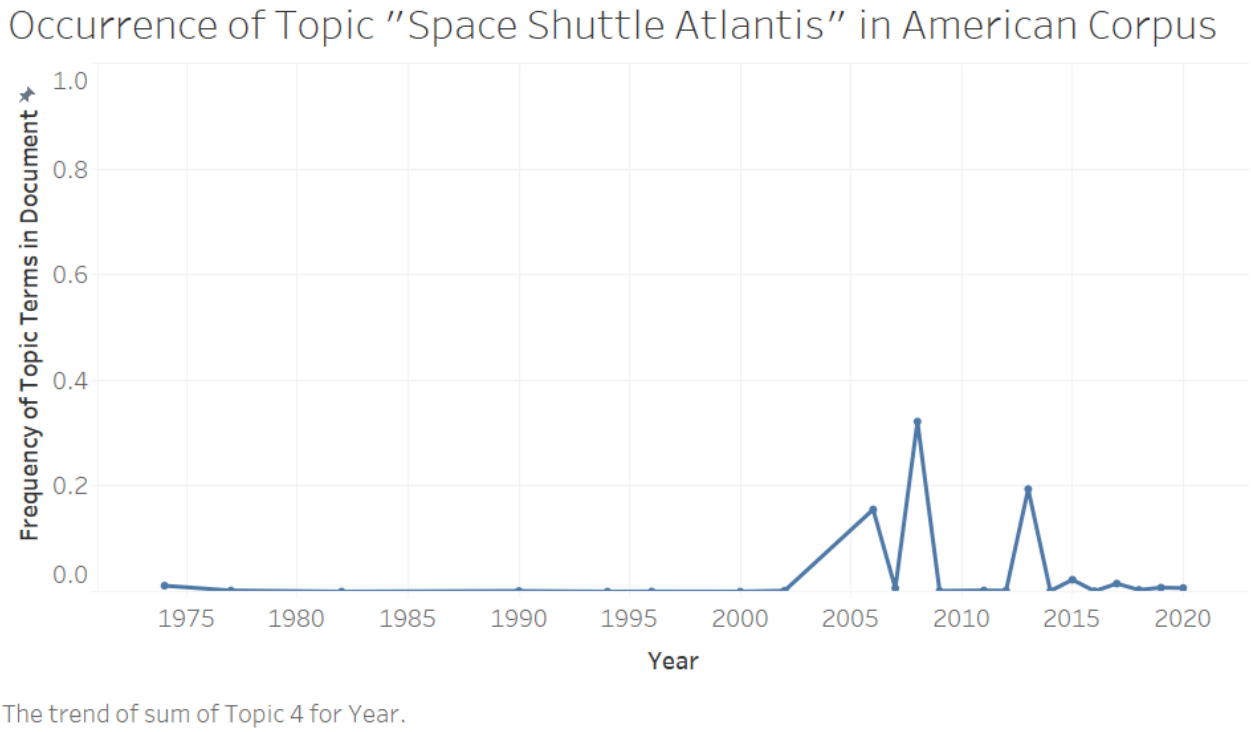

Figure 1 Occurrence of Topic "Space Shuttle Atlantis" in American Corpus

Similarly, the topic I have entitled "Space Shuttle," present in twenty-three of the texts at a rate greater than one percent, is temporally based. Upon initial examination, we would expect

[21] Although I filtered out the astronaut's and cosmonaut's common names and nicknames, "taco" remained in my list of topics because it is a unique nickname.

this topic to include a broader range of texts as it contains words like “astronaut,” “space,” “flight,” and “launch.” However, we can again use temporal clues to identify that this topic includes “hubble” (referring to the Hubble telescope launched on a Space Station mission in 1990). Looking at the distribution of the topic across the texts, again we see a concentration of texts containing this topic in the years after 2000 with the highest concentration in two texts: Mike Massimino’s *Spaceman: An Astronaut’s Unlikely Journey to Unlock the Secrets of the Universe* (2016) and Kathryn Sullivan’s *Handprints on Hubble: An Astronaut’s Story of Invention* (2019). In fact, the term “hubble” is only represented in these two texts in the corpus.

Another topic that is obviously time bound contains terms related to early American space missions including Mercury, Gemini, and Apollo (“NASA Missions”). This topic is represented evenly across the texts (Figure 2). This topic calls to attention a challenge in classifying the texts in my corpus: memoirs written about the Mercury, Gemini, and Apollo missions continued to be published long after the events had taken place. For example, Gus Grissom’s memoir *Calculated Risk: The Supersonic Life and Times of Gus Grissom* was published in 2018 but focuses on events related to the early days of the American manned spaceflight program.

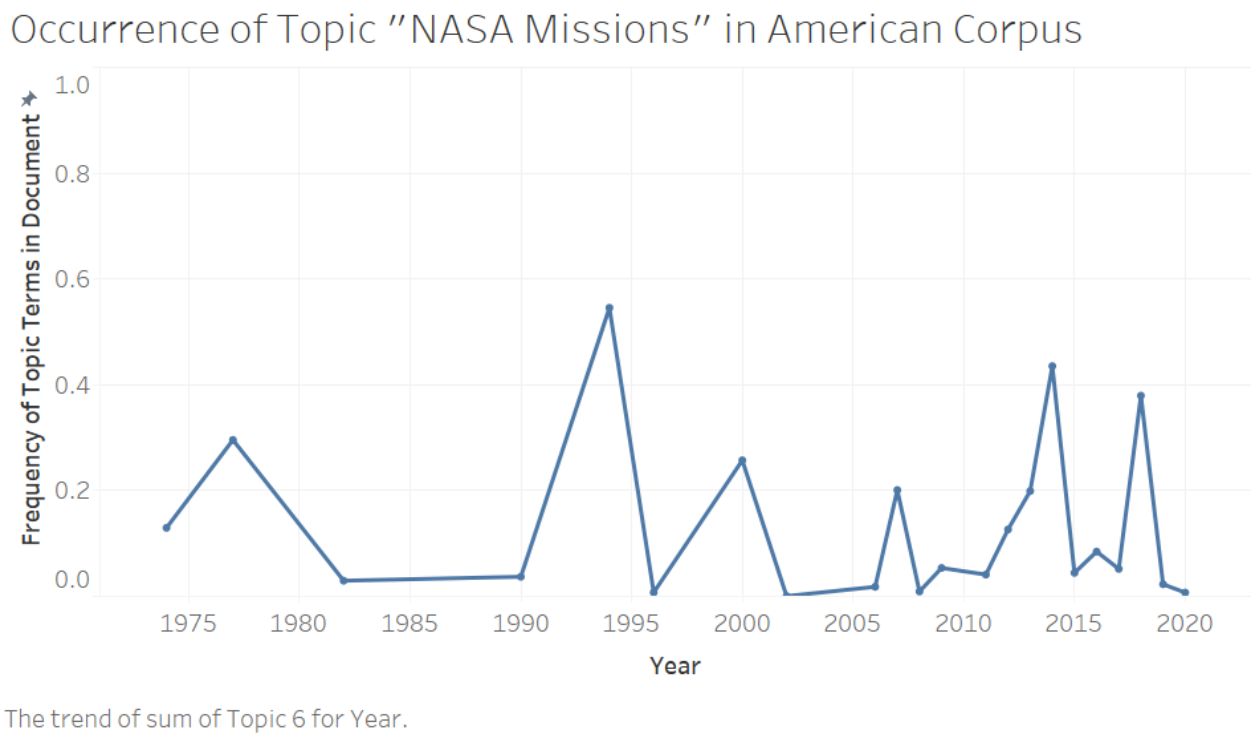

Figure 2 Occurrence of Topic "NASA Missions" in American Corpus

The topic "Lunar Landing" is clearly linked to the Apollo missions to the Moon with terms like "moon," "back," "lunar," "time," "apollo," and "houston." This topic is represented in twenty-five of the twenty-nine memoirs. However, the highest frequency of the topic is clearly focused on the texts published between 1975 and 1995 (Figure 3). This topic includes some terms that do not immediately fit the topic "Lunar Landing" including "great," "life," "thought," and "god." The discussion of the term "god" in connection to spaceflight will be considered in detail in Chapter Three.

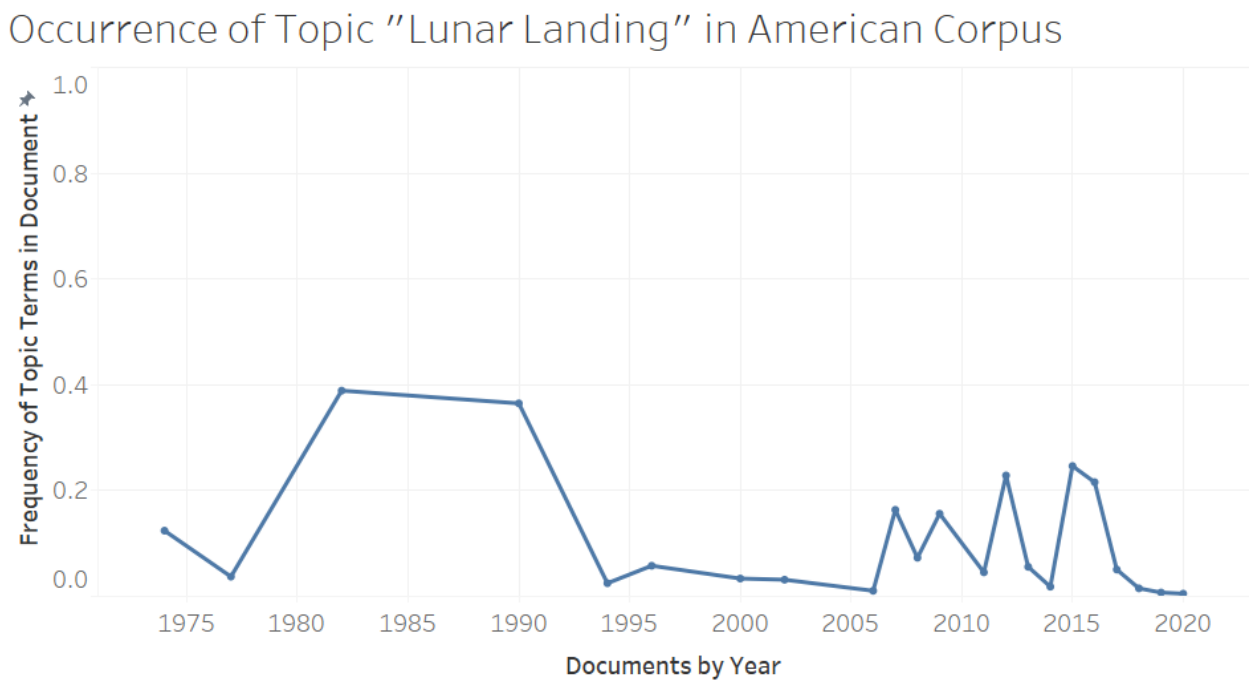

Figure 3 Occurrence of Topic "Lunar Landing" in American Corpus

When considering which topics to use to perform further analysis on my corpus, I found four topics to prove particularly productive. These topics differ from the topics that directly address space exploration including the topics I have called "Space Flight" and "Apollo, Space Shuttle, Space Station." These two topics are not particularly useful from an analytical perspective except to confirm the high representation of these topics across the memoirs. The similarity of the topics also suggests that these memoirs discuss the space program in common ways. The topics that deviate from the topic of spaceflight are more interesting for analysis. Out of the remaining topics, I have identified the following themes to include in my analysis (Table 2):

Table 2 Specific Topics for Analysis from American Corpus

Topic	# of Texts that Include Topic*	Words in Topic
Identity and Self	29	call, hand, position, system, body, long, final, face, find, career, quickly, story, past, man, step, question, personal, begin, experience, voice
Perspective and Thought	28	world, space, information, experience, human, time, people, years, nature, process, universe, energy, mind, sense, matter, life, science, work, perspective, thought
Everyday Life	29	space, told, school, air, nasa, asked, program, day, made, years, home, force, looked, gave, life, flew, people, president, house, left
International Cooperation	27	space, time, station, day, astronaut, people, back, russian, life, nasa, mission, crew, good, work, night, shuttle, part, astronauts, iss, great

*At a rate higher than one percent

The topic "Everyday Life" contains words related to quotidian themes like "school," "home," "house," and "years." At first glance, this topic relates to aspects of astronaut life outside of the profession. However, the topic also includes the terms "nasa," "president," "space," "program," and "flew." The inclusion of these terms in one topic suggests that these terms frequently occur together. I discuss this topic in Chapter Two in connection to the tell-all American memoirs that focus both on the professional experience of being an astronaut but also include details about life outside the profession. It is the inclusion of details about the astronaut's daily lives and the ways in which going to space impacted themselves and their families that makes the tell-all memoirs deviate from the earlier propagandistic accounts of the first space farers. Thus, I argue that the inclusion of details about everyday life is a conscious response to the picture of astronauts painted in the master narrative of spaceflight discussed in Chapter One.

The topic "Perspective and Thought" includes terms related to the larger philosophical meaning of space travel with words like "human," "universe," "energy," "mind," "sense," "perspective," and "thought." This topic is present in twenty-eight of the documents in the

corpus but we see it most clearly in the memoirs I examine in Chapter Three when discussing the Overview Effect and changing justifications for space travel during the period of international cooperation. I also consider the topic "International Cooperation" in Chapter Three when I discuss the ways in which astronauts describe working with cosmonauts and the ways in which they navigated cross-cultural communication.

The topic "Identity and Self" is considered in Chapter Four. This topic includes terms focused on the personal or individual including "personal," "experience," "face," "body," and "story." This topic also includes terms related to the physical body like "hand," "face," "step," and "voice." This topic is present in all twenty-nine texts in the American corpus but is present to a higher degree in memoirs published during the memoir boom. Thus, I examine this topic in conjunction with the argument I make in Chapter Four about space farer memoirs published after 1990 and particularly those published in the twenty-first century. I discuss questions of identity, the body, and the ways in which these memoirs share generic characteristics with self-help memoirs.

I also utilized topic modeling to analyze the Russian corpus of cosmonaut memoirs. As in the case of the English corpus, I began with pre-processing the text to make it readable to the topic model algorithm. For Russian texts, the standard approach when using tools like topic modeling is to lemmatize the text before performing analysis (May et al. 2). Lemmatization is a process in which a computer converts each inflection of a word to its dictionary or canonical form (called a lemma). Russian nouns are converted to their singular, nominative case form, verbs are converted to infinitives, and adjectives are converted to a singular, masculine form in the nominative case. This process is crucial for the computer to count each inflection of a common term and to ensure accurate analysis. As with the English corpus, I also utilized a stop

word list for the Russian corpus to remove semantically insignificant terms. For the Russian corpus, I relied on the stop word list built into the Russian program Yandex MyStem, a Python program that performs morphological analysis on Russian language texts (Yandex.ru/dev/mystem/). There are limited options available for lemmatizing Russian texts.

I used the same MALLET topic modeling program for the Russian corpus and trained the corpus for ten topics to be consistent with the English corpus. Working with Russian text files, as is so often the case, produced some unexpected challenges, particularly with character encoding. However, final analysis produced the following topics and terms:

Table 3 Results of Topic Modeling on Russian Corpus

Topic	Number of Texts that Include Topic*	Words in Topic	Translation of Words in Topic
Dissolution of Soviet Union	8	ссср, год, страна, система, государственный, горбачев, работа, министр, завод, новый, президент, украина, вопрос, комплекс, энергия, конструктор, союз, директор, испытание, совет	ussr, year, country, system, governmental, gorbachev, work, minister, factory, new, president, ukraine, question, complex, energy, constructor, union, director, test, soviet (noun)
Life on Space Station	19	земля, станция, день, сегодня, связь, работа, сеанс, володя, спать, эксперимент, говорить, вода, космос, очень, час, работать, ребята, вечер, утро, смотреть	earth, station, day, today, connection, work, session, volodia*, to sleep, experiment, to speak, water, space, very, hour, to work, people, evening, morning, to see *Given name Volodia
First Man in Space	24	полет, космонавт, корабль, экипаж, первый, космический,	flight, cosmonaut, ship, equipment,

		космос, союз, время, очень, подготовка, программа, друг, земля, встреча, орбита, гагарин, второй, должный, час	first, cosmic, space, union, time, very, preparation, program, friend, earth, meeting, orbit, gagarin, second, necessary, hour
Technical Matters	21	корабль, полет, система, человек, работа, станция, космический, аппарат, новый, большой, земля, космонавт, орбита, первый, должный, очень, проблема, управление, программа, год	ship, flight, system, person/man, work, station, cosmic, apparatus, new, big, earth, cosmonaut, orbit, first, necessary, very, problem, direction/governance, program, year
Strength and Speed	24	земля, корабль, человек, космос, летчик, слово, минута, приходиться, союз, год, последний, скорость, техника, самый, сила, условие, знать, друг, секунда, кабина	earth, ship, person/man, space, pilot, word, minute, to come to be, union, year, last, speed, technology, most, strength, condition, to know, friend, second, cabin
Goals and Relationships	24	год, ракета, решение, принимать, создавать, дело, связь, мир, главный, время, военный, проблема, цель, должный, позволять, отношение, инженер, технический, начинаться, запуск	year, rocket, decision, to take, to create, matter, connection, world/peace, main, time, war (adj.), problem, goal, necessary, to allow, relationship, engineer, technical, to begin, launch
Everyday Life	24	время, становиться, день, работа, знать, каждый, начинать, понимать, жизнь, идти, дело, человек, оставаться, место, проходить, выходить, видеть, сделать, несколько, оказываться	time, to become, day, work, to know, every, to begin, to understand, life, to go, matter/case, to arrive, to leave, to see, to do, a few, to turn out to be
War	14	машина, самолет, летчик, первый, новый, дело, говорить, цель,	machine, plane, pilot, first, new,

		война, конец, самый, сказать, высота, лишь, собственный, аэродром, фронт, какой-то, боевой, иной	matter/affair, to speak, goal, war, end, most, to say, height, only, one's own, airport, front, some kind of, war (adj.), different
Hero	24	космический, год, первый, человек, большой, юрий, советский, становиться, самолет, жизнь, сказать, товарищ, летать, новый, день, дорога, спутник, герой, имя, отец	cosmic, year, first, person/man, big, iurii*, soviet, to become, plane, life, to say, comrade, to fly, new, day, road, satellite, hero, name, father *Given name, most likely in reference to Yuri Gagarin
Space Flight	23	человек, полет, первый, самолет, дело, летчик, сказать, космический, космонавт, очень, хотя, несколько, самый, королев, гагарин, говорить, новый, полный, случай, испытатель	person/man, flight, first, plane, matter/affair, pilot, to say, cosmic, cosmonaut, very, although, a few, most, korolev, gagarin, to speak, new, complete, case, tester

*At a rate higher than 1%

When compared to the American corpus topics, the Russian corpus contains similar topics and terms. This is perhaps surprising given the vastly different cultural and historical conditions under which the texts were written. Again we can pick out topics that are related to specific temporal events such as the topic I have titled "Dissolution of Soviet Union" which features terms related to the 1991 coup d'état attempt such as "august," "country," "president," and "gorbachev." This topic is disproportionately represented in a single text, Oleg Baklanov's *Kosmos – moia sud'ba* [Space is My Destiny] (2012). Baklanov was a politician who was directly involved in the Soviet coup d'état and thus it is not surprising that his text deals directly

with this topic. I discuss this topic in conjunction with the glasnost memoirs written by cosmonauts in response to the master narrative of spaceflight in Chapter Two.

Similarly, the topic "War" contains terms from memoirs that include reminiscences of the Second World War (called the Great Patriotic War in the Russian context) including "machine," "plane," "pilot," "goal," "war," "airport," and "front." This topic is disproportionately represented in memoirs published before the 1990s presumably because younger cosmonauts writing after the 1990s no longer had lived experience of the war. Out of the twenty-four documents in the corpus, this topic occurs at a rate higher than one percent in fourteen of the documents. I discuss this topic in more detail in Chapter One.

Another topic tied to a specific time period in the Russian corpus relates to life on space stations and includes terms like "work," "session," "to sleep," and "experiment." Another term in this topic is the name "volodia," a given name. This name refers to Vladimir (Volodia) Dzhanibekov, crew member with Viktor Savinykh on the Salyut 7 space station in 1985. Savinykh makes frequent reference to Dzhanibekov in his memoir *Zapiski iz mertvoi stantsii* [Notes from a Dead Station] (1999).[22] This topic is present in nineteen out of the twenty-four documents in the Russian corpus and is obviously tied to cosmonauts whose space missions involved time on space stations.

The topic "First Man in Space" contains terms related to Yuri Gagarin's space flight in 1963 with terms like "flight," "cosmonaut," "first," "preparation," "orbit," and "gagarin." This topic is present in all twenty-four documents of the Russian corpus. Because the topic contains words like "flight" and "cosmonaut" that we would expect to see across the corpus, however, this topic does not necessarily indicate that discussions of Yuri Gagarin or being first in space are

[22] The title of the text is an allusion to Dostoevsky's *Notes from the House of the Dead.*

evenly distributed across the Russian corpus. Similarly, the topic "Space Flight" contains the names of Korolev and Gagarin but also has generic terms related to space flight we would expect to see across the corpus including "flight," "cosmonaut," and "plane."

The most useful topics for my analysis to come from the Russian corpus are those that, as in the case of the American corpus, encompass categories other than space flight. The topic "Hero," for example, suggests fruitful terms for analysis including "person/man," "to become," "life," "new," "day," "hero," "name," and "father". This topic includes terms related to one of the central questions of my dissertation about the creation of the self and the intersection between the individual self and the heroic or idealized version of the self-created by the public image of the cosmonaut. The inclusion of the verb "to become" in this topic is also suggestive of the development of one's psychological and social sense of self in the texts. This topic is represented across the corpus at relatively high frequencies (Figure Four) but will be considered in detail in Chapter One.

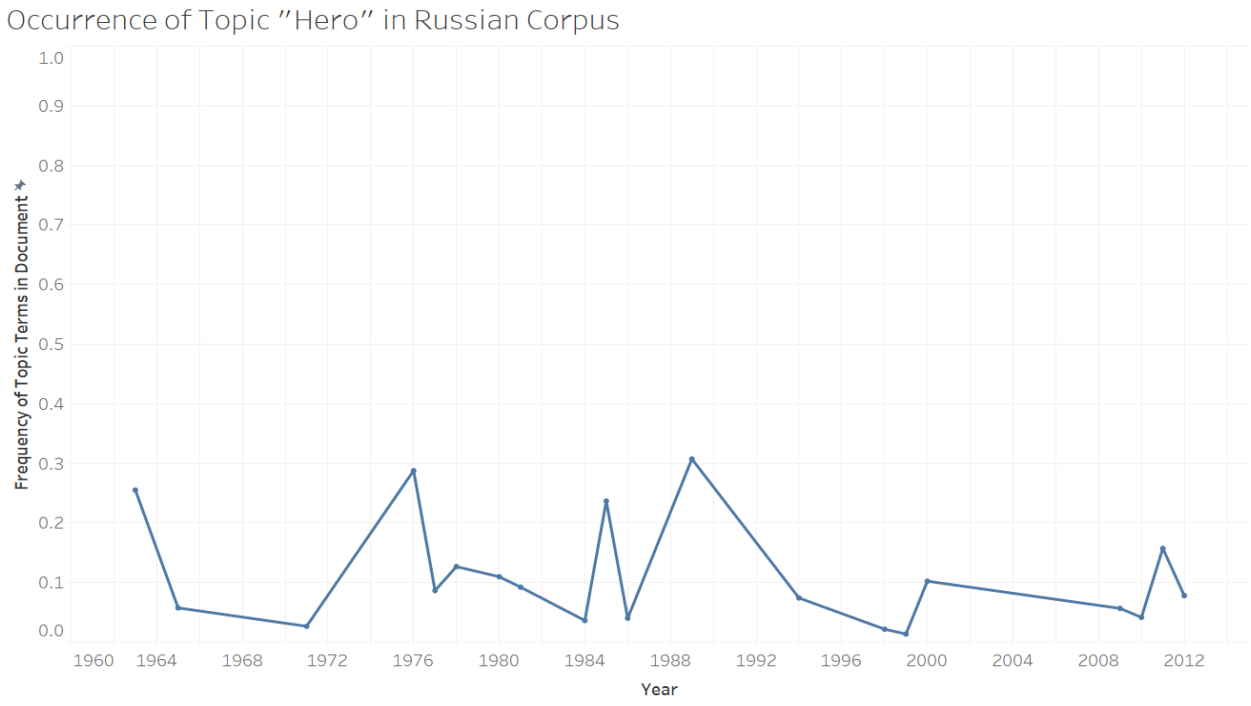

Figure 4 Occurrence of Topic "Hero" in Russian Corpus

The topic "Everyday Life" includes terms related to both space flight and more day-to-day terms with a high proportion of action verbs like "to understand," "to come," "to begin," "to know," and "to go." The higher proportion of verbs in this category suggests a potential limitation of topic modeling in highly inflected languages. Because all the verbs were transformed from their conjugated forms to an infinitive, there is a higher frequency of infinitive verbs in the Russian corpus than the English corpus. Furthermore, the computer will recognize those infinitives as a single term as opposed to conjugated forms of the verbs in the English corpus which are not recognized as a single term. In other words, the computer will not recognize "thought," "think," and "thinks" as one term in English but any inflection of the Russian equivalent verb "to think" would be counted as one term and thus might skew the analysis towards a disproportionate usage of verbs.

Perhaps the most interesting element in either corpus is how similar the topics are to one another and how limited the number of terms used across the topics. The American corpus contains 200 topic terms but only 118 unique word forms. This means there is a high level of repetition across the terms. The most frequently used terms in the topics are "space" (7 times), "nasa" (6), "time" (6), "crew" (5) and "flight" (5). Similarly, the Russian corpus topic models feature 201 words but only 129 unique word forms, again suggesting a high level of repetition. The most frequently used terms in the topics are "year" (5), "new" (5), "first" (5), "person/man" (5) and "matter/affair" (4). For analytical purposes, it is difficult to differentiate some of the topics from each other without relying on temporal terms referring to specific space missions or historical events.

Conclusion

For each of the chapters that follows, I examine central themes in the memoirs as connected with the results of the topic modeling I performed. The first chapter focuses on master narratives of space exploration found in the two earliest works of life writing and lays the background needed to establish the language and themes used to discuss astronauts and cosmonauts in ghost-written memoirs. This chapter makes extensive use of close reading of two foundational texts: *We Seven* and Yuri Gagarin's memoir published by *Pravda* and considers the topics "War" and "Hero" in the Russian context. The second chapter focuses on reactionary texts that responded to the image of space farers in the master narrative and explores thematic topics identified in topic modeling like the dissolution of the Soviet Union and the topic I have called "Everyday Life" in both the Russian and American corpus. Chapter Three considers the topics "Perspective and Thought" and "International Cooperation" from the American corpus and examines similar trends in the Russian corpus found in the topics "Goals and Relationships" and

"Life on Space Station" while Chapter Four considers "Identity and Self" from the American corpus. Limitations and strengths of topic modeling are considered in detail in the Discussions section of this dissertation.

Chapter One: Master Narratives of Space Flight

The earliest works of life writing to come out of both the American and Soviet space programs are largely congratulatory, propagandistic; they advance a master narrative of the space programs of both countries. This chapter establishes the characteristics of the master narratives expressed in memoirs published by the Soviet newspaper *Pravda* and the American *Life* magazine. Both *Pravda* and *Life* had exclusive access to the stories of the cosmonauts and astronauts respectively, the former because of its status as a state-owned publishing entity and the later through an exclusive contract. In particular, I describe the qualities and characteristics ascribed to cosmonauts and astronauts in these works and the ways in which they were presented less as individuals than as exemplars of an ideal type of Soviet or American citizen. This image was propagated by the state and popular media and the astronauts and cosmonauts themselves had very little to do with creating it. In fact, the lived experience of the space farers was often contradictory to the idealist version of their lives presented in ghost-written memoirs during this time. I argue that these early memoirs exhibit many of the qualities of memoirs from classical antiquity and the Middle Ages including didactic qualities for the reader to emulate and the presentation of exemplars. The individual selves created in early space farer life writing are thus constructed not by the space farers themselves but rather serve as sites of production for positive qualities emphasized by their respective societies and governments.

Master Narratives of Space Flight: In both the American and Soviet contexts, the narrative surrounding space flight was carefully curated by the popular press and the state to present what Slava Gerovitch calls a "master narrative" in the Soviet context ("'Why Are We Telling Lies?' 463). Historian Roger Launius defines a master narrative as "a set of sociocultural interpretations of events agreed upon by most interpreters of the event or age" and writes that

such narratives are "abundantly apparent" when considering the space age (353). As detailed in the Introduction, Gerovitch highlights four elements of this master narrative in the Soviet context: the myth of the founding father of the Soviet space program in the figures of Konstantin Tsiolkovskii and Sergei Korolev; the myth of exclusively domestic space technology; the myth of spaceflight as an expression of national identity; and stereotypical justifications for spaceflight like the destiny of humanity, glory for the nation, and national security (353). Launius similarly outlines several elements of the American master narrative of spaceflight including: the myth of progress as a result of American exceptionalism; stereotypical justifications for spaceflight including benefits for all mankind (NASA's official justification for its establishment); the myth of spaceflight as a feel-good endeavor that reflected national spirit; and the myth of space as a new frontier that continued a spirit of exploration going back to the European explorers of the fourteenth century (355-59). Both the Soviet and American master narratives of spaceflight thus in some ways overlap. They both rely heavily on a connection between spaceflight and national identity and the emphasis on the exploration of space as a triumph of technology. The American narrative lacks a founding father figure analogous to Gagarin and Korolev in the Soviet narrative. Perhaps due to the prominence of Wernher von Braun and his connections to Nazi Germany, the American space program did not stress the role of any one leader.[23] Both narratives also purport to justify space exploration for pan-national goals and claim space exploration will benefit all mankind while remaining deeply tied to the importance of national interests.

[23] Marcello Spagnulo suggests the United States space program was hesitant to acknowledge its connections to the former German rocket program: "The unspoken truth was that no one wanted the first US satellite to be launched thanks to a rocket built by former Nazis" (13).

The master narrative of space exploration was both fostered actively during the early days of the Cold War Space Race and invoked in later reminiscences and celebrations. By examining early life writing from both the Soviet and American space programs, we can identify ways in which this master narrative was crafted from the very beginning as an essential part of the space endeavor. In this section I focus specifically on the idea of spaceflight as an expression of national identity and ask how the astronauts and cosmonauts are presented as figures who particularly embody national ideals. The presentation of the self in both American and Soviet memoirs of the early space program is not reflective of larger trends in autobiography in the twentieth century which feature an individualized self whose personal uniqueness defines success (Wang 5). Rather, the memoirs I consider in this chapter present individuals as "ideal models" whose stories are told for didactic purposes much in the same way as they were in classical antiquity and the Middle Ages (7).

The figure of both the astronaut and the cosmonaut was linked to national conceptions of the ideal citizen. In the Soviet context, this ideal has its roots in the celebration of pilots and arctic explorers as uniquely Soviet heroes. Slava Gerovitch discusses the development of the New Soviet Man beginning in the 1930s with explorers like Mikhail Vodop'ianov and Nikolai Kamanin who rescued a crew of Arctic explorers aboard the icebreaker *SS Cheliuskin* and recognizes the heroic status bestowed upon these men as the first recipients of the Hero of the Soviet Union title *(Soviet Space Mythologies* 50). Stalin famously celebrated Soviet aviators (called Stalin's falcons) and pushed for pilots to complete a series of record-breaking flights as part of a campaign to display the might of Soviet technology (51). The cosmonauts were similarly celebrated as heroes and should be considered inheritors of the image of the heroic pilots of the 1930s.

Gerovitch recognizes tensions in the image of the New Soviet Man and traces its development from its inception in the 1930s to the 1960s with regard to the individual and the collective. He argues that Western historians have historically understood the New Soviet Man in the context of totalitarianism as a "passive individual subsumed under the collective" (49). However, Gerovitch recognizes more recent scholarship that has challenged this idea and attempted to trace nuances in the understanding of the individual and collective Soviet self. He cites Vladimir Papernyi's theory of cultural change beginning with a period of mechanism (and a celebration of the machine) and collectivism in the 1920s that gave way to focus on the human and individual in the 1930s-1950s (49). Gerovitch also cites Elena Zubkova's alternative theory that the Stalin era was an age of collectivism and it was only under Khrushchev that individualism became prominent (Zubkova). After Stalin, most historians agree that perceptions of the self changed; however, there are still differing opinions on whether that change celebrated individual freedom and expression. Thus, the image of the New Soviet Man was never without contradiction and the expression of this image in the context of the cosmonauts is also in some ways contradictory.

The first group of Soviet cosmonauts was fittingly chosen from a pool of test pilots. In this way, the cosmonaut was already connected to the cultural icon of the pilot celebrated under Stalin. As in the United States, there was debate as to what qualities the first group of cosmonauts should have. At a meeting of the Soviet Academy of Sciences in 1959, the qualifications were discussed (Gerovitch, *Soviet Space Mythologies* 53). Physical requirements were similar to those demanded of the Mercury astronauts, although even more restrictive: the cosmonauts had to be shorter than five feet seven inches and weigh less than 158 pounds (53). The candidates were required to be fighter pilots from military backgrounds. Sergei Korolev

argued that they needed "qualities needed for a future cosmonaut, such as assiduousness, self-discipline, and the unwavering determination to reach the set goal" (53). The Soviet candidates differed from the Mercury Seven in that they had less flying time and there was no requirement for an engineering background. From the beginning, the Soviet program utilized greater automation in their spacecraft and viewed the role of the cosmonaut as less of an engineer than a pilot (53). This was not seen as a negative, but rather as a positive affirmation of the superiority of Soviet technology over American technology. The American program was more firmly connected with manned space missions from the beginning whereas the Soviet program began with the unmanned satellite Sputnik.

The perception of the cosmonauts was thus in some ways consistent with larger metaphors in Soviet culture that celebrated the role of the individual as a cog in the larger system. This metaphor originated in a toast Joseph Stalin gave in 1945 in which he celebrated the "little cogs of a grand state mechanism" and the role the Soviet people played in the Great Patriotic War (51). This metaphor went part and parcel with the image of the New Soviet Man, the ideal Soviet citizen. Indeed, the development of the New Soviet Man was officially adopted as part of the agenda of the Communist Party at the Twenty-Second Party Congress in 1961, concurrent with the preparations for the first manned space flight (51). As discussed above, the image of the New Soviet Man was contradictory: "[t]he New Man was both a distinct individual and a 'little cog'; he strove for personal achievement and wanted to be a good member of the collective; he was to be a master of technology, yet he merged with technology as its intrinsic part" (52). The early cosmonauts were presented to the public as exemplars of the ideal New Soviet Man in much the same way that American astronauts were celebrated as exemplars of American values. But while the Americans celebrated the Mercury Seven as a group, it was an

individual cosmonaut who received the most attention in the Soviet Union and who would become the symbol of the Soviet space program. This turn toward the individual is concurrent with larger trends during the Thaw era (beginning after Stalin's death in 1953) that saw the "resurrection of the individual."

Yuri Gagarin's account of his flight and the mythology surrounding his role as the first man in space is a foundational element of the Soviet master narrative of space flight. As Slava Gerovitch recognizes, the cosmonauts quickly became mythological symbols of Soviet power and dominance ("'Why Are We Telling Lies?' 464). The Soviet cosmonaut was synonymous with the New Soviet Man who "demonstrates in action all the invaluable qualities of the Soviet character, which Lenin's party had been cultivating for decades" (464). Gerovitch discusses the role multiple organizations had in crafting this image, including coaching cosmonauts on how to handle public appearances, writing speeches for them, and correcting "errors" made by the early cosmonauts (466). One of the main ways in which the image of the early cosmonauts and in particular Gagarin was celebrated as an exemplar of the New Soviet Man was through newspaper articles, biographies, and memoirs. As Asif Siddiqi recognizes, there was a "huge body of literature issued by 'official' journalists who extolled the virtues of the Soviet space programme" (98).

Gerovitch discusses the plot elements of early cosmonaut biographies and memoirs that suggest Clark's "master plot" of socialist realism in which the positive hero undergoes formulaic and predictable trials to emerge in service of the Communist Party. Elements of the positive hero and master plot are identified by Gerovich in cosmonaut biographies and memoirs including the molding of the positive hero by a mentor figure. Typically the memoirs begin with humble childhoods and feature the following:

> wartime hardships, 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 mission trusted to the cosmonaut by the Communist party, and finally coming back with an important message reaffirming the communist values" ("'Why Are We Telling Lies?' 466–67).

Topic Modeling

Interestingly, some of these plot points can be traced across my corpus of Soviet/Russian cosmonaut memoirs through topic modeling. The prevalence in early memoirs of the Second World War (called the Great Patriotic War in the Soviet/Russian context) are so prevalent that they emerged as an independent topic including terms like "machine," "plane," "pilot," "goal," "war," "airport," and "front." This topic is disproportionately represented in memoirs published before the 1990s presumably because younger cosmonauts writing after the 1990s no longer had lived experience of the war (Figure 5). The high frequency of words in this topic in the early Soviet memoirs shows how foundational this plot point was in these works.

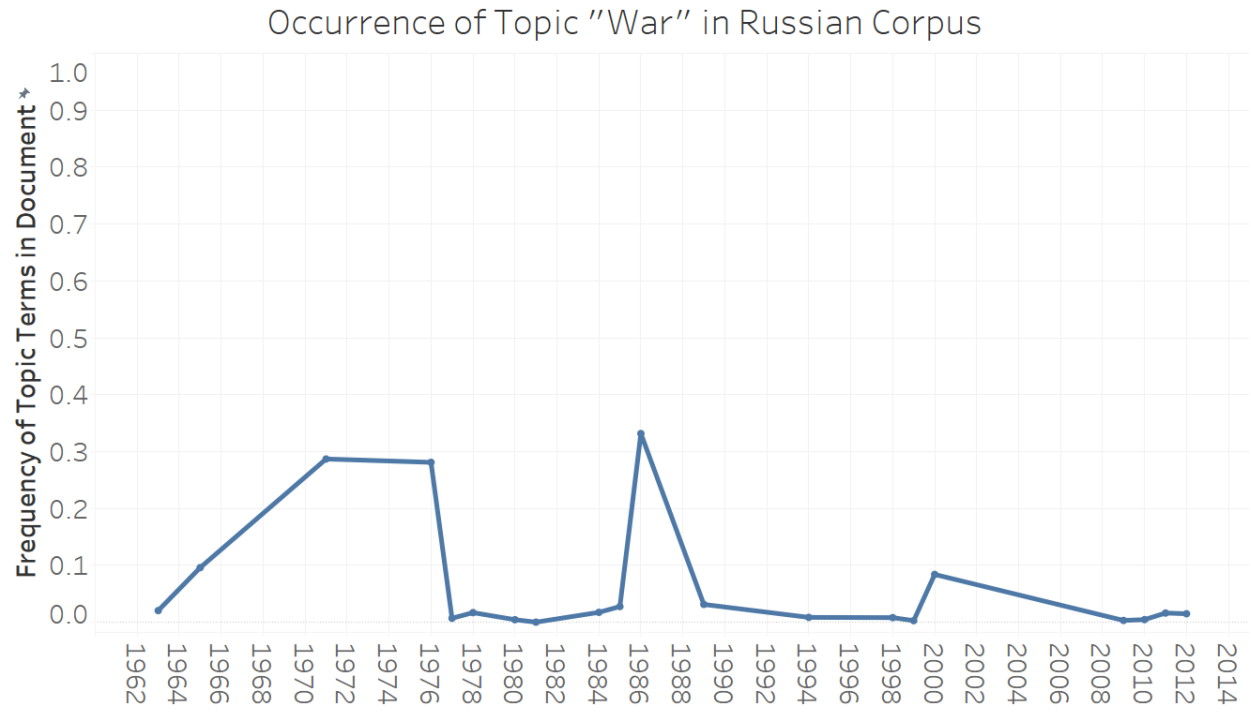

Figure 5 Occurrence of Topic "War" in Russian Corpus

Another theme to emerge from topic modeling also confirms elements of the Soviet master plot at play in the early autobiographies of cosmonauts, the topic I have called "hero." This topic includes terms like "person/man," "to become," "life," "new," "day," "hero," "name," and "father." This topic is represented across the corpus of Soviet/Russian cosmonaut autobiographies at relatively high frequencies (Figure 6).

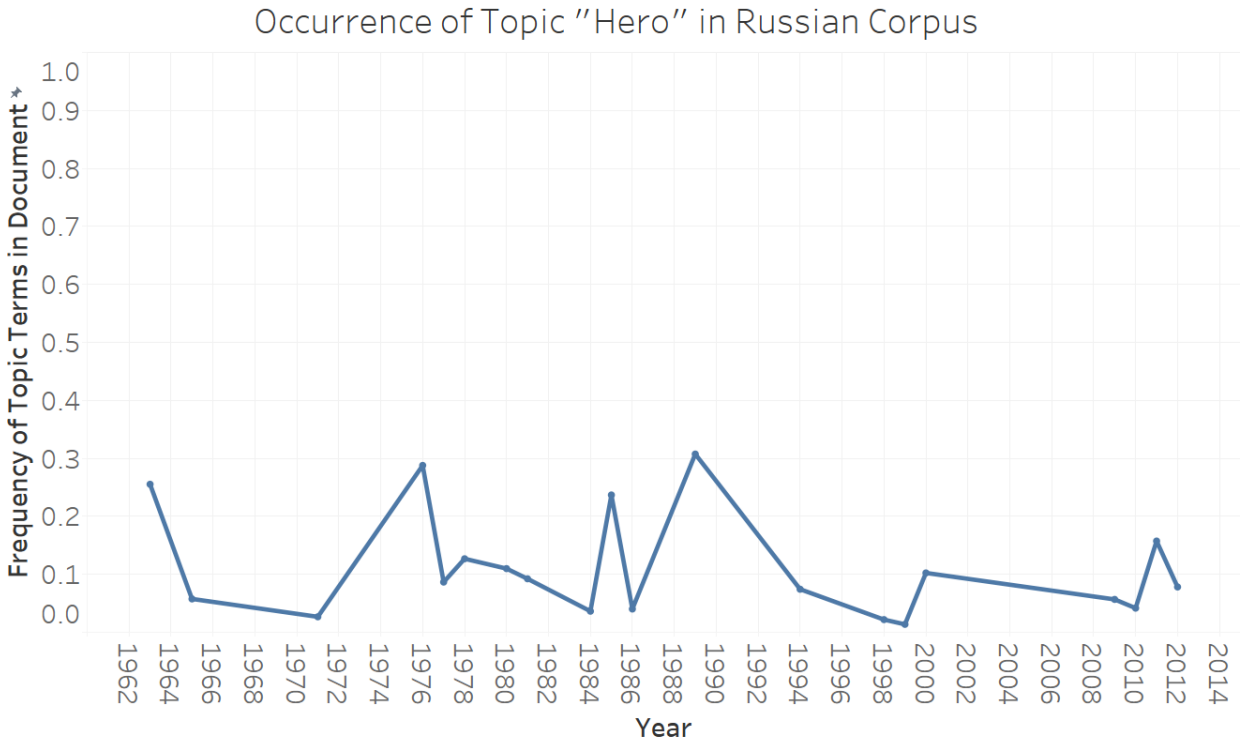

Figure 6 Occurrence of Topic "Hero" in Russian Corpus

Thus, the image of the cosmonaut was always connected both implicitly and explicitly with the ideal Soviet citizen as exemplified in the figure of the New Soviet Man and the positive hero. Yuri Gagarin was presented as a living embodiment of this ideal, as will be examined in greater detail in the close reading section below. The American astronauts were also presented to the public as ideal citizens of the United States with particularly American characteristics. As Matthew Hersch recognizes in his work on American astronauts in popular culture, the astronauts were celebrated as celebrities who fit pre-assigned roles including "soldier, daring

pilot, and American hero" (*Inventing the American Astronaut* 1). The introduction to *We Seven,* the first life writing celebrating the Mercury Seven astronauts that will be analyzed in detail below, asks "[w]hat kind of man could manage to be part pilot, part engineer, part explorer, part scientist, part guinea pig—and part hero…" (Carpenter et al. 6). The traits necessary to be a successful astronaut included courage, remaining calm under pressure, resourcefulness, and physical strength (7). Although there was no official censorship in the United States as there was in the Soviet Union, astronauts were expected to portray a certain image and were coached by NASA and the American press much as the Soviet cosmonauts were (Hersch 2). As such, "the actual working life of astronauts remained hidden behind a bland veneer of virtue" and many elements of astronaut's lives including the less glamorous elements of space work, competition, and "discomforts of civil service remained largely absent from published accounts of this new hero class" (6). In addition, elements of the astronaut's personal lives that were considered "flamboyant" or less than savory were similarly excluded from the public narrative. Some of these elements, including marital problems, extramarital affairs, or mental health issues, were later discussed in the tell-all memoirs I consider in Chapter Two.

The astronaut selection process was designed to produce a class of individuals with specific qualities and characteristics deemed necessary for spaceflight. Candidates were chosen from among military aviators and were recommended by one of the branches of the military (Hersch 16). The requirements included being in excellent physical condition, the ability to stay alive in dangerous circumstances and having the stamina to withstand long periods of stress (Burgess 35). The selection committee eventually decided on specific physical requirements including being under forty years of age, as well as experience requirements such as having logged around 1,500 jet hours (35). In addition, astronauts were expected to be in superb mental

condition. Guidelines for psychiatric evaluation of astronaut candidates included specific traits astronauts should possess such as "sufficient drive and creativity to insure positive contributions," "freedom from conflict and anxiety," and "no evidence of impulsiveness" (29). In addition, negative qualities were also outlined that would preclude candidates from selection. These included "[e]xaggerated and stereotyped defenses," "[s]elf-destructive wishes and attempts to compensate for identity problems or feelings of inadequacy," and not being "overly dependent on others for the satisfaction of their needs" (29). Finally, astronauts should be motivated not by self-interest or "exaggerated needs for personal accomplishment" but rather by the mission itself (29).

Many of the qualities sought in astronaut candidates are indicative of elements of American character that are embedded in the master narrative of American space travel. For example, the requirement for candidates to possess drive and creativity aligns with the concept of American exceptionalism or the idea that Americans are chosen or special and that, by extension, the United States is "a unique nation with a special destiny" (Langman and Lundskow 195). The search for astronaut candidates for the Mercury Seven program was a search for the exceptional among the exceptional, for exemplars of the ideal type of American who would ensure the United States' success in the Space Race while confirming the supremacy of the American (exceptional) way of life. Implicit in the stated qualifications necessary for astronaut candidates was an understanding of who would not be considered exceptional: essentially anyone who was not a white male. As Langman and Lundskow recognize, the exceptional American possessed the "identity and values of white men" and excluded anyone who did not fit into either of those categories (white or male) (195). The astronaut candidates represented a particular type of American. As Hersch puts it, "[t]hat none of the astronaut candidates would be female, non-

Caucasian, or foreign-born was so obvious to the Selection Committee as to go unstated" (16). This was further ensured as all the candidates were chosen from among active servicemen, a process that essentially guaranteed the "racial and gender homogeneity of the astronaut corps" (16).

The qualifications necessary for a Mercury astronaut are outlined by the editors of *We Seven* and included being daring and courageous (also traits of the Soviet positive hero) , remaining cool and resourceful under pressure, being physically strong ("of course") and possessing nerves of steel (7). The astronauts would "have to be devoid of emotional flaws which could rattle them or destroy their efficiency when they found themselves in a crisis" (7). The list goes on, getting more specific: astronauts would have to be "young enough to be in their physical prime…and yet mature enough to have lost the rash impulses of youth" (7). They had to be less than five feet, eleven inches tall and weigh no more than 180 pounds (American astronauts could weigh about thirty pounds more than their Soviet counterparts). They needed to have an engineering background and test pilot experience. The qualifications are summed up in a quote from an Air Force general who said NASA was looking for "ordinary supermen" (8).

The dichotomy between ordinary and superman provides a productive framework to understand the ways in which the astronauts were meant to represent the everyday American and at the same time be exemplary. This role is similar to the dual expectations of the positive hero in socialist realist fiction. The editor of *We Seven* describes the astronauts as "strikingly similar" and emphasizes their "ordinary" traits: they were all married with children, from small towns and cities, and all had brown hair except for one (9). Hersch identifies the traits NASA promoted in its first selection of astronauts: "loyal, modest men" who would be able to challenge the Soviets (26). He suggests that the Mercury Seven were offered as a counterpart to the impersonal,

technologically focused Soviets (as represented by Sputnik, an unmanned satellite): the astronauts would be "a human face" that was "characteristically American…honest, energetic, reverent" (26). The astronauts were presented to the American public as "plain-speaking small-town fliers," the sons of farmers and frontiersman (Hersch 26). They exemplified American values by being both typical and exemplary. In this way, the astronauts were a different kind of celebrity, one that was theoretically both representative and aspirational.

The tension between the Mercury Seven as a collective group of interchangeable heroes and the acknowledgment of the candidates as individuals is one of the most productive areas of analysis when looking at early autobiographical works in the American context. Matthew Hersch argues convincingly that the Mercury Seven were presented to the public as part of an enduring image of heroic aviators and flyers who were unfazed by death and reflected America's "legacy of individualism and heroic exploration" ("'Capsules Are Swallowed': The Mythology of the Pilot in American Spaceflight" 37). Similarly, Denice Turner writes about the image of heroic pilots like Charles Lindbergh and the popularity of first-hand accounts of flight written by pilots before the Second World War (9). American astronauts were expected to reflect the skills and talents of individual "pilot-warriors" who risked their own personal safety in the name of their country (Hersch 40). However, the Mercury Seven astronauts were almost always represented to the public as a group. Indeed, the cover image featuring the astronauts in *Life* magazine from September 14, 1959, features an image of the seven men in suits, all smiling and looking nearly indistinguishable one from the other (Figure 7). The caption to the image reads "One of Seven: First American in Space" (Sage 149). The astronauts were presented as exemplars of the best American citizens. Director of the navy's Astronautical Division of the Bureau of Medicine and Surgery Norman Barr clarified: "These men have been chosen from a population of about 180

million to represent the United States in this important project. We are all behind them a hundred percent" (149). The image of the original Mercury Seven that was sold to the American public was thus less focused on individual astronauts and more on the idealized image of the astronaut that these seven men embodied. Compared to the iconic image of the singular Yuri Gagarin, the focus on the group of seven in the American context is in some ways surprising. It is also an image that changed when Neil Armstrong became the figurehead as the first man on the Moon, celebrated as an individual in ways that the Mercury Seven were not.

Figure 7 Mercury Seven in Life Magazine 1959

The master narratives of space travel in both the Soviet and American context presented the cosmonaut and the astronaut as national heroes. As we have seen, the portrayal of heroism was tied to character ideals that are specific to the cultural and political contexts out of which they arose. While some similar traits emerged, including bravery and loyalty to one's country as well as the at times contradictory balance of both individual and collective traits, both narratives were deeply tied to conceptions of the nation and the image of the cosmonaut as the New Soviet Man and the astronaut as an American exemplar. When considering early autobiographies produced by mass media outlets, I ask not only how cosmonauts and astronauts are portrayed as heroes, but also how the production of these autobiographies contributed to the development of space farers as celebrities. I consider the ways in which the astronauts and cosmonauts contributed to the image of themselves as celebrities and the ways in which their autobiographies were used to bolster this image.

Astronauts involved in the first space missions were widely celebrated as public celebrity figures. They were highly visible in news media and celebrated for their positive qualities considered above. The official introduction of the seven astronauts who made up the original Mercury Seven at a press conference on April 9, 1959, highlighted the astronaut's high intelligence, high motivation, stability, and status as family men (Hersch 26). From the beginning, the astronauts were encouraged to perform public relations work and NASA expected the astronauts to accurately represent the agency's "goals and intentions" to the public (49). The astronauts were featured prominently in the American press and paraded across the country in a series of appearances at civic organizations, schools, and factory plants that made products for NASA (48). From the beginning, the image of the astronauts was carefully cultivated by NASA and the press to introduce the public to a new category of heroes.

The astronauts actively contributed to the production of this image. Most prominently, the Mercury Seven astronauts were part of a group contract with Time, Inc. that gave *Life* magazine exclusive rights to their "family stories" (Hersch 49). Astronauts sought out publishing deals to increase their salary. As Hersch writes, the starting salary for an astronaut in 1963 was $13,000 per year, which was not enough to adequately provide for a family and complete the constant travel NASA expected of the astronauts. NASA changed their position on whether astronauts should have the right to retain publishers and after a period of debate concluded that contracts with publishers were generally beneficial for NASA and the astronauts as they both "protected the astronauts' families from excessive press scrutiny and had eliminated potential competition between the men for publicity" (49). The contract with *Life* magazine effectively ensured that the astronauts would be represented in the press in a way that NASA could moderate and prevented the astronauts from competing for other magazine deals or publishing negative information about the space program (49). NASA was able to largely control the narrative published about the astronauts and in some ways moderate their behaviour through the publishing contract; astronauts were expected to "release personal information through *Life*, or not at all" (49).

The image of the astronauts produced by *Life* magazine was entirely consistent with the narrative of astronauts as modern-day heroes. Stories about the early astronauts were published in twenty-eight issues of *Life* between 1959 and 1963 and regularly depicted the astronauts as "bland good guys" who came across as completely homogenized (Garber). Some of the articles in *Life* were bylined by the astronauts themselves but were heavily ghost-written by *Life* writers (McCurdy 101). One of these writers remarked that the astronauts were the driving force behind the heroic image and that they used their status as "national heroes to enhance their influence in a

flight program dominated by rocket scientists and engineers" (101). The astronauts actively promoted an image of themselves as all-American heroes, presenting themselves as well-rounded fathers and husbands (101). The stories that were ghost written for the astronauts followed a routine structure defined by Harlen Makemson as such: "an anecdote from test pilot days, followed by descriptions of astronaut training, an acknowledgement of danger, a sense of duty in accepting the mission, and a projection of what the first flight might be like" (quoted in Garber). In this way, the astronauts were part of the creation of the mythic version of the astronaut story. This tendency is perhaps best exemplified in the stories told by the astronauts in the autobiographical *We Seven,* published by Simon and Shuster after it purchased the rights from *Life* for $200,000. This work will be analyzed in detail below.

The version of themselves the astronauts presented to *Life* was different from their lived experience. The astronauts were the recipients of many benefits due to their heroic status including using private jets, attending parties, and receiving insider stock market tips (Hersch 51). In addition, they received gifts and special rates on mortgages and cars (51). While many of the astronauts did not lead the "pure" lives presented to the public, the press narrative was absolute, and it was not until the 1970s and the publication of Thomas Wolfe's *The Right Stuff* (1979) that this image began to be questioned. The process by which individual astronaut's autobiographies published in the 1970s aided in challenging the image of the astronauts created in the late 1950s and 1960s will be examined in Chapter Two.

Yuri Gagarin's autobiography was also the result of collaboration with the press, although in an entirely different publishing industry and economic system. The autobiography enjoyed enduring success and was republished multiple times. In his biography of Gagarin (2020), Andrew Jenks discusses the elements of Gagarin's life and personality that were omitted

from his autobiography and its subsequent versions, the first version which is included in my corpus for study. These include factual elements from Gagarin's flight (Gagarin's capsule had "spun wildly out of control during its descent") as well as the fact that his rocket launched not from Baikonur but from another launch site called Tiura-Tam (14). Jenks suggests that Gagarin "had a talent for becoming what people wanted him to be" and was capable of adapting his personality to fit different audiences (7). He asks how complicit Gagarin was in crafting an image of himself as exemplary and the role of individuals in creating celebrity culture. John McCannon's work on early Soviet heroes including aviators and Arctic explorers addresses some of these issues. McCannon suggests that there was significant dissonance between the real-life behaviours of the polar explorers and the celebrity image they helped manufacture. He discusses the financial gains that were to be had by the explorers in return for public appearances and written works (356). McCannon suggests that the explorers were thus complicit in the creation of their celebrity status.

Just as the astronauts leveraged their public status for personal gain, Yuri Gagarin similarly contributed to the image of himself as a hero and actively used his fame for material and financial gains. As Jenks recognizes, Gagarin was at one and the same time an "official Soviet icon" and a "celebrity who conveyed the materialistic, hedonistic, solipsistic spirit of an emerging consumer society" ("Homo Sovieticus" 174). Just as the astronauts presented themselves and were presented by the press as pure examples of American virtue while in reality living the lives of celebrities, Gagarin took advantage of his status as Soviet hero.[24] For example, Gagarin drove a bright red French Matra Djet given to him by France "at excessively high rates

[24] I explore the distinction between heroes and celebrities in Chapter Four in the context of the memoir boom. Although Jenks uses the term celebrity, I subscribe to Boorstin's definition of heroes as people who "are distinguished by their achievements" while celebrities benefit largely from their perceived personalities and not from actual acts they have performed (2).

of speed" (174). He and other cosmonauts were able to obtain tickets to popular shows in Moscow and had access to popular consumer goods otherwise unavailable to the Soviet public including clothes and shoes (175).

The dissonance between the selves presented in the early astronaut and cosmonaut memoirs and the lived reality of these figures as heroes in the American and Soviet systems is telling. The memoirs reflect strong adherence to the master narratives of space travel and generically read similarly to one another as examples of life writing that produce an image of the self that is largely separated from lived experience. Chapter Two will discuss the reactionary wave of life writing that followed the publication of these ghost-written autobiographies and aimed to challenge the image of the astronaut and cosmonaut presented to both the American and Soviet public in the 1950s and 1960s. Below I examine Yuri Gagarin's largely ghost-written autobiography (written "with the assistance" of S. A. Borzenko and N. N. Denisov) as well as the first work of life writing from the Mercury Seven entitled *We Seven*. Both of these works were chosen because they are the earliest examples of life writing in both contexts and because they are representative of the discourse surrounding space farers as heroes in the 1950s and 1960s.

Close Reading of *Doroga v kosmos* [Road to the Stars]

Among the early Soviet space literature were collected "memoirs" first published by the state newspaper *Pravda* and compiled into print volumes including *Doroga v kosmos* [Road to the Stars] by Yuri Gagarin (1961) and *25 Chasov v kosmicheskom polete* [25 Hours in Space Flight] by Gherman Titov (1961). These works were meant to memorialize the Soviet Union's first successes in manned space flight. The introduction to *Doroga v kosmos* makes this purpose clear when discussing Gagarin's flight: "This unparalleled victory of humanity over the forces of

nature embodied the genius of the Soviet people, the great strength of socialism and its incontestable superiority over the dying capitalist system" (2).[25]

Gagarin's autobiography *Doroga v kosmos* was published by *Pravda* almost immediately after he returned from his orbit around the Earth on April 12, 1961. In his biography of Gagarin, Andrew Jenks discusses the genre of Gagarin's autobiography and identifies it as "a standard socialist hagiography of the collective farm boy and Soviet hero" ("Yuri Gagarin and the Many Faces of Modern Russia" 8). He argues that Gagarin is presented in the autobiography as the positive hero of socialist realism. Jenks's analysis fits with my own argument that early life writing about the cosmonauts and astronauts is reflective of a model of selfhood similar to that of classical antiquity and the medieval period that uses individuals as exemplars with specific traits that were valued by society and in this case the state. Jenks's invocation of Gagarin's autobiography as hagiography is based on Katarina Clark's work on the Soviet novel. Clark argues that the positive hero is a defining feature of Soviet socialist realism and identifies that this hero is "someone the reading public might be inspired to emulate" (46). Clark clarifies that the positive hero is reminiscent both of hagiography and Russian chronicles of princes that emphasize "honor, duty, valor, and service to one's country" (47). It comes as no surprise that Gagarin's autobiography reads much like a socialist realist novel with Gagarin as the positive hero.

The autobiography opens with the assertion of Gagarin's humble origins: "…the family into which I was born is the most ordinary, in no way differing from millions of hardworking families in our socialist homeland" (Gagarin 3).[26] Gagarin confirms that his parents were simple

[25] «Эта беспримерная победа человека над силами природы воплотила в себе гений советского народа, могучую силу социализма, его неоспоримое превосходство над умирающим капиталистическим строем.»
[26] «...Семья, в которой я родился, самая обыкновенная, она ничем не отличается от миллионов трудовых семей нашей социалистической Родины.»

people with their origins in the peasant class and their pride at working on a *kolkhoz* (collective farm) in Klushino, a village in the Smolensk district: "My father's whole life was connected to the *kolkhoz.* It was a second home for him" (5).[27] The outbreak of war serves as a key plot point, as is to be expected. Gagarin recounts his and other boys in the village's interest in a fallen Soviet plane and two Soviet pilots who were downed near their village, the first mention of aviation in the work (5). In summarizing the impact the war had on his generation, Gagarin writes: "Each of us suffered through the war, saw horrors committed by the occupiers, lived through the pangs of hunger and lawlessness—all of which was impossible to forget or forgive. And these children in time became adults" (9).[28] In his biography of Gagarin, Jenks confirms that the horrors experienced by Gagarin during the war were consistent with his lived experience and confirms that the atrocities were not exaggerated (36). Gagarin describes his education, which was severely interrupted by the war, in detail, highlighting the bond he had with his teachers of literature and physical education and emphasizing the importance of the Soviet education system for the reader.

After completing six years of schooling, Gagarin decided to go to Moscow and enroll in trade school. He joined a program for foundrymen and worked hard to make up for his lack of formal schooling. Gagarin writes about the impact the biography of Mikhail Vasilyevich Frunze had on him and his classmates and notes how they frequently discussed the concept of heroism and the need for the younger generation to continue the sacrifices and constant heroism demanded of them in the revolutionary battle (12). After completing his course in metal smithing (a leitmotif of socialist realist culture celebrating the iconography of the blacksmith), Gagarin

[27] «Вся жизнь отца была связана с колхозом. Колхоз был для него вторым домом.»
[28] «Каждый из них настрадался за войну, видел ужасы, чинимые оккупантами, испытал муки голода и бесправия – всё то, что невозможно ни забыть, ни простить. А дети со временем становятся взрослыми.»

continued his schooling at a technical school in Saratov. During this time, Gagarin joined the Voluntary Society for Aid to the Army, Aviation, and Navy (DOSAAF) described by Jenks as "a paramilitary organization" that ran flying clubs for young adults and promoted military values and goals (70). He learned to fly and was influenced by several mentors including Hero of the Soviet Union Sergei Ivanovich Safronov. Gagarin's involvement with aviation is consistent with the trend described above that saw cosmonauts as the natural inheritors of the heroic status of aviators in the Soviet Union. Gagarin describes how Safronov drew on his life experience and his actions during the war to "show us, future pilots, how the Soviet person and real pilot is formed" (19).[29] Additionally, Gagarin describes the influence of Grigory Kirillovich Denisenko, who was also a Hero of the Soviet Union and contributed to Gagarin's "upbringing" (vospitanie). Denisenko explained to the members of the aviation club Gagarin participated in the elements of will (volia) including the ability to direct your behaviour, control your own actions, the ability to overcome any challenge, and to complete any tasks assigned to you with the least loss of strength possible (19).[30] The introduction of mentors or guides who support Gagarin's understanding of what it means to be a Soviet citizen is characteristic of the master plot of Soviet socialist realism and again squarely places Gagarin's autobiography within this tradition and highlights Gagarin's role as the positive hero.

The trial Gagarin must overcome as the positive hero is of course his orbital flight and representation of the Soviet Union as the first human in space. Siddiqi describes the ways in which the narrative of Gagarin's space flight was memorialized including eliminating

[29] «На примерах своей биографии он стремился показать нам, будущим пилотам, как формируется советский человек и настоящий лётчик.»

[30] «Выступая как-то на комсомольском собрании, он в свою очередь объяснил нам, что такое воля, – это прежде всего умение управлять своим поведением, контролировать свои поступки, способность преодолевать любые трудности, с наименьшей затратой сил выполнять поставленные задания.»

contingency from the narrative so that all successes were assumed, and failure was not an option; narrowing the perspective so that individuals (typically cosmonauts as opposed to engineers) were the focus of the narrative and utilizing the "single master narrative" of Soviet space history (98). These elements can all be seen in Gagarin's autobiography. For example, Gagarin describes his selection as the first man in space as almost a foregone conclusion: "Everyone supposed that I would be named for the first flight (63).[31] When Gagarin was informed that he had been chosen, he just said "They gave me their word" (63).[32] The reader is never in any doubt that Gagarin will be chosen. Nor is there any suspense about the success of the flight. When Gagarin meets chief engineer Sergei Korolev just before lifting off into space, there is a slight indication of the dangers associated with Gagarin's flight: "When I first saw him [Korolev], he looked worried and tired," but this is quickly corrected with a description of the engineer's reassuring smile and the assurance that "Everything will be good, everything will be okay"(66).[33] Gagarin's account of his time in space is similarly optimistic: as his rocket ship takes off, he famously says "We're off! Everything will go okay" (69).[34] During the flight, Gagarin announces by radio that he feels great, everything is going well, and the flight is proceeding as expected (69-70).

Yuri Gagarin's memoir was re-published in 1976 and cements the mythic story of his space flight. The second edition purports to be Gagarin's account of his own life told "simply, humbly, like everything that he [Gagarin] did while he was alive ("Predislovie" [Foreword]).[35] The introduction to the memoir is written by cosmonaut Titov. He sees in the memoir a chance to finish the story of Gagarin's success and add to what was originally a shorter story: "The story

[31] «Все предполагали, что в первый полёт назначат меня.»
[32] «Дали мне слово.»
[33] «Впервые я видел его озабоченным и усталым…», «Всё будет хорошо, всё будет нормально.»
[34] «Поехали! Всё проходит нормально.»
[35] «Рассказал просто, скромно, так, как все это он делал, как жил.»

now seems too short, and we are trying to finish it and expand it ("Foreword").[36] The many editions and reworkings of Gagarin's memoir illustrate the importance his story had for the official version of the Soviet space program.

Close Reading of *We Seven: By the Astronauts Themselves*

We Seven: By the Astronauts Themselves was published in 1962. This volume contains recollections of the early Mercury missions and includes entries by the seven Mercury astronauts. While it is not the autobiography of a single individual, it is still the first example of life writing from the American space program and as the introduction to the volume makes clear is "a personal narrative, full of suspense and adventure, reminiscences and beliefs, facts and opinions, good days and bad days, and patiently detailed descriptions of a number of complex technical matters…" (Carpenter et al. 5). The introduction to the volume is written by the staff at *Life* magazine who acknowledge the "privilege" they had "to work closely with the Astronauts since they first joined Project Mercury in the spring of 1959" (6). Thus, like the first accounts of cosmonaut space flight in *Pravda*, this first volume of reminiscences were gate kept by a major player in the mass media.

The work purportedly contains the writing of the "Astronauts themselves—as the men who know the subject best—are best equipped to explain to others" (5). It is suggested that the astronauts (capitalized in the original) are a unique group that have special knowledge unavailable to the lay person. The reverence with which the astronauts are treated in the introduction and by the editor throughout the text is telling. Although the text purports to include personal details and both "good days and bad days," the tone of the introduction effectively erases nuance and individuality from the narrative. Indeed, the description of the text as "a

[36] «Сейчас рассказ кажется слишком кратким, и мы стараемся его дополнить, расширить.»

[singular] personal narrative" conflates seven individual's lived experience into one narrative. The editor suggests that they will let the astronauts tell their own stories, only occasionally butting in with "additional background about the authors which they have not included in their own chapters, either out of modesty or because none of them would be so presumptuous" (6). However, the editor then spends several pages defining the "sociology of the Astronauts themselves," again suggesting a category of people, not individuals, in an attempt to understand "what kind of human being [NASA] needed to man the cockpit" (6). Here *human being* again suggests a lack of interest in the individual and implies that the astronauts were not so much individuals as a category of human beings with certain characteristics needed for successful space flight.

Just as Gagarin's autobiography closely follows the socialist realist master plot, the astronaut's stories in *We Seven* are organized in a predictable structure that begins with describing the background of each of the seven astronauts, explains what motivated each of the astronauts to join the space program, describes their training and celebrates the first space flights. Individual chapters contain sections written by the astronauts (heavily ghost written).[37] The overall tone of the work is largely congratulatory and although purportedly representative of individual astronaut's stories reads more like one cohesive narrative defining the qualities of astronauts.

The first chapter is entitled "A Past to Draw On" and purports to convince readers that "Astronauts can and do grow up anywhere" (32). John Glenn writes briefly about his childhood and his military experience in the Korean War. He confirms that his military training prepared

[37] The introduction to the volume makes clear the involvement of the editors in producing the text. The repetition of phrases and the uniform style throughout the text suggests the astronauts themselves had little to do with writing the text.

him well to be an astronaut, writing that the qualifications for space flight are similar to those needed in combat: "…you must be able to analyze your own situation rationally and take appropriate action almost by instinct" (37). Other astronauts also draw on their military experience and discuss the influence war had on their interest in aviation. For example, Scott Carpenter writes that like most of the astronauts, he became interested in flying because of the Second World War (50). The experience of becoming an astronaut is directly tied to military experience in this section and highlights the similar backgrounds of the astronauts. Although the book claims that astronauts can come from any background, the original Mercury Seven astronauts came from families of similar social standing and generally followed a similar path to becoming astronauts.

When describing the selection process to become astronauts, each of the candidates discusses the rigorous physical and psychological tests involved. They stress the competitive nature of these tests and suggest that the tests could be passed with flying colors by drawing on internal qualities like self-control and motivation. For example, Scott Carpenter writes that he was able to hold his breath underwater for far longer than the other candidates simply because he was motivated to do so (59). This statement fits with the overall tone of the descriptions of physical tests which suggest that the astronauts were not extraordinarily gifted but merely displayed the discipline and perseverance necessary to overcome challenges.

A battery of psychological tests was part of the astronaut selection process and several of the astronaut candidates describe one test in particular, the "Who Am I?" test. This test required the candidates to answer the question "Who Am I?" by describing themselves using the construction "I am…" (59). Such a test seemingly offers a rhetorical opportunity for the astronauts to reflect on themselves as individuals. However, Scott Carpenter remembers thinking

the test had no value and answered with descriptions not of his personality but definitions of different roles he filled: “I am a man. I am a naval aviator. I am a father. I am a husband. I am thirty-three. I am an archer. I am a swimmer. I am a skindiver” (59). Finally he defined himself as an astronaut candidate: “I am a prospective Mercury Astronaut” (59). John Glenn similarly describes this test, defining himself as a man, Marine, flyer, husband, officer, and father (44). He writes, “When you got down near the end [of the test] it was not so easy to figure out much further who you were” (44). Ironically, a test that was supposed to illuminate something about who the astronauts really were ends up reaffirming their similarity. The lack of introspection described by the astronaut candidates when discussing this test again suggests the presence of ghost-writers.

We Seven contains several chapters describing the teamwork that made the Mercury missions possible; for example, a chapter entitled “We All Pull Together.” These chapters discuss the different roles and functions of the astronaut candidates and suggest the importance of teamwork. The focus is not on any one astronaut candidate and the text largely concentrates on technical questions and elements of astronaut training. Alan Shepard’s chapter entitled “The First American” suggests the importance of the individual but does not focus on Shephard’s specific qualities that led to his selection as the first man to ride the Mercury capsule, as he calls it (230). Shephard writes that he did not think he would be selected and that after he was chosen, he knew “each of the other fellows had very much wanted to be first himself” (230). That is the extent of the discussion of Shephard’s specific qualities that made him especially qualified to fly first. He is otherwise presented as one of seven.

Indeed, the text contains a note from the editor recalling the words of Lieutenant Colonel Douglas, doctor to the astronauts, who purportedly remarked that “[t]he morning each man went

into space…was the only time when he was *not* normal, when he was a superman" (233). Significantly, the doctor does not discuss Shepard's experience as an individual but remembers him as part of the group of astronauts. The doctor's comments are also significant for their affirmation of the image of the astronauts as ordinary supermen, men who both represented the American everyman but were at the same time extraordinary.

After Shepard's flight, *We Seven* notes that during his debriefing he was described as "calm and self-possessed" even if he also showed "some degree of excitement and exhilaration" (269). This description identifies the ideal reaction to space flight and is consistent with depictions of the astronauts as especially calm under pressure. There is little indication in the subsequent recollections of the other *Mercury Seven* astronauts that they were at any time overwhelmed, emotional, or touched by the experience of going to space. After his Friendship Seven Flight (1962), John Glenn describes seeing "thousands and thousands of small, luminous particles" out the window while orbiting the Earth (400). Glenn describes his attempts to seek a rational explanation for the particles but is unable to see any reason for their appearance. This seemingly extraordinary experience is underplayed: Glenn writes that the "particles were a mystery at the time, and they have remained one as far as I'm concerned" (401). Upon his return to Earth, a psychiatrist heard Glenn's description of the particles and asked him what the particles said to him. Glenn writes tongue in cheek: "I guess they [the particles] were as speechless as I was" (401). Thus ends the discussion of the particles, dismissed as quickly as they were introduced. Even in the face of seeing something extraordinary, the astronauts are thus presented as largely rational, calm and scientific in their understanding of space. This understanding of space changes in later memoirs and will be discussed in detail in Chapter Three.

John Glenn's flight on Friendship Seven did not run entirely according to plan and it was necessary for Glenn to perform manual corrections when the automatic control system did not work as intended. There were also issues with his heat shield during reentry. These challenges are presented in *We Seven* as milestone events in the history of the space program. Glenn writes that his flight proved "that man belongs in space" and reaffirmed the importance of manned (as opposed to robotic controlled) spaceflight (438). He writes, "We never did consider the Astronaut to be merely a passive passenger in Project Mercury" and suggests that humans play an important role in spaceflight (438). Glenn reiterates the importance of "teamwork and cooperation" in the space program and suggests that he speaks for all seven astronauts who were proud to "represent our country as we have" (438). Again, the experience of one astronaut is conflated with the experience of the entire first astronaut class. This is driven home in the concluding chapter of the work entitled "The Confirmation," meant to confirm the validity of space exploration and the need for its continuation. The chapter, attributed to Scott Carpenter, repeats that Glenn's spaceflight "proved that man does belong in space" (here the wording so closely resembles the previous chapter that the ghost writer's voice is unmistakable) and that the qualities needed for spaceflight are "stamina, intelligence and curiosity" (445).

Like Gagarin's autobiography, *We Seven* is a formulaic work that best reflects the idealized image of the astronauts. Unlike Gagarin's autobiography, however, *We Seven* celebrates a group and the teamwork needed to ensure success. Whereas Gagarin's autobiography is indebted to the socialist realist master plot that advances the figure of the single positive hero, *We Seven* is a collective story of success as seen through the eyes of ordinary supermen.

Conclusion

In this chapter, I have identified elements of the master plot of space exploration in both Soviet and American life writing from the 1960s. I have argued that early works of life writing produced by media outlets *Pravda* and *Life* are not expressions of individual selfhood but rather reflect a view of the self rooted in classical and medieval life writing traditions that aim to utilize individual life stories as exemplars of ideal traits. The production of these texts by ghost-writers and the media further suggests a dissonance between the lived experience of the space farers and the versions of themselves constructed by the media. While many of the ideal traits ascribed to cosmonauts and astronauts were similar, the most marked contrast between the two is in the presentation of the individual and the collective. Whereas the American astronauts who made up the Mercury Seven are presented as a collective group of like-minded individuals, Yuri Gagarin stands alone as the iconic image of the cosmonaut and his life story became enshrined in the Soviet cultural context in a way that no individual life story of the American astronauts did.

The cosmonauts and the astronauts were presented to the public as national heroes who exemplified qualities expected of the best kinds of citizens. Although both examples of life writing examined in this chapter purported to be autobiographical and thus generically expected to contain information about individual selves, both *We Seven* and *Doroga v kosmos* reflect a version of selfhood that is aspirational and generic. The seven pilots chosen for inclusion in the Mercury Seven flights are indistinguishable and the ghost-writing produced on their behalf devotes little attention to exploring selfhood. Instead, *We Seven* celebrates and iconizes the first astronaut class for the qualities they possess and the role they fill in contemporary American society. Similarly, Yuri Gagarin is presented in his autobiography as an exemplary Soviet citizen whose individuality matters only insomuch as he is exceptional. In both cases, early space farers

are presented to the public as national heroes whose individuality is less important than their ability to serve as exemplars.

The astronauts and cosmonauts were initially presented to the public as heroes, but their lived experiences align more squarely with their role as celebrities. It was their celebrity status that generated public interest in their life stories. In the chapters that follow I continue to explore the relationship between celebrity and memoir, focusing particularly on the role of celebrity in driving publication and readership of astronaut and cosmonaut memoirs in the twenty-first century. In Chapter Two I examine the second set of life writing to emerge from the space programs beginning in the late 1970s: tell-all astronaut memoirs and *perestroika* cosmonaut memoirs. I examine these memoirs as responding to the master narratives created in both the Soviet and American contexts.

Chapter Two: Tell-All and Glasnost Memoirs

If the 1960s were dominated by memoirs celebrating the lives and heroic feats of the astronauts and cosmonauts, memoirs written about early space flights in subsequent decades feature a significant shift in tone. In the American context, this shift can be felt as early as the tenth anniversary of the Apollo 11 Moon landing in 1979. In the Soviet context, memoirs published during glasnost (beginning in the late 1980s) about the earlier days of the Soviet space program feature a similar, albeit differently motivated, shift in tone. Although motivations for publishing memoirs about the earliest spaceflights differ in the American and Soviet contexts, there is a common thread between the two groupings: the desire for astronauts and cosmonauts to address the official, master narrative of history (cultural memory) that was put forth in the popular press and by the government and to correct that narrative with their own version of history (communicative memory).

In this chapter, I compare a subset of memoirs published between 1974 and 2000 by astronauts and cosmonauts who were part of the early space flight missions of the 1960s and 1970s. I consider how these memoirs address the official narrative of space flight and the ways in which the space farer's individual memories are offered alongside official historical accounts. I consider the changing political environment that allowed for the publication of these memoirs and question the motivations behind writing the memoirs professed by the authors. I compare astronaut and cosmonaut's accounts of their own involvement in the space program and ask how they describe the figure of the astronaut or cosmonaut. I utilize the results of my topic modeling to examine the category I have identified as "Everyday Life" found in both corpora. Finally, I examine a significant sub-set of the Russian corpus of memoirs written not by cosmonauts but by engineers. Engineers published more memoirs in the Russian context than the American context

and their memories of the Soviet space program are an important part of building communicative memory in the Russian context. I argue that astronauts and cosmonauts use their life writing to create versions of themselves that respond to earlier representations of space farers as heroes. In writing about their experiences in space, memoir writers challenge their status as heroes and invite readers to see their flaws. I ask what motivated some astronauts and cosmonauts to write memoirs that exposed their vulnerabilities to the reading public.

Topic Modeling

In both the American and Russian corpora I identified a topic from topic modeling I call "Everyday Life." The terms contained in these topics were similar enough across both corpora to consider them analogous topics. For example, both topics contain the terms "day," "life," and "people/person." Although the topics do not overlap completely, I consider them in comparison here as part of my larger argument that one way the tell-all memoirs respond to the master narrative of spaceflight is by focusing on the quotidian aspects of the life of the space farer. Memoir writers considered in this chapter attempt to make sense of their personal involvement in the space programs and we can see this tendency reflected in the language they use.

Motivations for Writing Memoirs

In their work on motivations for telling autobiographical stories, Baumeister and Newman identify four needs for meaning that "guide the construction of stories" (688). These four needs include the "need for purposiveness" satisfied by describing the attainment of either significant goals (objective) or a fulfillment state (a desirable subjective state); justifying one's actions by describing them as consistent with one's values, norms, or expectations; satisfying a need for efficacy by encoding useful information about how to control the environment; and supporting the story-teller's self-worth by portraying them as a competent and attractive person

(688). This framework for understanding motivations behind autobiographical storytelling is useful in this section as we consider why the veteran cosmonauts and astronauts of early manned spaceflights were compelled to write their memoirs. Baumeister and Newman's analysis comes out of social psychology, but it can be applied to the memoirs I consider in this section.

In addition to personal motivations for writing memoirs, I also consider the political and financial implications for the publication of these works and identify ways in which the authors interacted with publishing houses, their employers, and the press. I ask why the memoirs were published when they were and what relationship the cosmonauts and astronauts who wrote the memoirs had to their respective space programs as they were writing and how that relationship may have influenced their work.

American Tell-All Memoirs

After the publication of *We Seven: By the Astronauts Themselves* in 1962, there is a hiatus in the publication of astronaut life writing in the United States. The publication of Buzz Aldrin's *Return to Earth* (1973), Michael Collins's *Carrying the Fire* (1974), and Walter Cunningham's *All-American Boys: An Insider's Look at the US Space Program* (1977) were the first significant sub-set of memoirs written to commemorate early spaceflights. These three memoirs are highly different in tone from *We Seven.* By examining the ways in which these astronauts describe their involvement in the early space program, we can see the beginnings of a shifting narrative. Hersch suggests that these memoirs "cracked the door on tell-all space biography" and led to the further publication of life writing that complicated the image of the astronaut and questioned the motivations behind the early American space program (*Inventing the American Astronaut* 6).

After the heyday of manned spaceflight and the race to the Moon in the 1960s, the 1970s and 1980s were a period of shifting motivations and justifications for spaceflight. After the Soviet Union failed to reach the Moon and the most prominent champion for manned spaceflight Sergei Korolev's death in 1966, the Soviet space program turned to focus on robotic spacecraft and exploration of the Moon's surface (Ellis 54). The United States, after reaching the goal of the Moon, also needed to re-examine its goals and priorities. For one thing, the major Cold War goal of "beating the Russians" to the Moon had been accomplished in 1969 with the Apollo 11 Moon landing. Without any similar goal, the direction of the program began to falter. As W. D. Kay writes, "…by the late 1960s, there was no longer any agreement among policymakers as to what the space program—with its billions of dollars worth of technology, facilities, and personnel—was *for*" (107). Political support for NASA was waning as policymakers shifted their focus to issues that more directly affected their constituents. The focus under Nixon was on "using space" to make life better on Earth with projects like communications, meteorology, and remote sensing taking precedence over manned space flight missions (109). Public support for NASA was also decreasing. In 1969 the President's Space Task Group was convened to determine future directions for American space exploration and called for additional lunar missions as well as the construction of a space station and a reusable space shuttle with the goal of eventually launching crewed missions to Mars (109). However, the period between 1975 and 1981 was largely a time-out for NASA. It was in this political environment that the first tell-all American memoirs were published.

Close Reading of American Memoirs

Collins, Cunningham, and Aldrin were all retired from NASA at the time of publication of their memoirs. Thus, the appearance of their memoirs was not mediated or vetted by NASA in

the way that the accounts of the Mercury Seven astronauts had been in *We Seven.* The astronauts were not under contract to present themselves in a flattering light and offered their stories as an authentic, insider's alternative to the press coverage and publications celebrating the astronaut in the 1960s. Cunningham addresses his relationship with NASA in the preface to his memoir *All-American Boys*: he opens with an anecdote about receiving a call from the Astronaut Office who had a copy of his book. Cunningham writes that the office said, "We have a copy [of your book] in the office, but the boys are half afraid to open it. I hear it tells *everything.* I sure hope your book isn't going to get into a lot of that gamey stuff" (ix). Cunningham acknowledges that his book was categorically different from NASA-approved publications and would include the story of "everything," not just the sanitized version that NASA had instructed the astronauts to share with *Life* magazine. Cunningham's decision to write about "everything" reflects the larger trend I point to in this chapter to react to official, cultural memory with communicative memories created through the process of writing.

Michael Collin's memoir *Carrying the Fire* is generally recognized as one of the best-written space memoirs and in many ways serves as a model for later works. It is also one of the most commercially successful space memoirs, having been republished in 2009 and 2019. In the preface to the first edition of his memoir, Collins describes his motivations for writing:

> Despite the voluminous press coverage of recent years, and a fair number of books, especially after Apollo 11, people still don't have the vaguest idea of what it was like 'up there,' or what pre- and post-flight activities were necessary and how they affected the lives of those involved. I wrote this book to do that (xv).

Collins suggests that existing accounts of space flight leave out important personal details. He argues that not only do the public lack a strong understanding of what it was like to go up into space, but that they are unaware of the events that occurred before and after space flight and how they impacted the lives of the astronauts. Collins contends that the individual experience of being

an astronaut was not well communicated to the public and that he seeks to rectify this gap in understanding.

Collins continues: “Although undeniably autobiographical, I do not see it [his book] as a me-me-me kind of thing, but rather an insider’s factual and simple explanation of how the machines operated, who operated them, and what it was like living in an artificial, high-pressure environment” (xv). Here Collins seems to back away from the personal, explaining that his book will give “outsiders” information about space flight (and less information about him personally). There is a certain amount of tension in Collin’s understanding of his role as the autobiographical “I” in this text. He confirms that his voice is present in the text but suggests that his authority comes from being an insider and having direct experience that he hopes to relay to others. He later writes that his audience includes both lawyers and housewives, but not pilots or astronauts, again suggesting his desire to convey to the public the lived experience of going to space.

Collins wrote his book without a ghost writer and was proud of this fact: “But above all, I am glad that I wrote it myself. Not matter how good the ghost, I am convinced that a book loses realism when an interpreter stands between the storyteller and his audience” (xvi). Collins thus suggests that the authenticity of his story is critical. He desires to give his audience insider knowledge of going to space; indeed, it is this desire that motivated the title for the book. Collins writes that the title came out of a conversation with his editor who asked him to explain “what space flight is like, when limited to three words” (xvii). For Collins, the experience of space flight is akin to “carrying the fire.” He explains what this means: “There is no trick to it; it is simply what I feel space flight is like…how would you carry fire? Carefully, that’s how, with lots of planning and considerable risk” (xvi).

Collins's motivations for writing thus most clearly align with what Baumeister and Newman call "efficacy and control." Collins does not write to justify his own actions or to boost his self-esteem but rather to explain from his own perspective what being an astronaut was actually like. He writes to "make a difference and to control the environment," in this case the environment of NASA and the early space program (685). Collins writes with the desire to elucidate elements of being an astronaut that had not been available to the public and to highlight the effect of space flight on the astronauts and their personal lives. Collins's need to assert control over his experience of going to space and being one of the first astronauts suggests that he did not feel in control of this narrative while the events were unfolding. One technique Collins employs throughout his memoir to highlight this lack of control is irony: his language exemplifies the dissonance between the image of the astronaut presented to the American public and his own understanding of himself.

Collins begins his memoir with his career as an Air Force Test pilot and describes his fellow pilots with humor: "I had been accepted as a member of Class 60-C at the USAF Experimental Flight Test Pilot School, along with thirteen other exalted ones, mostly Americans (one Italian, one Dane, one Japanese), mostly hyperthyroid, superachieving sons of superachievers" (4). Collins's irreverent tone in his description of his classmates who would eventually become astronauts alludes to the heroic terms usually used to describe astronauts while subtly poking fun at the hyperbole used to discuss the astronaut's qualities. Collins explicitly addresses the image of the astronaut created by NASA for the Mercury Seven astronauts: "These men had also been exposed to greater public scrutiny than any group of pilots, engineers, scientists, freaks, or what-have-you in recorded history…All of them came through as Gordon Goodguy, steely resolve mixed with robust muscular good humor, waiting crinkly-eyed

for whatever ghastly hazards might be in store for them 'up there'" (24). In short, he acknowledges that the first astronauts were seen as "the *crème de la crème* and the nation loved them" (24). Collins's own description of the astronauts challenges this imagery with humor, irreverence, and irony.

Collins was among the second group of test pilots chosen for inclusion at NASA. He describes the necessary qualifications: "A degree in one of the biological sciences or engineering was required, and candidates could not be more than six feet tall or over thirty-five years old, as of the day of selection" (26). Collins underwent the same medical examinations described by the Mercury Seven in *We Seven.* However, Collins's descriptions are characteristically irreverent when compared with those of the original astronauts. For example, Malcolm Scott Carpenter (one of the original Mercury Seven) describes taking a Rorschach ink-blot test: "This is where the psychologists show you blobs of blotted ink and ask you to describe what the patterns look like" (57-58). Describing the same test, Collins writes "Then the shrinks take over where their more stable compatriots leave off. Thrust and parry. What are inkblots supposed to be, anyway? Is one crotch in ten pictures too many?" (28). Collins's usage of humor here calls into question the exalted atmosphere of the astronaut selection process and takes the level of discourse from a serious medical examination to a bawdy joke.

Collins alternately describes his own experience as an individual astronaut candidate as highly personal on the one hand and deeply impersonal on the other. The astronaut selection process both confirmed Collins's (and other astronauts') individuality and reduced them to a series of physical and psychological tests. Astronaut candidates were given a five-day physical exam during which their health data was collected to "help the medics gather some base-line data on healthy patients" (27). Collins describes these tests: "Inconvenience is piled on top of

uncertainty on top of indignity, as you are poked, prodded, pummeled, and pierced. No orifice is inviolate, no privacy respected" (28). The astronaut candidates were effectively reduced to a series of data points about their physical and psychological health. In fact, Collins writes that he not only felt like a data point but that he "*was* one" (38). Collins accepts this "bizarre change in viewpoint" as one of the necessary sacrifices needed to become an astronaut (39).

The first time Collins applied to be an astronaut he was rejected because he did not meet the "special requirements of the astronaut program" (33). He interprets this as meaning he lacked experience, and he discusses his efforts to obtain the necessary experience. Collins thus suggests that the astronaut program was made up of individuals who each needed to have certain qualifications and traits. This seemingly contradicts his earlier assertion that the astronauts were reduced to impersonal data points and reflects a larger contradiction in the ways astronauts were imagined as both individual heroes and a group selected for their homogeneity.

When Collins was eventually selected in 1963, he was part of a group of fourteen other astronauts who were added to NASA's manned spaceflight program. He writes about the differences between his cohort of astronauts and the previous groups but argues that the press's "natural tendency to highlight differences [between the Mercury Seven and later cohorts]" overstated the differences between the groups and that "[i]n retrospect, we were in the same tradition as the previous two groups" (45). Again, Collins suggests that while there was individual variation among the astronauts, they were ultimately a group of highly similar individuals. However, Collins discusses his acceptance into the astronaut program as something he thought would raise him and his family "to a new level of consciousness and achievement," suggesting that the change in his profession would significantly impact him on a personal level (43). He tempers this comment by reflecting that "[i]n retrospect, this analysis seems more than a

little overblown" but argues that was how he felt at the time (43). Collins's analysis of what it meant to become an astronaut is thus far more nuanced than the version presented in *We Seven.* Collins openly addresses the tensions he felt between being seen as an individual and a member of a group selected because they possessed similar qualifications and physical characteristics. He suggests that the public image of the astronaut as a hero with no flaws was categorically false and offers himself as an alternative to the strait-laced, somewhat humorless Mercury Seven astronauts.

Walter Cunningham's memoir *All-American Boys: An Insider's Look at the US Space Program* (1977) discusses the image of the astronaut in a similar vein. The title of Cunningham's work draws attention to his status as an "insider," just as Collins's work does. Cunningham's memoir is similar in tone and was described in a review in the journal *Technology and Culture* as differing from other astronaut memoirs published at the time (nine in total) for "being candid and often gossipy" (Emme 782). Cunningham says his objective is "to share the enthusiasm and the skill we [astronauts] brought to our work as well as to tell about the warts and moles which sometimes compromised it" (x). He indicates that he desires to challenge the "myth of the super-hero astronaut" and to identify the human characteristics of the astronauts (ix). His work, like Collins's, responds to the myths actively created in works like *We Seven.* Cunningham writes that the image of the astronaut was "purely a creation of the news media" and that astronauts would remain "trapped in that image until the public takes off its rose-colored glasses and begins to see us as people" (ix). Cunningham hopes that his book will "strip away the veneer and tell how America's most famous heroes were made" (ix). The review of Cunningham's work suggests that he is responding to "facile theories about astronauts and cosmonauts" to prove that

"they were vigorously strong individualists with contrasting personalities" (783). Thus, Cunningham's work, like Collins's, seeks to assert the individuality of the astronauts.

However, Cunningham, like Collins, asserts that his work is not an autobiography: he claims his book is "not an autobiography of Walter Cunningham, although it is bound to reveal as much about myself from what isn't said as from what is" (x). Cunningham maintains that his focus is not on his life story, but on explaining to the public how the astronauts "think and work, act and react," a story that he alleges had "never been told" (x). Both Collins and Cunningham suggest that the story told by the press about the astronauts left out the astronauts' own experiences and seek to fill in the gap with their own understanding of what it means to go to space. Cunningham can thus also be said to be motivated by a need for control, efficacy, transparency and veracity.

Buzz Aldrin's memoir *Return to Earth* (1973) does not include an author's preface with clearly stated motivations for writing. However, in his first chapter, Aldrin acknowledges that his book describes the metaphorical journey he took after returning to Earth from the Moon. Aldrin's book directly engages with the question of the personal effect of space travel on an individual. He opens with the experience of being in isolation after returning from the Moon and the feelings he developed: "The enormity of it all was beginning to occur to me…Before, thoughts had been focused on the technical achievement ahead of us. All that precise work was now done and behind us. It would take a couple of years for it to become clear to me, but that day on the USS *Hornet* [where the astronauts were in isolation] was actually the start of the trip to the unknown" (12). Aldrin uses the metaphor of return to frame his journey to the Moon, orienting his metaphor rhetorically on the period after the Apollo 11 mission and returning to his childhood and early days in NASA only in the middle chapters of his memoir. Aldrin's

vulnerable account of the psychological impact of space flight on the individual directly contradicts the heroic image of the returning astronaut.

Aldrin writes in detail about the contrast between the public perception of the astronauts during public appearances made after the Apollo 11 mission and his private recollections. Remembering the moment when the three Apollo 11 astronauts splashed down to Earth, Aldrin writes: "It was over. No exclamations, no slaps on the back. No handshakes. All that would come later, at least the handshakes. We sat in silence, three men alone together with their private thoughts" (4). Aldrin suggests that he was given very little time to process the personal impact of spaceflight on his life and that from the moment the astronauts entered their isolation chamber (the astronauts were required to endure three weeks of isolation for fear they encountered unknown bacteria on the Moon), they were under surveillance: "…I, for one, wondered how many people were watching us…The president of the United States and a lot of television cameras were waiting on the *Hornet*" (6). Aldrin and his fellow astronauts were obliged to participate in a variety of public appearances including a meeting with President Richard Nixon which took place through windows in the isolation chamber. The astronauts were seated with cameras positioned at eye level. Aldrin recalls being shocked when the national anthem was played, prompting the astronauts to stand and "present three crotches to the world" because of the position of the cameras (9). Aldrin comments on the juxtaposition between the ceremony expected of the astronauts and their actual lived experience. His remark about crotches also speaks to questions of masculinity, suggesting the experience of space travel is a particularly masculine one.

Aldrin's memoir addresses the ways in which NASA encouraged the astronauts to commemorate the first voyage to the Moon and he recalls being asked to create both written and

taped formal debriefings (17). These debriefings focused more on the technical aspects of the mission than on personal, subjective experience. Aldrin describes his changing psychological state during this period and the uneasiness he began to feel: "…I had a picture taken during one of the debriefing sessions which to me is an accurate representation of how I felt at the time. Everyone else appears relaxed and there I am—eyes wide and looking frightened" (18). Aldrin's psychological distress is presented as something personal, closed, and unconnected to his public appearances. Aldrin writes that his internal body temperature (which was still being continuously monitored) rose two degrees but that doctors could not identify any medical issue. He remembers the temperature being raised for "the next several months, through our cross-country tour and throughout the round-the-world trip. By the time it started down, I was going along with it. When my personal odyssey was over, the temperature returned to normal and has stayed there" (18). Aldrin describes a disconnect between his individual psychology and his role as a public figure and highlights the tension between the image of himself he was compelled to present to the public and his own private struggles to process his trip to the Moon.

This tension is so evident in Aldrin's memoir that he devotes several chapters to recollections of the press tours he was part of after returning from the Moon. He writes, "It was never actually stated by anyone, but it was becoming obvious that what was expected of us was public visibility and not a return to the immersions of training. The great coup had been completed, the space program was once again the delight of nearly all Americans, and we had an experience to share with millions of people, all of whom appeared very curious indeed" (25). Aldrin bristles at the public attention but equates NASA's expectation of publicity for the astronauts to a "duty to perform, a duty for both our government and for NASA" (25). Aldrin acknowledges this duty but suggests deep reluctance at accepting this role: "Though the word

made me terribly uncomfortable and self-conscious when it was first used—and whether or not it was true—we were said to be heroes of the greatest technological achievement yet accomplished by man. The first implication was obvious: heroes have duties. They are public property, however reluctant they might feel" (25). Aldrin's description of heroes as public property is telling. He suggests that the astronauts no longer had private access to their experience of space flight and that they were expected both by their employers and their country to share those experiences with the public.

Aldrin's detailed discussion of the public relations tours he, Mike Collins, and Neil Armstrong endured is especially worthy of note. Aldrin describes the ways in which NASA prepared the astronauts, including providing them with a speech writer and grooming them for public appearances (45). He remembers both moments of genuine patriotic feelings ("I had seen a troop of Boy Scouts, all carrying American flags, and I experienced a powerful wave of patriotism, the most patriotic feeling I had ever had in a lifetime of service to my country") and the disappointment of being solicited by businessmen hoping to exploit the astronauts for monetary gain (31). Aldrin juxtaposes the triumphant image of the astronauts with his own declining mental health.

Aldrin suggests that his descent into depression was gradual and worsened over time. He struggled with seeking professional help for fear that knowledge he was receiving psychiatric support would be on his record and influence his image: "When I went to…a psychiatrist…I paid the bills myself so that the treatment would not be listed on my records…It was best to remain secretive" (277). Eventually Aldrin sought help and was hospitalized for his depression. He describes the efforts that were taken to hide his depression from the general public. He was hospitalized for psychiatric treatment but kept on the hospital floor with patients with neck nerve

issues and his only official diagnosis was neck problems (295). Aldrin's description of his depression during this time period is honest and raw. He writes, "I could see no hope, no possibility of controlling anything. I began staying up nearly all night every night with some vague fear of sleeping in the darkness…I yearned for a brightly lit oblivion—wept for it" (288). The image he presents of himself is in direct contrast with the media created astronaut who felt no emotions except for pride, bravery, and stoic determination.

Aldrin directly discusses the ways in which his identity as an astronaut and more specifically the public image tied to his figure as a hero led to a split sense of self that he directly links to his deepening depression. He discusses his involvement with *Life* magazine, essentially a requirement for the astronauts, as mentioned above. He laments that the astronauts were paid by *Life* in proportion to the number of individual astronauts on the contract. As more astronauts were brought into NASA, Aldrin's commission with *Life* decreased from $16,000 annually to $3,000 annually. Aldrin discusses a book recounting the Apollo 11 mission that he co-wrote with Neil Armstrong and Mike Collins "with a more than considerable assist from two earnest *Life* writers" and suggests that this account of their time in space did not genuinely address the lived experience of the astronauts. Again, Aldrin highlights the financial gains he made from this endeavor and explains that he only received royalties from the book during the time he was an active astronaut (302). The discussion of payment for his experiences raises the question of who owned the experience of space travel. The expectation of NASA at this time was certainly that the experience was public property.

Aldrin wrestles with the image of himself presented to the public of one of "the most simon-pure guys there had ever been" and his own understanding of himself. He remarks, "My own image of myself as a husband and father further contrasted with what I read about myself

and my family" (301). Aldrin goes so far as to suggest that his wife's perceptions of who he was were influenced by the press and the ideal of the astronaut: "She [Joan, Aldrin's wife] had really believed all that crap she read about me" (338). Aldrin's memoir suggests that the experience of going to space changed the way he understood himself not because of the life changing experience of seeing space or landing on the Moon, but because of his celebrity status and the crafting of a narrative of the astronauts as identical, untouchable heroes by the press.

In the closing chapter of his memoir, Aldrin suggests he had two motivations for writing. The first was to "be as honest as possible and to present the reality of my life and career not as mere fact but as I perceived the truth to be" (338). This claim resonates with Collins's and Cunningham's intentions, both of whom suggest the importance of telling their stories as they "really were" and indirectly or directly addressing the media's portrayal of astronauts. Aldrin's second motivation for writing is less clear. He writes, "The second and more important intention was that I wanted to stand up and be counted" (338). Perhaps Aldrin is referring to his status as the second (as opposed to the first) man on the Moon. He writes earlier in his memoir that he was irked by the issue of a commemorative stamp celebrating Apollo 11 that featured the caption "First Man on the Moon." Aldrin felt the stamp should have read "First Men on the Moon" (47). However, the overall tone of Aldrin's memoir is not one of bitterness or jealousy of his fellow astronauts. Instead, he stresses his desire to share with the public his second "journey" after returning from the Moon and his hope that his story will draw attention to depression and mental illness: "It is my devout wish to bring emotional depression into the open and so treat it as one does a physical infirmity" (303). In this way, Aldrin's memoir fits more squarely in a tradition of self-help memoirs. This trend will be discussed in more detail in Chapter Four when I consider

astronaut and cosmonaut memoirs in the context of the memoir boom and suggest that they can be read as part of a larger trend towards self-help memoirs in a neoliberal context.

In summary, the three American astronaut memoirs considered in this section can all be said to be motivated by a desire to control the narrative and reclaim both psychological and bodily autonomy from the experience of space travel as a national project. In writing their memoirs, astronauts assert individual agency over what was presented to the public in the 1950s and 1960s as a public experience. At the same time, the memoirists express a desire to share the insider's experience with readers.

Russian Glasnost Memoirs

In some ways, the motivations for writing and publishing glasnost memoirs mirror those behind the American tell-all memoirs. Although temporally the glasnost memoirs were not published until the late 1980s (as opposed to the American memoirs published earlier), they represent a similar response to changing cultural trends as the tell-all cosmonaut memoirs. Cosmonauts address their desire to write about their own thoughts and feelings about their involvement in the space program and to make their personal stories known and available to the public. They also address the glorified image of the cosmonaut and suggest that this image became so far removed from the public that they had begun to lose interest in space exploration. Unlike the American astronauts who were never explicitly forbidden from writing about their experiences in space, Russian cosmonauts were strictly censored. As Asif Siddiqi has pointed out, the first forty years of Soviet space writing were "delimited by secrecy" and writing about the space program was limited to positive examples of progress and success ("Privatising Memory: The Soviet Space Programme through Museums and Memoirs" 99). It was only with the advent of glasnost and continuing into the 1990s that this narrative was complicated, and

memoirs played a major role not only in challenging the master narrative but in creating important, alternative histories (communicative memories) (99). Thus, the memoirs written by cosmonauts during the glasnost period reflect a different motivation—the motivation to inform the public about the elements of the space program that had previously been hidden.

With the introduction of glasnost in the late 1980s, cosmonauts were able to write and publish accounts of their time in space that offered the reading public the "true history" of the space program. This trend was part of a much larger movement in the Soviet Union in which personal accounts of the Soviet era began appearing in the late 1980s (Paperno xi). Irina Paperno argues that Soviet memoirs, diaries, and dreams offered a space for intimate experiences that were previously private to be made public and digested by others (xii). Paperno examines the celebrity memoir as part of this movement and although she does not include cosmonauts in the category of celebrities, it was their involvement with the space program and their role as public figures that facilitated the publication of their memoirs (1).

During glasnost, there was an explosion of memoirs written by both cosmonauts and engineers. In contrast to the American context where the vast majority of memoirs were written by astronauts, engineer memoirs make up an equally important part of this trend in writing during glasnost. Soviet rocket engineers were more public figures than their American counterparts and Sergei Korolev, one of the most well-known rocket engineers who advocated for manned space exploration, was woven into the lore of the Soviet space program as one of its founding fathers. Soviet space engineers who wrote their memoirs were motivated by a desire to address gaps in history that were hidden before glasnost.

Close Reading of Cosmonaut Memoirs

Konstantin Feoktistov's memoir is a clear example of an engineer memoir written with the purpose of bringing to light hidden elements of the Soviet space program. Entitled *Vospominaniya o Lunnom korable: Neizvestnaia stranitsa istorii otechestvennoi kosmonavtiki* [Memories of the Moon Ship: An Unknown Page in the History of Our Nation's Cosmonautics] (2000), the memoir recounts Feoktistov's involvement in the N-1-L-3 program, the Soviet Union's lunar program (beginning in 1965 and formally abandoned in 1976). Feoktistov addresses the gaps in public knowledge in the title of his memoir by referring to an "unknown page in history" and offers himself as a historian capable of filling them in. He acknowledges in his preface that very little had been written about the space program of the 1960s and 1970s and that most of what had been written focused on the later Energiia-Buran rocket. Feoktistov tacitly acknowledges the censorship that kept the USSR's failed lunar landing program a secret: "It is only recently that our country learned that the Soviet Union, like the United States, was preparing to fly a man to the Moon ("Ot avtora" [Author's Note]).[38] He offers his book as an attempt to fill in the missing pieces of history.

The bulk of Feoktistov's work is devoted to specific aspects of the lunar program, its development, and descriptions and graphic schemas of planned equipment and modules. Thus, it is fair to ask if the work is truly a memoir. However, embedded in Feoktistov's historical account of the lunar program is his own understanding of the ways in which his private life was touched by history. He writes: "Currently many people write about the influence of political decisions on our space program…But it is important not to forget that events do not exist in isolation and that

[38] «Лишь недавно в нашей стране узнали, что Советский Союз также, как и США готовил полет человека на Луну.»

they are always stained by the emotions of real people and always multifaceted ("Skhema ekspeditsii" [The Mission Plan]).[39] Feoktistov muses further on the impact of history on an individual's life, saying that it is difficult to know where history is actually made (delaetsia)—from above in the directors' offices or at the engineer's drawing board and on factory floors. He suggests that his experience as a young engineer was isolated from that of the higher-ups and that he, like his contemporaries, was deeply proud of his work on the lunar program and strongly desired to see the Soviet Union be the first to land a man on the Moon.

Feoktistov acknowledges a gap between the writing published during glasnost about the Soviet space program and the lived reality of those who participated in the program. He writes that although there are articles that describe the events of the program, they fail to shed light on the atmosphere of the work: "that emotional height and enthusiasm which reigned in the engineering and research collectives and also the psychological trauma which followed the discontinuation of the N-1-L-3 program in March 1976 ("Author's Note").[40] Feoktistov suggests that it is the personal, human element of the story that has not been made clear to the public. He mourns not only the loss of the lunar program but the loss of the optimism of his youth. Feoktistov remembers how the loss of the lunar goal had a long-term effect on the engineers including those working on the development of the Energiia-Buran system. He writes, "For many years the developers of the Energiia rocket launcher struggled with psychological trauma because [they feared] a new project could end up 'in the trash' [like the N-1-L-3 project]"

[39] «Сейчас многие пишут о влиянии политических решений на нашу космическую программу…Но не надо забывать, что события не существуют сами по себе, они ведь всегда окрашены эмоциями конкретных людей и всегда многоплановы.»

[40] «Авторы статей, описывая события тех дней, почти не освещают ту атмосферу работ, тот эмоциональный подъем и энтузиазм, которые царили в конструкторских и исследовательских коллективах, а также ту психологическую травму, которая последовала за закрытием работ по теме Н-1-Л-3 в марте 1976 года.»

("T2K").[41] But he writes that the successful launch of the Energiia in 1987 was the best antidote for this trauma and that the hopes for the aborted lunar program were transferred to possible future projects. Feoktistov suggests that the Energiia would allow for more productive exploration of the Moon and suggests that the Moon could be used in the future as a base for further space launches, for example to Mars.

Feoktistov writes of his involvement with the lunar program as a way both to address elements of the Soviet space program that were hidden from the public and to heal what he terms his psychological trauma at losing the Moon shot. His attempts to describe the success of Energiia-Buran as the logical inheritor of the lunar program help us understand his attempt to make sense of history and to find a positive outcome. In this way, one of Feoktistov's motivations for writing aligns with what Baumeister and Newman call efficacy and control. The efficacy and control motivation is predicated on a desire to control one's environment and make a difference. Stories of efficacy include both stories of success and failure. Baumeister and Newman claim that "[s]tories about failure may also be useful for purposes of efficacy" as long as the person telling the story is able to understand what led to the failure and how to avoid failure in the future. They also cite scholars who identify the power of telling stories about failure to return control over the situation to the teller: "A story about a significant failure or trauma…may therefore help to restore a sense of control merely by seeming to offer understanding" (686). In Feoktistov's case, his ability to write about the failure of the lunar program allowed him to take back control over the narrative and his identity.

Engineering memoirs like Feoktistov's continued to be published throughout glasnost and the early post-Soviet period. While a full examination of these memoirs is outside the scope of

[41] «Не один год разработчики ракеты-носителя «Энергия» преодолевали психологическую травму, ведь и новый проект мог пойти «в корзину».»

this dissertation, mention should be made of Boris Chertok's four-volume memoirs *Rakety i liudi* [Rockets and People] (2005) which was first published in 1995 and compiled by the Russian State Archive of Scientific-Technical Documentation (Chertok xiii). In his introduction to his English translation of the memoir, Asif Siddiqi writes about the importance of Chertok's memoirs not just as a personal story but as helping to "locate the Soviet missile and space programs in the fabric of broader social, political, industrial, and scientific developments in the former Soviet Union" (xiii). Chertok suggests he viewed writing his memoir as a literary endeavor, although he doubted he had the "literary skills sufficient to tell about 'the times and about myself'" (1).[42] He claims his work aspires to "historical authenticity" and that what he planned as a single volume of about 500 pages morphed into four volumes written over six years. Chertok describes his work as a "historical memoir" that has "consumer value" because it reveals links between the past and present "and may help to predict the future" (3). Chertok directly addresses gaps in the history of science and technology in the Soviet Union and offers his work as an attempt to fill in some of those gaps. For example, he writes, "[i]n the process of working on my memoirs, I regretfully became convinced of how many gaps there are in the history of the gigantic technological systems created in the Soviet Union after the Second World War" (4).[43]

Chertok's motivation for writing his memoir is similar to Feoktistov's. Both authors suggest that their work provides important information that was missing from the published narratives about the space program. In addition, both suggest that their books tell not just a personal story but a historical story and that they are actively engaged in the process of writing history. This point is underscored in Chertok's second chapter of his memoir which he classifies

[42] Here Chertok alludes to Mayakovsky's unfinished *poema* "Vo ves' golos" [At the Top of My Voice] (1929-1930). The reference is consistent with Chertok's literary aspirations and his association with the intelligentsia.
[43] Chertok suggests the gaps in history were justified by "a totalitarian regime of secrecy" but that objective recounting is threatened under the current "ideological collapse."

as “excerpts from the history of rocket-space technology and state politics” that he considers necessary to understand the rest of the his recollections (5). Chertok writes that this chapter should not be considered part of his “memoirs, recollections, or reflections” suggesting that it is generically different from what is to follow (5).

In her work on the post-Soviet memoir, Irina Paperno suggests that many memoir writers turned to Alexander Herzen’s *Byloe i dumy* [My Past and Thoughts] as a guidepost to writing their own accounts of their lives (12). She sees in Herzen’s work both generic cues for post-Soviet writers (namely the usage of fragments) but also, and more importantly, an “authorial position” based on “a historicist self-consciousness that gave meaning and value to their difficult and complex lives, turning diverse personal records into documents of historical significance” (12). Chertok’s memoirs provide a clear example of this phenomenon, and he considers his own voice as one that has been tasked with illuminating a period of history for his contemporaries. Chertok also directly addresses what he calls the Russian intelligentsia’s “lack of skill in organizing politically” in his attempts to explain the behaviour of the “technocratic elite” who were outwardly supportive of the Communist state but still criticized the system among themselves (7). Chertok goes so far as to produce a list of “traits” he sees in his contemporaries that will help readers understand why “despite possessing colossal potential strength, these individuals never tried to obtain real power in the country” (7). Here we see Chertok attempting to justify events from the past and make sense of his own understanding of his contemporaries and himself as part of the technocratic elite. This motivation is in line with what Baumeister and Newman call justification for one’s actions within one’s value system (683). Chertok discusses the dissolution of the Soviet Union, writing that “[i]n a struggle for personal power, new statesmen—without asking the permission of their people—destroyed the Soviet Union with a

swiftness that not even its most ardent enemies could have dreamed" (28). Chertok writes that the Soviet space program declined rapidly and saw a great tragedy in the lack of state support for Russian cosmonautics during the 1990s (28). Chertok's reminiscences thus end with the collapse of the Soviet Union and are concurrent with Paperno's assertion that many authors of memoirs in the post-Soviet period saw themselves as living in a world "that has come to an end" (49).

The end of the Soviet Union and the transition from the Soviet space program to the Russian space program is a key theme discussed in the glasnost and post-Soviet cosmonaut memoirs. This is not surprising and reflects the period in which the memoirs were written. This theme emerged in the topic modeling I performed on the Russian corpus. The theme I entitled "Dissolution of the Soviet Union" was present in eight of the texts considered for analysis and included terms like "ussr," "year," "country," "system," "governmental," "gorbachev," "new," "president," "question," and "soviet." As is clear from the figure below, the proportion of texts that address this theme rose beginning in 1985 (Figure 7). The spike for the year 2010 represents Oleg Baklanov's memoir *Space is My Destiny*. As a politician Baklanov was directly involved in the Soviet coup d'état and thus it is not surprising this memoir would feature these terms at a much higher rate than the rest of the memoirs in the corpus. Nonetheless, the topic modeling provides useful confirmation of the prevalence of this theme in the memoirs considered.

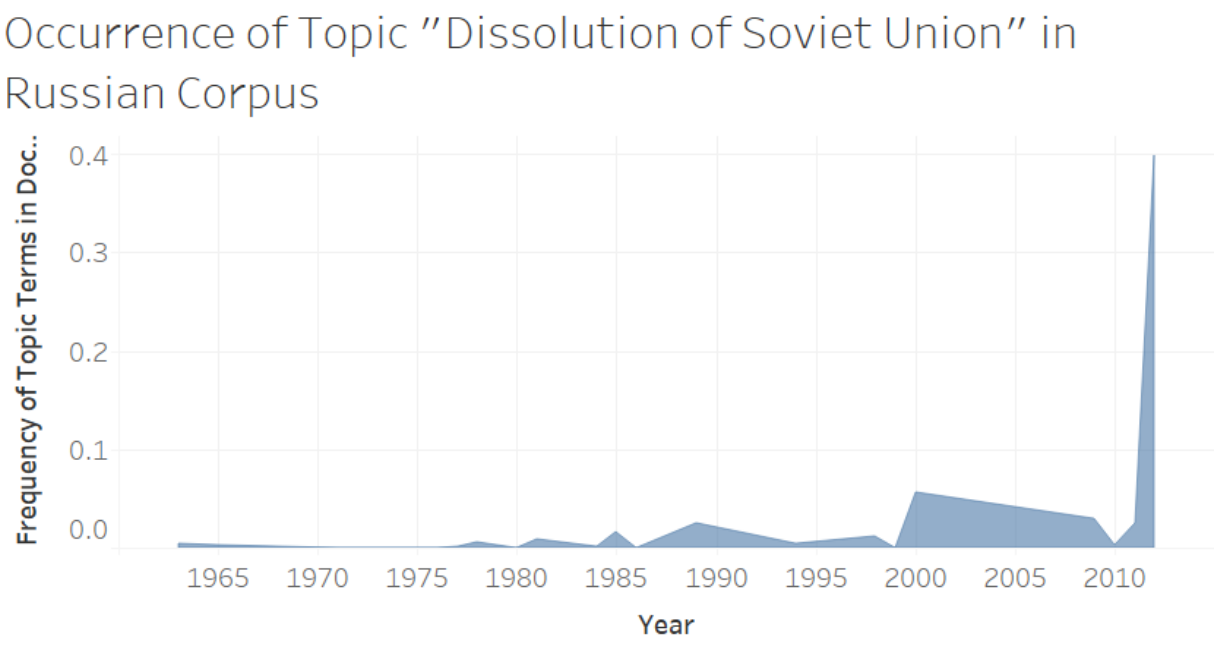

Figure 8 Occurrence of Topic "Dissolution of Soviet Union" in Russian Corpus

Two cosmonaut memoirs published during this time build upon this theme and help illustrate my argument further. Valentin Lebedev's memoir entitled *Moe izmerenie: Dnevnik kosmonavta* [My Dimension: The Diary of a Cosmonaut] (1994) contains an epilogue that directly addresses questions of history, the dissolution of the USSR, and future directions for the Russian space program. Lebedev's memoir is one of several published during this time that include a diary purportedly written while he was aboard the Salyut space station. While initially the form may seem to preclude it from being classified as a memoir, I maintain with Paperno that fragmentary forms were generically expected for memoirs published during the late Soviet period. She writes, "One is struck by how quite a few of these accounts [Paperno considers a corpus of life writing published at the end of the "Soviet epoch"] are texts in flux—diverse fragments that can be, and have been, assembled and reassembled into different makeshift texts by either their authors or publishers" (5). In addition, she identifies that the "fusion of memoir

and diary in one text is frequent" (7). While Paperno does not devote more time to the form of the memoirs she considers, I argue that the inclusion of diaries in cosmonaut memoirs adds to the author's truth claims. By presenting the diary as a historical artifact, a piece of history embedded within a larger retrospective account, these diaries add to the project of re-creating or re-writing history.

Lebedev writes in the introductory material of his memoir that he chose to keep notes about what his time on the space station Salyut was like because the existing literature (including articles and books) describing space flights left out important information and distorted the truth, including the "difficulties of our [the cosmonauts'] lives, the individuality of each of us; that is, played up only the external sides" (9).[44] Like many of the American astronauts, Lebedev writes that the image of cosmonauts held by the public was unrealistic, removed from reality and "gussied up" (otlakirovannyi) and that as a result the public had started to lose interest in space and cosmonauts (9). Like some of the astronauts, Lebedev also expresses concern about writing frankly about his experiences in space and worries that his writing might be used against him in the future. Nevertheless, he decided to write "everything as it was, what I saw, felt, think, and do" (9).[45] Lebedev expresses his desire to write about the realities of life on the space station as well as to identify what gives a cosmonaut the strength to withstand a long-term mission on a space station (9). Thus, one of Lebedev's motivations for writing resembles that found in the American tell-all memoirs. He seeks to discuss hidden aspects of being a cosmonaut that were not available to the public and to control the narrative of what it meant to be a cosmonaut.

[44] «… трудности нашей жизни, индивидуальность каждого, т.е. обыгрывается только внешняя ее сторона.» (9)
[45] «…все, как есть, что вижу, ощущаю, думаю, делаю.» (9)

Lebedev also uses the introductory material of his memoir to discuss the impact being a cosmonaut had on his sense of self. He writes about the importance of finding oneself, one's own path, and suggests that anyone has the ability to develop their strength of character if they only stay focused: "But in life there are tons of pleasant and accessible moments which distract and get in the way of our self-development, understanding our own capabilities, finding our own 'I', and believing that you are a person, an individual with your own way of looking at life, with your own positions and affirming your faith in your own significance through concrete tasks and actions" (9).[46] Lebedev suggests that his own actions as a cosmonaut directly impacted his sense of self and offers his diary as an intimate look at the ways in which his individuality was shaped by the experience of spending an extended period of time on a space station.

In his afterword to Lebedev's text, space writer Vladimir Gubarev justifies his decision to publish Lebedev's diary. Gubarev writes that the time had finally come for him [Lebedev] to be able to look back on the past and analyze the things he understood correctly and correct the mistakes he had made in reporting on the Soviet space program (377). Gubarev's afterword directly addresses the idea of an "end" of an era in the way Paperno asserts many post-Soviet memoirs address the theme of the end of history. He writes about what he is careful to identify as Soviet, as opposed to Russian cosmonautics (rossiiskaia kosmonavtika) and highlights the importance of understanding this distinction (377). In his account of Soviet space flights, he writes that one thing frequently missing from the reporting was the emotions and feelings of the individual cosmonauts themselves. He maintains that the role of the cosmonaut during the Soviet space program was initially seen as "secondary" and that the first pilots were chosen not only for

[46] «Но в жизни есть масса приятных и доступных моментов, которые отвлекают, мешают выразить себя, понять свои возможности, найти свое я, поверить в то, что ты человек, личность со своим взглядом на жизнь, со своей позицией, и утвердиться верой в свою значимость через конкретные дела и поступки.» (9)

their flight experience but based on their height and weight and that Sergei Korolev famously proclaimed that "any healthy person on the smaller side could and should fly in a rocket" (378). As we have already seen, the theme of the cosmonaut as an important but ultimately replaceable part of the machine was part of the foundational understanding of Soviet cosmonauts. Gubarev notes with irony that if any reporter had asked such a "banal" question as "Was Yuri Gagarin scared?," he would have answered with his characteristic smile, "The technology worked reliably, and I believed in it!" (378).[47] Similarly, he ironically recalls that Valentina Tereshkova had suffered from motion sickness in space but that this was so sufficiently "hushed up" that Tereshkova herself probably does not remember it (378).[48] He writes that every space flight tested the cosmonauts, their character and their strength but that this side of cosmonautics had always been hidden (378).[49] Gubarev offers Lebedev's diary as an antidote to this lack of knowledge about cosmonauts' private thoughts, feelings, and experiences. In this way, the work aligns in motivation with American astronaut memoirs which also sought to emphasize the human experience of going to space and perhaps in the process revive public interest.

Gubarev also asserts that Lebedev's diary should be compared to Rousseau's *Confessions* in that it honestly depicts everything Lebedev felt. Lebedev so effectively painted a picture of going to space that, reading his diary, the reader could feel as if he too were a cosmonaut and could compare his own feelings, opinions, and dreams with those of Lebedev. Ultimately, for Gubarev, the most important element of Lebedev's diary is that it is truthful (380).

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[47] «Техника работала надежно, и я в ней был уверен!»

[48] «Хорошо ли себя чувствовала на орбите Валентина Терешкова? Известно, что ей пришлось тяжко, но это было настолько «засекречено», что даже сама Валентина, наверное, забыла о тех невероятно трудных для нее сутках полета.»

[49] «В каждом космическом полете испытывался человек, его характер, его судьба.
Но мы не знали об этом, лишь догадывались подчас, так как эта область космонавтики
всегда была тщательно прикрыт.»

Lebedev's memoir is an interesting example of post-Soviet memoir because the contents of the diary contained within the memoir had been published previously. Editor Gubarev recalls how he published fragments of Lebedev's diary in *Pravda* and the journal *Science and Life*. However, he also recalls the extreme censorship to which the diary was subjected: "The red pencil of the censors unrelentingly removed paragraph after paragraph from Lebedev's writing and he just went white from anger and hurt because the censor had taken the important and truthful elements from the diary; that is, the most valuable parts" (380).[50] Lebedev's work was actually first published in the United States in English translation in 1990 and Lebedev was accused of sharing state secrets with the enemy (380). Gubarev frames Lebedev's commitment to the truth as a battle no less important than his accomplishments as a cosmonaut. Gubarev ends his afterword proclaiming that the publication of Lebedev's diary in its entirety is symbolic and could perhaps bring about a renewal in cosmonautics. However, the overall focus of the afterword falls on summarizing the Soviet space program.

In his own epilogue, Lebedev writes about the end of the Soviet Union and reflects on the twenty years that had passed from the time he wrote his diary to its publication in full. Like Gubarev, Lebedev considers it necessary to take a retrospective look at the history of Soviet cosmonautics. Lebedev explains that in the early days of the Soviet cosmonautics program, scientists were funded by the government who had a vested interest in producing rockets capable of delivering bombs. He continues to describe the development of the Soviet space program and attempts to reconcile the master narrative of the program with the realities he lived through. Lebedev, like Feoktistov and Chertok, writes from a specific historical moment that questions

[50]«Красный карандаш цензоров безжалостно вычеркивал из записей Лебедева абзац за абзацем, и он только бледнел от гнева и обиды, потому что цензор убирал из дневников важное и искреннее, т.е. наиболее дорогое.»

the legacy of the Soviet Union (and thus the legacy of the Soviet space program) in the face of its dissolution.

Conclusion

Both astronaut tell-all memoirs and cosmonaut glasnost memoirs respond to earlier master narratives of spaceflight that position space farers as idealized citizens. Although the historical and cultural context that motivated the publication of the astronaut and cosmonaut memoirs differed, both respond to the master narratives created in the US and the USSR in similar ways. Space farers use their writing to establish their individual understanding of themselves as astronauts or cosmonauts and to highlight the ways in which they differ from the image of the hero presented in earlier forms of life writing. In both cases, astronaut and cosmonaut life writing can be considered forms of communicative memory, creating autobiographical accounts of historical events, and establishing the role of the individual in the larger context of history.

Chapter Three: Transcendence and International Cooperation

The master narrative of space travel established in the 1950s and 1960s in both the Soviet and American contexts relied upon Cold War competition and the presumed dominance of each nation's technological abilities over their rivals. In this narrative, as we have seen, cosmonauts represented the radiant future of communism as exemplars of New Soviet Men while astronauts affirmed the success of democracy in producing everyday superheroes. This narrative changed after the 1969 Moon landing and was further complicated as space travel moved away from the race to be the first and towards a different kind of engagement in space, one that focused less on exploring unknown frontiers and more on establishing a permanent presence in space.

Beginning in the 1970s, a series of cooperative projects between the United States and the Soviet Union further complicated the narrative of the Space Race. In particular, the Apollo-Soyuz Test Project (ASTP) in 1975 provided the first opportunity for astronauts and cosmonauts to rendezvous in space and was celebrated as a symbolic moment of peace for all mankind. Further cooperation between the two countries brought about new opportunities for astronauts and cosmonauts to travel to each other's respective countries, learn each other's languages, and work together. Astronaut and cosmonaut memoirs that address joint Soviet-American and later Russian-American space missions provide a productive perspective on how to better understand the ways in which cooperation in space impacted the master narrative of space exploration.

Memoirs recalling space travel that took place after the logical conclusion of the Space Race (the Apollo 11 Moon landing) tackle changing attitudes to space travel, nationalism, and identity. The memoirs considered in this chapter are linked by common themes identified in topic modeling including the topics I have called "Perspective and Thought" as well as "International Cooperation." While both of these topics come from the analysis of the American

corpus, there are analogous trends determined through close reading in Russian cosmonaut memoirs that discuss space flight in philosophical or religious terms as well as memoirs that directly address joint space missions between the US and the USSR.

The memoirs in this chapter also grapple with changing political and popular domestic support for space travel after the Space Race. Space travel enjoyed high levels of support during the height of the Space Race during the 1950s and 1960s. With the race over and done, popular discourse began to question the need for continued space exploration. The motivations for space travel were no longer as clear or as tied to national dominance. Individual memoir writers writing without a ghost writer often use their memoirs to explain to the public why space travel is still necessary and to highlight the impact spaceflight had on themselves individually. Instead of focusing solely on the specific details of space missions, some memoir authors turn to philosophical justifications for spaceflight and incorporate religious, mystical, or other transcendent frameworks into their understanding of the experience of spaceflight.

In this chapter, I examine memoirs that directly discuss Soviet- and later Russian-American cooperation to ask how astronauts and cosmonauts shifted from viewing their counterparts as enemies to colleagues. I position this shift as part of a larger trend moving away from national narratives of space travel towards a larger, pan-national understanding of the purpose of space flight. In this formulation, space farers find meaning in space travel not through their role as representatives of the US or the USSR but through their belief that going to space advances humankind. Individual memoir writers discuss their experiences of cooperation in space in the context of pan-nationalism and suggest that life on Earth would be better if all humankind could work together like space farers. A related phenomenon is memoirs that engage with religious or mystical interpretations of space flight to argue for the purpose of going to

space and suggest that the experience is meaningful to them not as representatives of a nation but rather as part of humanity (sometimes conceived of as God's kingdom or simply the human race). These memoirs address what "space philosopher" Frank White calls the "Overview Effect," a term used to describe the (theoretical) change in perspective and philosophy experienced by space farers upon seeing the Earth from space. I argue that the end of the Space Race and the rise of international space cooperation changed the way individual space farers made sense of their role as astronauts and cosmonauts and that the discourse in their memoirs reflects this change. The form and content of the memoirs from this time reflect this change as authors search for larger, essentialist themes such as world peace, human cooperation, or environmentalism to justify their purpose in writing.

Topic Modeling

In this chapter, I engage with concepts of the self that have historically transcended national boundaries. Sidonie Smith writes about the development of the concept of a "universal self" beginning in the Renaissance period that is closely tied with Western thinking (5). The universal self "suggests the certitudes of well-defined, stable, impermeable boundaries around a singular, unified, and atomic core" that is independent from society, history, and culture: it is considered "an ahistorical or transcendent phenomenon and remains autonomous and free" (while actually remaining deeply historically and culturally based) (7).

Denice Turner in her work on American flight life writing in the twentieth century has suggested that pilots have a unique ability to experience this kind of universal self because they have the "ability to leave the solid earth behind" and to transcend the "encumbrances of the physical body" (10–11). She argues that pilots were able to "identify with all others" when in the sky while at the same time separating themselves as exemplary individuals with unique

privileges (11). Astronauts and cosmonauts are similarly positioned as universal selves who can transcend daily life by leaving the Earth and its referents behind.

Indeed, it has been suggested by both space farers themselves and theorists that the experience of going to space changes one's understanding of oneself and creates an opportunity for a new kind of consciousness as the result of leaving the Earth and seeing the planet as a whole. According to these theories, the experience of disembodied reflection that takes place when viewing space outside a vehicle window is transcendent and causes the individual to rethink their relationship to others and the Earth they left behind. In his monograph *The Overview Effect: Space Exploration and Human Evolution* (1987), Frank White proposes that astronauts and space settlers "would have a different philosophical point of view as a result of having a different physical perspective" (4). White uses astronauts' own writing and speech to argue that the experience of spaceflight has a profound impact on how those astronauts think about the world. For example, he quotes Russell L. Schweickart: "When you go around the Earth in an hour and a half, you begin to recognize that your identity is with that whole thing. That makes a change. You look down there and you can't imagine how many borders and boundaries you cross, again and again and again, and you don't even see them" (11-12). White suggests that the Overview Effect erases boundaries between states and peoples but also (through Schweickart) claims it has the ability to erase individuality or the self: "And all through this I've used the word *you* because it's not me, it's not Dave Scott, it's not Dick Gordon, Pete Conrad, John Glenn—it's you, it's we. It's Life that's had that experience" (13). Similarly, cosmonaut Yuri Artiukhin writes: "It isn't important in which sea or lake you observe a slick of pollution, or in the forests of which country a fire breaks out, or on which continent a hurricane arises. You are standing guard over the whole of our Earth" (Kelley 71).

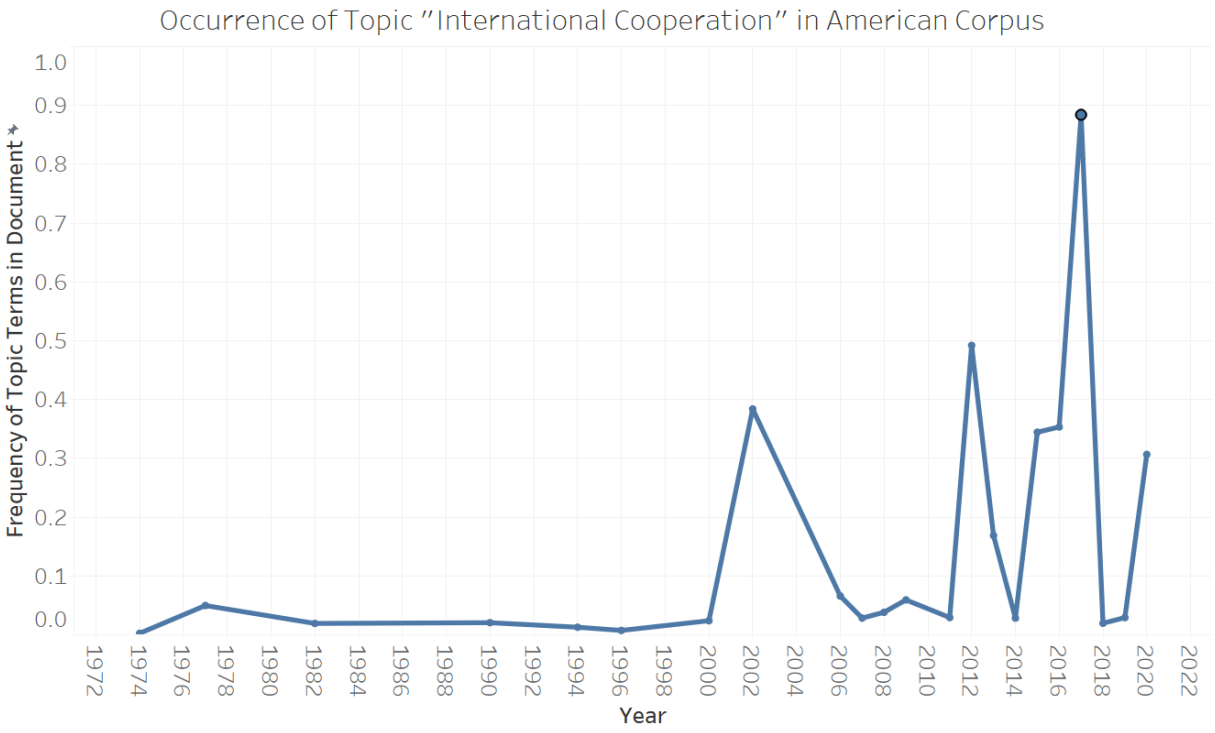

Figure 9 Occurrence of Topic "International Cooperation" in American Corpus

We can trace some of the aforementioned themes including international cooperation and changes in perspective using the topics produced through topic modeling. In both corpora of memoirs, I identify topics concurrent with the trends I examine in this chapter. In the American corpus, the theme "International Cooperation" suggests the prevalence of terms denoting projects completed in tandem with the Soviet Union and Russia. This theme contains terms like "astronaut," "people," "russian," "crew," "work," "great" and "iss" (International Space Station). While clearly some of the terms in this topic are prevalent across the entire corpus, there is a spike in the usage of this topic beginning in memoirs published in the 2000s that continues to the present day (Figure 9). The inclusion of the term "russian" and its derivative forms in this topic suggests the importance of cooperation with the Soviet and Russian space programs.

We can examine the prevalence of the terms that contain the base word "Russia" including "Russia," "Russian," and "Russians," across the American corpus by examining their

relative frequency (Figure 10). There are two distinct periods of publication that saw higher relative frequencies of the terms: from 1974 to 2006 and from 2013 to 2020. We can also see that there are individual works in which the prevalence of these terms was high: in the earlier period these are Cunningham's *All-American Boys* (1977, republished in 2010) and Linenger's *Letters from Mir* (2002). While the inclusion of the terms in Linenger's work is predictable given the content of the text and the fact that Linenger's work was written during his time onboard the Soviet and later Russian space station Mir, Cunningham's high usage of the terms is less immediately obvious.

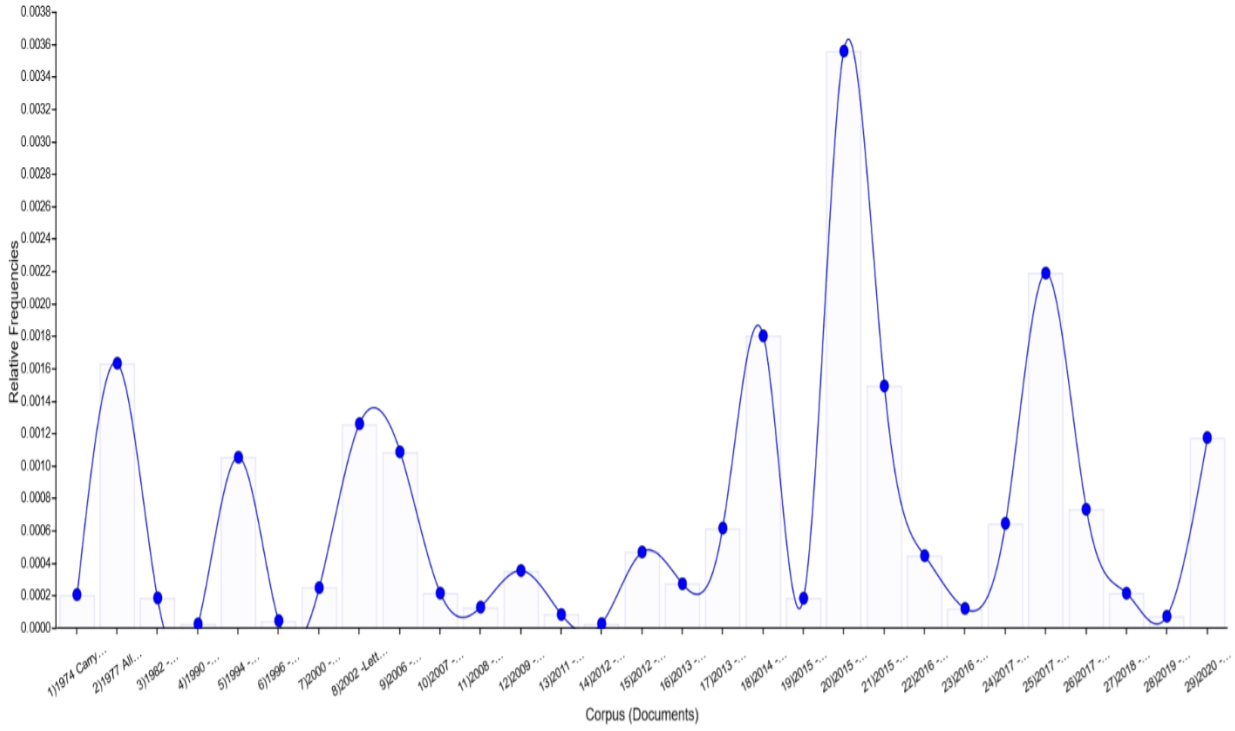

Figure 10 Relative Frequency of "Russia" Across American Corpus*

In examining Cunningham's usage of "Russia" in all its forms, we can see that the frequency is strongly concentrated at the end of the text. An examination of some of the contexts in which "Russia" is used confirms that most of the instances of this term occur in a chapter added to the second edition of the text published in 2010 (Figure 11). Cunningham provides a

retrospective account of the differences between the US and Soviet space programs that could not have been written when the work was originally published in 1977. Thus, in this case, Cunningham's text should perhaps be characterized by its 2010 publication date. This instance shows one of the difficulties of analyzing texts that have been published in multiple editions with substantive changes.[51] Nonetheless, Cunningham's comparison of the differences between the two space programs is instructive when considering the topic "International Cooperation" in the American corpus (Figure 9).

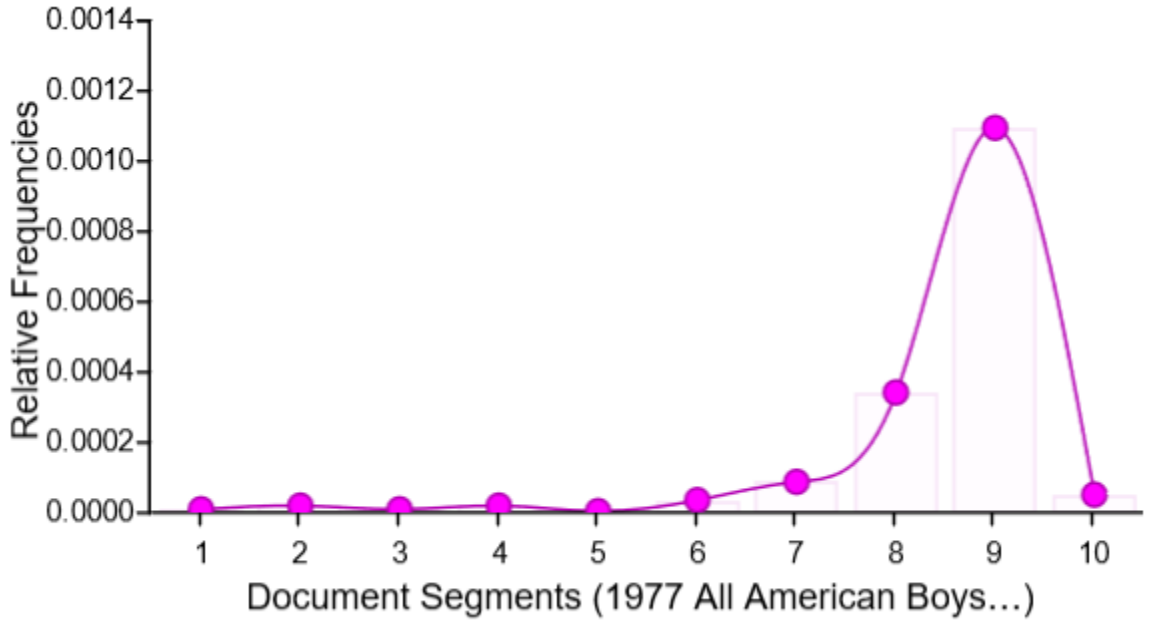

Figure 11 Usage of Term "Russia" in Cunningham's Memoir*

Cunningham discusses the differences between the American and Soviet space programs as stemming from "their respective approaches" to state oversight (Ch. 16 "The Russians Are Coming!"). For Cunningham, the main difference between the two systems was that in

[51] The 2010 version of Cunningham's text was chosen for inclusion in the American corpus because it was already digitized and available as an e-book. Without reading both editions of the text, it was impossible to predict how much the 2010 version deviated from the 1977 version. In the case of Cunningham, the text was heavily modified. The editing and subsequent publications of new editions of space farer memoirs would be a fruitful topic for further research.

"American democracy, the individual is paramount; in the Soviet collectivist society, the individual was the tool of the communist system of centralized planning and control" (Ch. 16). Cunningham sees the distinction between the individual and the collective as particularly pronounced when considering the role of the cosmonaut versus that of the astronaut. He writes that cosmonauts were "subjects to be studied, directed, and totally responsive to trainers, doctors and (during a mission) to ground control." Cunningham writes that the cosmonauts followed the directions from ground control "religiously" in a "master-slave relationship" and claims that Soviet cosmonaut flight bonuses depended on how well the cosmonauts followed orders (Ch. 16). Interestingly, Cunningham's language echoes earlier characterizations of cosmonauts as cogs in the machine and reflects the tensions discussed in Chapter One about the role of the cosmonaut as either a skilled pilot or an icon with little more skill than a monkey. For Cunningham, this question is only applicable to cosmonauts and not astronauts and boils down, again, to the distinction between the individual and the collective: "They [the Soviets] never fully trusted the individual as opposed to the 'collective' on the ground" (Ch. 16). Cunningham writes that the distinction between the Soviet and American space programs (what he views as "the limitations of the Russian program") were made clear during periods of collaboration including the Apollo Soyuz Test Project of 1975 and during the Shuttle-Mir cooperation projects in the 1990s.

Three memoirs published in the second grouping discussed above (from 2013-2020) feature high usage of "Russia" and its related terms: Thomas Stafford's *We Have Capture: Tom Stafford and the Space Race* (2014), Ron Garan's *The Orbital Perspective: Lessons in Seeing the Big Picture from a Journey of 71 Million Miles* (2015), and Scott Kelly's *Endurance: A Year in*

Space, a Lifetime of Discovery (2017). These memoirs all directly discuss cooperation between the US and the Soviet Union and later Russia and are also considered in more detail below.

A topic I named "Perspective and Thought" contains terms related to the changing way astronauts describe their experiences in space and the impact space travel had on them as individuals. This topic includes terms like "world," "space," "experience," "human," "people," "energy," "mind," "sense," "life," and "science." These terms are not prevalent in astronaut memoirs before 1996 (Figure 12). I examine usage of these terms in the section on the Overview Effect and religious and/or mystical interpretations of space flight below. Looking at the distribution of the terms in this topic, there are two publication years for which there is a high prevalence of terms in the American corpus: 1996 and 2015. Closer examination of the works included in the corpus shows that only one work was published in 1996: Edgar Mitchell's *The Way of the Explorer: An Apollo Astronaut's Journey Through the Material and Mystical Worlds.* However, in 2015 three titles were published--Buzz Aldrin's *Return to Earth* (released as e-book in 2015), Clayton Anderson's *The Ordinary Spaceman: From Boyhood Dreams to Astronaut* and Ron Garan's *The Orbital Perspective: Lessons in Seeing the Big Picture from a Journey of 71 Million Miles.* Figure 12 shows the frequency of every term from the topic "Perspective and Thought" across the corpus when the texts are grouped by publication date. We can also examine the usage of individual terms in the topic across each individual text in the corpus. Because there were three texts published in the same year, it is possible Figure 12 is misleading in that we would expect a higher usage of terms when comparing the three texts published in 2015 with one text published in 1996.

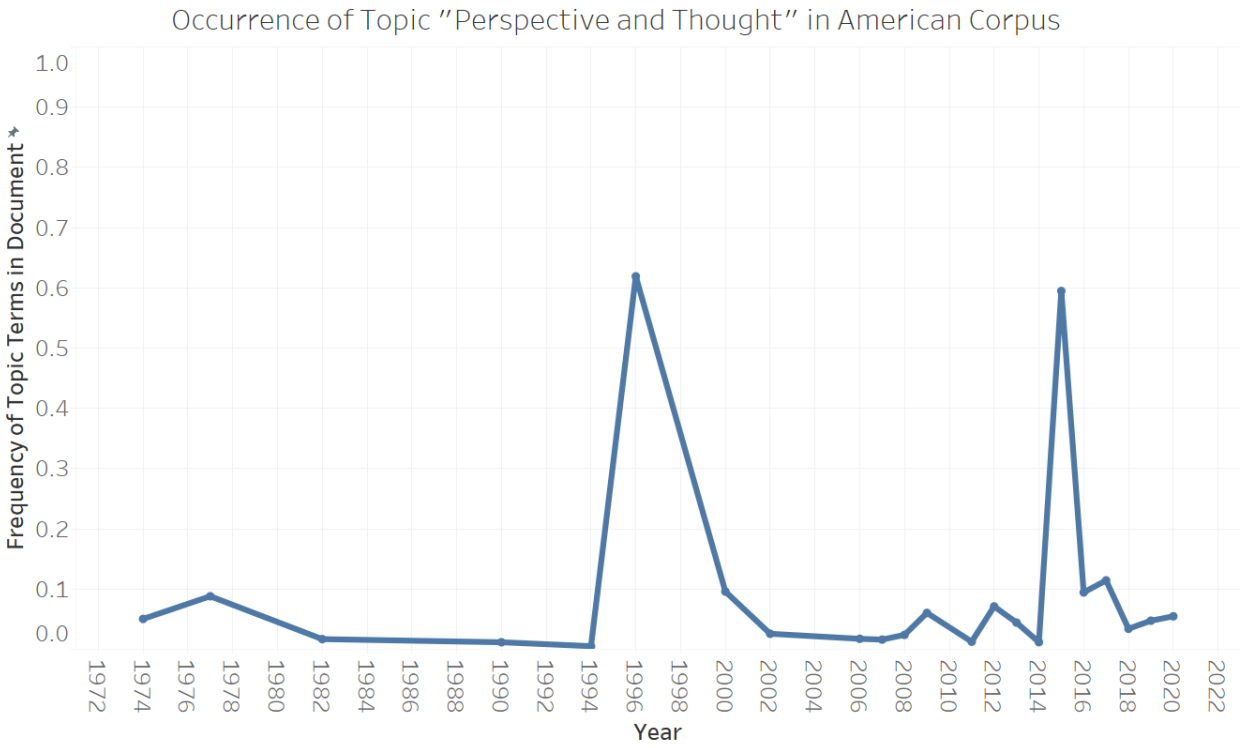

Figure 12 Occurrence of Topic "Perspective and Thought" in American Corpus

A search for the relative frequency of the term "world" across the corpus reveals the highest frequency of usage of this term in Mitchell and Garan's works (Figure 13). In the visualization below, each point represents a single text in the corpus whereas the visualization of the topic models groups texts by publication year. It is my supposition that the topic "Perspective and Thought" contains terms featured most heavily in Mitchell and Garan's works because both texts draw explicit attention to their framing of space travel as an experience that changed the author's perspectives on life. This supposition can be confirmed by examining the frequency of other terms from the topic across the corpus. For example, the usage of the term "experience" is similarly highest in Mitchell and Garan's works and noticeably higher than across the corpus at large (Figure 14).

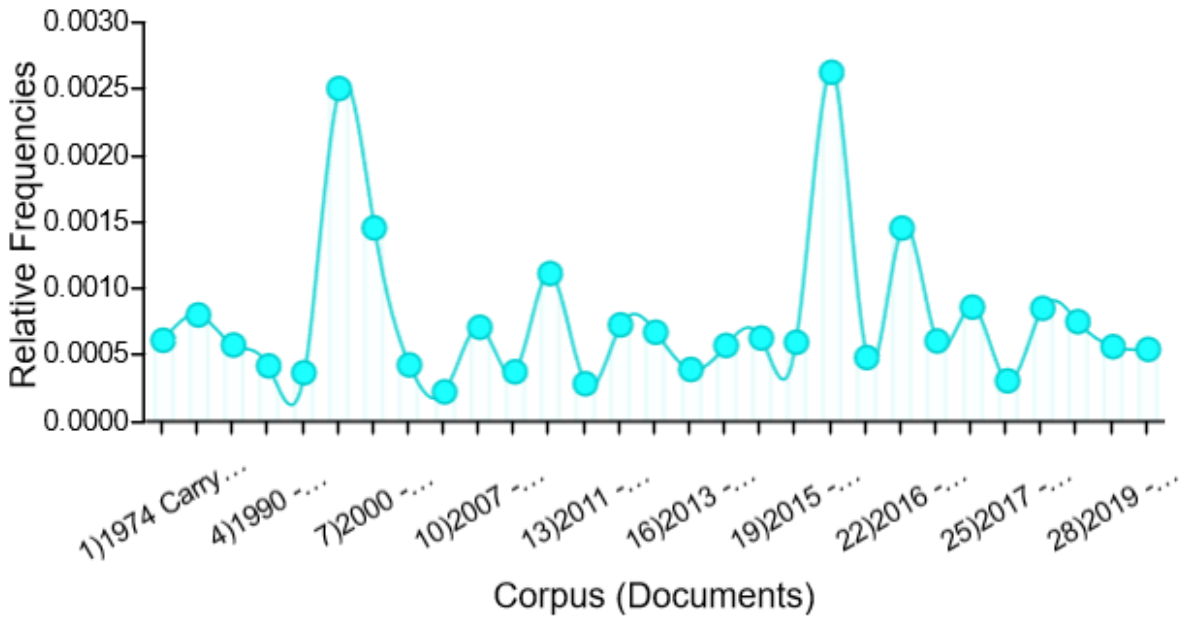

Figure 13 Relative Frequency of Term "World" Across American Corpus

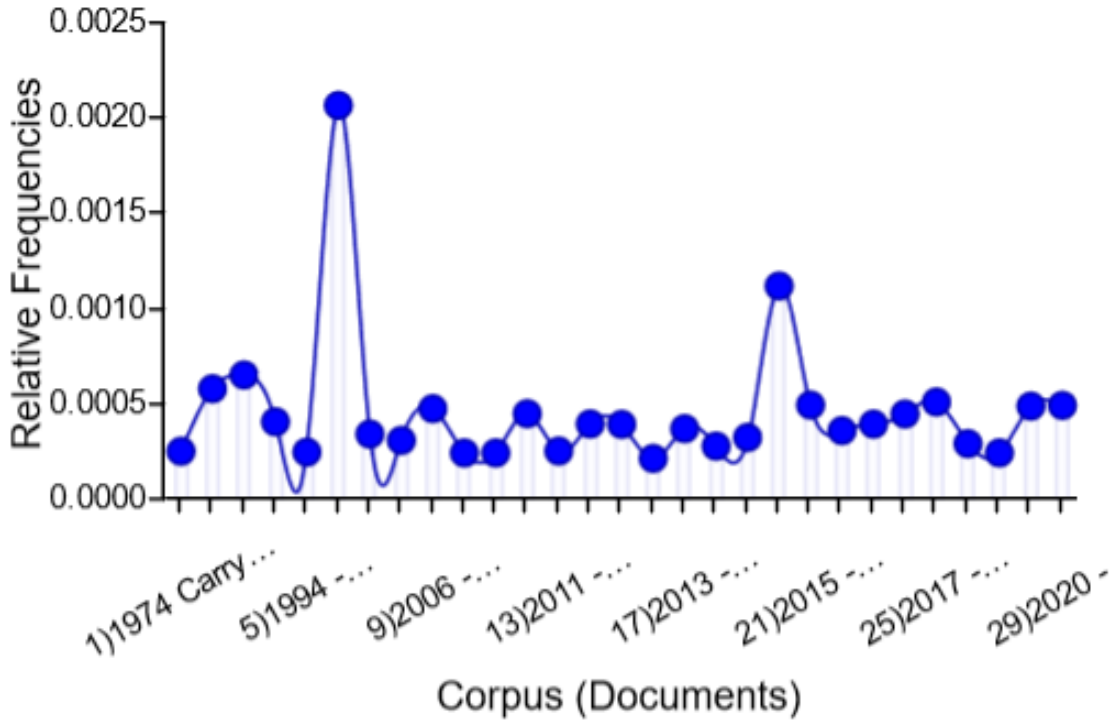

Figure 14 Relative Frequency of Term "Experience" Across American Corpus

Thus, the topic “Perspective and Thought” is most directly applicable to Mitchell and Garan’s texts, which will be discussed below. This is not to say that the topic is not still useful

for analysis across the corpus but it does suggest limitations in using topic modeling on a corpus of this scale. These limitations will be further discussed in the Discussion of this dissertation.

The Russian corpus also shows evidence of the prevalence of themes related to cooperation in space and changing patterns of incorporating the experience of space flight into one's personal life story. The topic I have called "Life on Space Station" includes terms related to daily life in space such as "day," "today," "connection," "work," "to speak, "to work," "people," "evening," and "morning." While there is no explicit inclusion of Americans in this topic the way Russians are included in the topic "International Cooperation" in the American corpus, the topic still speaks to interaction between individuals in space due to the prevalence of action verbs related to interpersonal communication. This topic is also temporally linked, becoming more prominent beginning in memoirs published in the 1980s and continuing in dominance until the present day (Figure 15).

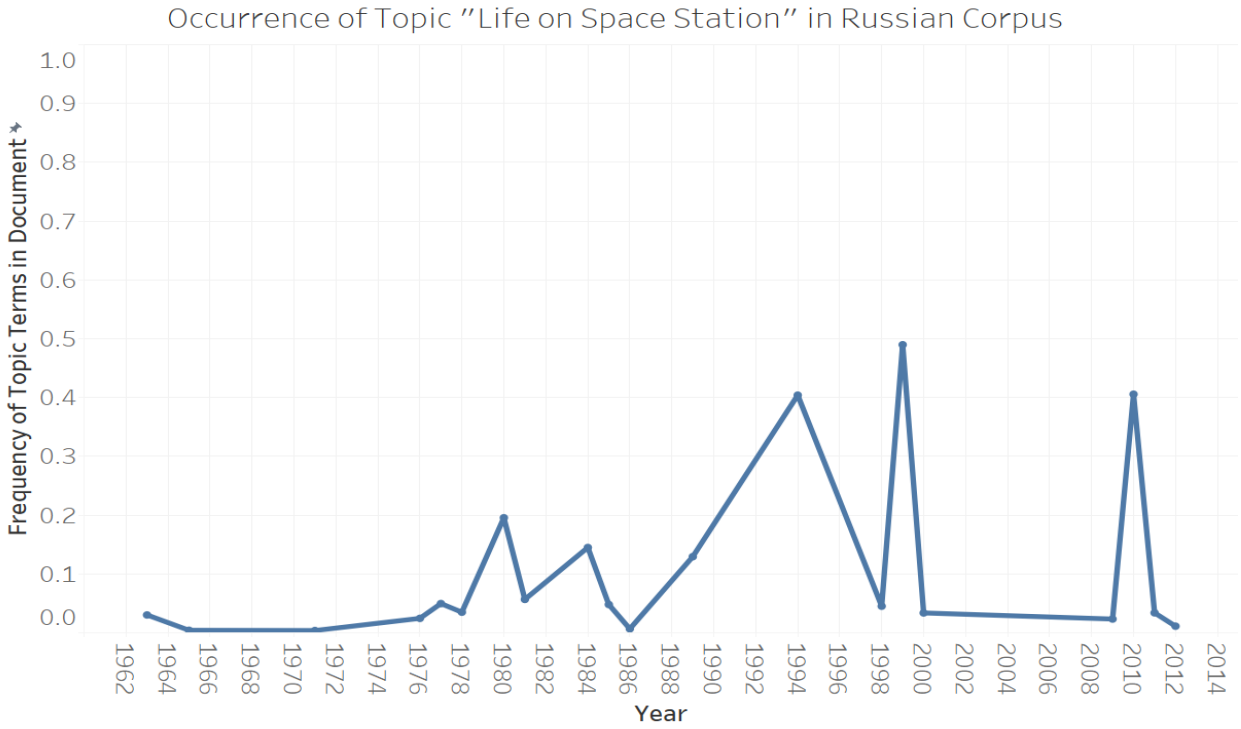

Figure 15 Occurrence of Topic "Life on Space Station" in Russian Corpus

Additionally, the topic I have called "Goals and Relationships" includes terms related thematically to the discussion of the Overview Effect in this chapter. Terms such as "to create," "connection," "world/peace (mir)," "relationship," "problem," and "goal" are all indicative of discussions in the memoirs of the changing rhetorical justifications for space travel and a shifting focus away from the national to the pan-national or universal. Temporally, this topic is more evenly spaced than the other topics considered in this chapter (Figure 16). However, there is a marked increase in the prevalence in this topic beginning in the 2000s. I examine the usage of specific terms across the Russian corpus from this topic to identify the prevalence of specific terms over time.

Figure 16 Occurrence of Topic "Goals and Relationships" in Russian Corpus

Background: Cooperation in Space

Although nominal cooperation between the United States and the Soviet Union began as early as 1961 when letters were exchanged between President Kennedy and Premier

Khrushchev, the first direct interaction between the two countries only began in the late 1960s. A bilateral agreement signed on June 8, 1962 called for cooperation "for the benefit of mankind" but resulted in little more than limited exchanges of meteorological data (Krige et al. 128). The 1960s were still overall defined by intense competition between the US and the USSR.

After the Moon race had ended, both the Soviet and American space programs underwent a transitional period as they attempted to identify what their purpose would be moving forward. NASA transitioned its focus to building orbital stations and developing the Shuttle program (Krige et al. 132). Public and political support for NASA waned during the late 1960s and NASA's budget decreased each year. There was less desire for so-called "crash" programs like the Moon shot and a demand for NASA to demonstrate the cost-benefit analysis of its projects. With the political motivation to beat the Soviets no longer motivating support for the space program, the focus turned to projects that would yield benefits on Earth; projects that would yield spin-off technologies that could be utilized on Earth and projects that supported the stewardship of Earth came to the fore. Likewise, in the USSR, popular support shifted away from space travel in the context of the declining communist economy and citizens were less likely to be "vocally in favor" of space projects (140).[52] Of course, knowledge of the inner workings of the Soviet space program was still limited. The focus shifted from manned space programs to the usage of robotic spacecrafts and the development of orbital stations that would house cosmonauts for long periods of time.

[52] Here Krige et al. cite Siddiqi who gives an anecdote reportedly from *The Washington Post* regarding a grandmother's dismay at the lack of availability on fresh potatoes. She purportedly remarked: "We have rockets, right? Of course, right. We have *Sputniks*, right? Of course, righty. They fly beautifully in outer space. So I say to you, dear friends, Why don't we just send these rotten potatoes into outer space too" ((Siddiqi, "Challenge to Apollo: The Soviet Union and the Space Race, 1945-1974" 794).

Krige et al. suggest that Soviet-American cooperation during the late 1960s and early 1970s was in some ways a grassroots or bottom-up phenomenon (132). In 1969 and 1970 Soviet cosmonauts visited the United States and in October 1970 US and Soviet officials discussed possible collaboration in Moscow (132). The first large-scale collaborative project was born in January 1971 under President Nixon. Acting administrator of NASA George Low met with Henry Kissinger, then foreign policy advisor to Nixon, to discuss the possibility of a joint mission that would pair NASA's Apollo with the USSR's Soyuz spacecraft (132). Kissinger reportedly supported inviting cooperation with the USSR, provided NASA "stick to space" and avoid cooperation on the ground (132). The US-USSR Science and Applications Agreement was signed on January 21, 1971, and researchers from both countries agreed "to exchange lunar soil samples, share biomedical results from human spaceflight, and compare findings from Mars and Venus probes" (133). In addition to exchanging data with each other, both the US and the USSR began to cooperate with other countries and began to distribute data in the public domain.

The Apollo-Soyuz Test Project (ASTP) was born in 1972 when President Nixon and Premier Kosygin signed the Summit Agreement Concerning Cooperation in Outer Space for Peaceful Purposes (Krige et al. 138). Among other provisions, the Summit called for the creation of a joint training exercise in which the Soyuz and Apollo capsules would meet in orbit and dock with each other. From the beginning, there was tension between the "rhetorical goal" of a highly demonstrative and symbolic mission and the scientific justification for the ASTP. On the United States side, there was significant debate and pushback to ensure that the ASTP would prove beneficial for NASA even if the Soviet Union pulled out of the project (Krige et al. 139). Whatever the scientific achievements of the ASTP, the project resulted in a genuine cultural exchange between cosmonauts and astronauts and opened up the possibility of further

international cooperation in space. In the next section, I examine impressions of the ASTP as recounted by the astronauts and cosmonauts who were involved in the program.

Memories of ASTP

The climax of the ASTP was the so-called "handshake in space" between cosmonaut Aleksei Leonov and astronaut Thomas Stafford on July 17, 1975. A highly symbolic moment, the handshake highlighted the spirit of cooperation that ASTP was meant to signify in the political context of Nixon-era détente. Today, ASTP is celebrated as a powerful moment between two former enemies and seen as the predecessor to future space cooperation between the United States and the Soviet Union and later Russia. For example, an article on NASA's website celebrates the "technology, processes, and relationships developed for ASTP" that led to "the success of future programs such as Shuttle-Mir and the International Space Station" (Uri). While much has been written about the political significance of ASTP, less attention has been paid to the experience of the individual space farers who took part in this joint endeavor and the ways in which they made sense of cooperating with their former "enemies."

Out of the five space farers who made up the crew of the ASTP, four have written memoirs that deal with their memories of the mission. On the American side, Thomas Stafford's *We Have Capture: Tom Stafford and the Space Race* (2002) and Donald Slayton's *Deke! US Manned Space Flight* (1994) both treat their involvement in ASTP at length. On the Soviet side, Aleksei Leonov's *Vremya pervykh* [Era of the Pioneers] (2017) also contains a lengthy chapter on ASTP while his compatriot Valerii Kubasov's *Prikosnovenie kosmosa* [Touching the Cosmos] (1984) includes ASTP in his memoir, although the work is centreed around his later Interkosmos mission (1980). In all four works, similarities emerge in the ways the space farers make sense of the ASTP mission and the ways in which this mission changed their sense of self

and their understanding of the common traits connected humans across national boundaries. All four discuss the importance of the mission in changing their perception of their counterparts from enemies to friends. The language barrier is particularly prevalent across all four works as well as the importance of communication. The memoirs compare differences between Soviet and American astronautics. Finally, all the memoir writers attempt to ascribe significance to ASTP in the language typical of other space memoirs that celebrate space exploration in the name of "all mankind."

All four memoir writers focus on the importance of learning each other's language for cooperation in space. Officially, the decision was made that crew members would speak to each other in their respective languages; that is, the American astronauts would use Russian and the Soviet cosmonauts would use English when communicating with each other. Recollections of the challenges of learning Russian and English respectively occupy a large amount of space in these memoirs, and it is often the introduction of language that leads to discussion of the ASTP. For example, Stafford recalls buying a book on Russian soon after he heard about the ASTP to express his interest in the mission (Ch. 15 "Behind the Curtain"). Deke Slayton similarly writes that he began taking Russian privately when he heard about the ASTP to be considered for the mission (359). Stafford recognized the value in being able to communicate with his fellow space farers in Russian and pushed head of NASA Chris Kraft to provide the ASTP astronauts with better language instruction after a trip to Moscow made it clear that they "were not going to be successful in this mission without more Russian instructors" (Ch. 16 "ASTP Is Dead!"). Eventually the American astronauts had a team of four language instructors to support them in learning Russian (Ch. 16). Stafford claims he was successful in learning Russian but also clarifies that the astronauts were not "required to be conversational or fluent, just functional"

(Ch. 15 “Behind the Curtain”). Similarly, Slayton recalls that the Russian he learned was largely related to space terminology and scripts of commands that would be needed during the actual ASTP mission and that he “could barely get along in a social setting” (377). Even so, he acknowledges that Russian “was a real bear” and that the astronauts spent more time on Russian than any other aspect of preparation for the mission (378).

Kubasov and Leonov also discuss the role learning English played in their participation in ASTP. Leonov recalls that his colleague Vitya Gorbatko was originally assigned to the ASTP but that despite his excellent qualifications (“a good cosmonaut who knew mathematics well”) he was completely stumped by the English language (230).[53] As a result of his difficulties with English, Gorbatko was taken off the ASTP mission and Leonov was his replacement. Leonov at the time did not know any English but committed to two hours of individual study daily (230). The cosmonauts even took a formal English exam proctored by professors at Moscow State University. Leonov remembers how difficult the test was and how unprepared they were to answer the questions asked by the proctors because the cosmonauts had learned “their own professional language” and had begun by learning technical terms (232). Nonetheless, Leonov earned a four on the exam (the equivalent of a B in the American grading system). Kubasov wrote about his regret at not knowing English before the ASTP: “Participation in the Apollo-Soyuz program demanded that I quickly master English” (Ch. 9 “Profession: Cosmonaut”).[54] Thus all four memoir writers remember language study as one of the principal elements of the ASTP and discuss the difficulties they had in learning each other’s languages.

[53] «…хороший космонавт, хорошо математику знал, но заколдованный был в языке абсолютно. »
[54] «Участие в программе «Союз» - «Аполлон» потребовало срочно освоить английский.»

While neither the cosmonauts nor the astronauts perhaps ever achieved conversational fluency in speaking each other's languages, their focus on communication through language is significant in that it highlights both groups' desire to understand one another on an individual level. The memoirs point to the distinction between stereotypes the space farers had about each other as Soviets or Americans as compared to the individual astronauts or cosmonauts involved in the ASTP that they got to know personally. American memoir writers remember their impressions of the Soviet delegations they interacted with either in the US or the USSR including interpreters, "minders," and presumed (by the astronauts) KGB members and describe their interactions through typical Cold War frameworks of understanding. Tom Stafford, for example, writes that the Soviets he met on his first trip to the USSR seemed "friendly, if careful" and he explicitly acknowledges that the Americans and Soviets still saw themselves as enemies "with thousands of nuclear weapons aimed at each other" (Ch. 15 "Behind the Curtain"). Leonov uses similar language when he discusses the initiation of ASTP, writing that 1975 was not the simplest time for relations between the USSR and the US and that both countries recognized that they were just one match away from mutual destruction (241).

Slayton and Stafford both recount the time they spent training in the Soviet Union and express both surprise at the conditions they found there and affirmation of some of their preconceived notions about the USSR. Slayton was "surprised at Russia [the Soviet Union]" during his first visit and noted that "things were better than I thought they would be" (373). He mentions an American colleague who had told Slayton he was bringing a suitcase full of nuts and peanut butter, giving Slayton the impression that the food in the USSR would be inedible. Slayton did not find this to be the case. However, both Slayton and Stafford also offer critical impressions of the USSR. Stafford remembers that he "didn't think much" of Soviet construction

or the Hotel Rossiia where he stayed on his first trip to the USSR (Ch. 15 "Behind the Curtain"). Similarly, Slayton describes accommodations for the astronauts at Star City (the training facility for cosmonauts outside of Moscow) as "typically Russian" because there were no curtains on the shower and the doors were missing doorknobs (378). Both offer anecdotes about the surveillance they assumed they encountered in their hotel rooms while staying in Star City. Slayton writes that the "walls had ears" and that all the astronauts had to do to get something was speak to the walls (378). He recounts an anecdote in which he complained that the astronauts did not have enough to do and requested a pool table: "The next day, by God, there was a pool table in our bar downstairs" (379). Stafford recounts telling the walls that there were too many flies in his room and that the astronauts wanted better beer, both complaints which were apparently subsequently addressed (Ch. 16 "ASTP Is Dead!"). Both astronauts relay their experiences with Soviet surveillance in a light tone as a humorous fact of life in the USSR that actually benefitted them. However, their discussions of the secrecy of the Soviet space program take on a different tone.

Both Stafford and Slayton highlight the differences between the American space program in its relative openness (at least in their experience as astronauts) and the Soviet space program's secrecy. Stafford recounts the "wildly different approaches to solving problems" between the two programs and claims that the Soviets were reluctant to explain the reasoning behind some of their decisions (Ch. 15 "Behind the Curtain"). Both astronauts remember their desire to see the launch site at Baikonur (located in the steppes of current-day Kazakhstan) and the amount of persuading it took for this request to be granted. Even so, the astronauts were flown in under the cover of darkness so they would have less knowledge of the exact location of the site (Slayton 380). This is contrasted with a perceived openness on the side of the American program, although Stafford does acknowledge that he assumed both sides of the project were performing

reconnaissance on each other (Ch. 15). For example, Slayton recalls that the Soviets were not forthcoming on the launch date of the Soyuz spacecraft because the official American position was that if they knew, they would tell anyone who asked (381).

While both the astronauts and cosmonauts remember the political context of ASTP through the eyes of national interests, their discussion of each other as individuals is more nuanced. Slayton discusses his attempts to get the cosmonauts away from their entourage during a visit to Houston in 1974 to determine if they would be different without their "minders" (380). To his surprise, the cosmonauts did not act any differently when on their own. Slayton concludes that the cosmonauts were "basically a lot like us—pilots and engineers—and their pilots were actually pretty polished" (371). Stafford makes a point to humanize the cosmonauts for his readers, pointing out from the beginning of his memoir that working with Leonov and Kubasov allowed him to realize that the Soviets were not "faceless enemies" but were rather "complicated human beings trying to make the best of a terrible and complicated political system" (65). Leonov dedicates an entire subsection of his memoir to describing his "friend Tom Stafford." He describes how both men were stationed in Germany during the Cold War on different sides of the border and how their life stories in many ways coincided. Stafford goes as far as to include in his memoir short sections devoted to Leonov's childhood and youth, framing the narrative as a comparison from the start. For example, after describing his training as a military pilot, he writes, "In the Soviet Union, the home of those Tu-4 bombers I was being trained to intercept, Aleksei Leonov was a cadet at the Kremenchug Air Force School…" (Ch. 3 "Cold Warrior"). The relationship between the individual cosmonauts and astronauts is offered in contrast to the larger political relationship between the US and the USSR.

This is made clear when the astronauts and cosmonauts remember the time they spent in space together. While neither crew launched from Earth together (the Soyuz crew launched from Baikonur while the Apollo crew launched from the Kennedy Space Center), they spent time viewing each other's spacecrafts and sharing meals as well as completing joint scientific experiments once they docked in Earth orbit. While most elements of the mission were highly orchestrated and rehearsed, there was a sense of autonomy for the astronauts and cosmonauts while they were in space. For example, Leonov remembers a disagreement between the spacefarers and mission control regarding an experiment they were to conduct while in Earth orbit in which the two spacecraft would fly in tandem at a distance of at least 150 meters. Both Leonov and Stafford considered such a distance would increase fuel consumption to an unacceptable extent (236).[55] Leonov recalls intense discussion of the matter during a meeting before the mission took place and Stafford's anger with the specialists who insisted on a distance of 150 meters; he claimed he took Stafford aside and told him: "Calm down. After all we will be alone in space. We'll do what needs to be done" (237).[56] Leonov continues triumphantly: "And we did it! I flew past Apollo at 40 meters. I distinctly saw the face of pilot Vance Brand in the porthole. And afterwards no one even thought to ask how we flew. At what distance?" (237).[57] Leonov suggests that the rules of conduct on Earth do not necessarily apply in space.

This is not to say that the astronauts and cosmonauts completely abandoned their ties to the Earth while in space. In fact, the vast majority of the ASTP was orchestrated and performed with the full participation of mission control teams in Houston and Kaliningrad. The spacefarers

[55] «Но из практику полетов авиации и мне, и Тому Стаффорду, командиру «Аполлона», было ясно: такое расстояние неприемлемо из-за повышенного расхода топлива.»
[56] «--Успокойся. Мы ведь будем в космосе одни. Сделаем так, как нужно.»
[57] «И сделали! Я проходил в сорока метрах от «Аполлона». Прекрасно видел в иллюминаторе лицо пилота Вэнса Бранда. И потом никому даже в голову не пришло узнать, а как же мы летали? На каком расстоянии?»

were instructed to complete performative acts of diplomacy including the official handshake in space, exchanging souvenirs and memorabilia including flags and joining two halves of an Apollo-Soyuz medal "to symbolize the link-up and handshake in orbit" (Stafford, Ch. 17 "Handshake in Space"). Stafford remembers that there were "no big speeches" but still recalls receiving a phone call from President Ford (Ch. 17). Slayton confirms the rehearsed nature of the ceremonial elements of the ASTP: "All the various crew exchanges had been scripted in advance" (389). He recalls the astronauts and cosmonauts performing televised addresses to the Soviet and American people and remembers Stafford saying in Russian, "Let the things that went on yesterday in our flight, and today, be a good thing for both our people" (392). Such demonstrative ceremonial acts are remembered by the space farers, however, without a sense of personal emotional attachment and are merely reported as elements of the program coordinated and planned by teams back on Earth.

Slayton, Stafford, and Leonov all utilize humor to discuss their personal experiences of the ASTP and the time they spent together in space. Their stories of funny interpersonal moments in space read differently from the official ceremony of the ASTP. For example, Leonov recalls an incident in which he tricked the American astronauts into thinking he had brought vodka on board the Soyuz: "Before the flight I removed the labels from "Stolichnaia," "Russkaia," "Starka," and "Moskovskaia" [vodka]. I placed them in the logbook…After we entered orbit, I glued the vodka labels onto food tubes with borscht" (249).[58] Leonov and Kubasov took out the tubes when the Americans visited the Soyuz spacecraft and told them that it customary for Russians to pay their respects in space and drink before eating. He remembers

[58] «Еще перед стартом достал этикетки: «Столичная», «Русская», «Старка» и «Московская». Положил их в бортовой журнал…И после того, как мы вышли на орбиту, я наклеил водочные этикетки на тюбики с борщом.»

Stafford refusing and saying that it would be shown on camera. Leonov convinced the astronauts to take the tubes and after toasting the secret was revealed: there was no vodka in the tubes. Leonov recalls with humor that Slayton was shown on camera saying it would have been better if it was vodka (250). Leonov recounts this story with particular emphasis on the fact that he was the only one who knew ahead of time about the secret vodka plot, again highlighting that behaviour in space was not subjected to the same rules as on Earth. Stafford describes the American's own practical joke "in revenge" for the "vodka" toast: Vance Brand brought a cassette tape of "girls giggling in a shower" and played it over the radio to the cosmonauts as the two spacecrafts drifted away from each other (Ch. 17 "Handshake in Space").

The interplay between the official memory of the ASTP as signified by performative acts of diplomacy and the personal experience of the astronauts and cosmonauts is interesting in these memoirs because it suggests that the individual experience of the space farers was separate from their understanding of themselves as representatives of a nation. In discussing their time in space together, the memoir writers do not focus on their identity as representatives of the United States or the Soviet Union but rather discuss the personal relationships they formed with each other. In discussing the significance of the ASTP, they use language that celebrates the joint venture in terms of benefits for the entire planet, not their individual nations. For example, Kubasov describes what humans can accomplish with cooperation: "It seems that today it is not only the technology that is being tested but also the main thing that will help earthlings reach distant worlds. I'm talking about international cooperation, about combining the strengths of many

countries in the name of the interests of all mankind (Ch. 12 “The Flight is Completed”).[59] Leonov similarly describes the value of the ASTP mission for all humankind when he writes about the moment six million earthlings looked at the planet from space (during the televised ASTP coverage) and saw planet Earth and how small and fragile it is (242). The language used by both cosmonauts anticipates the shift in tone away from national celebrations of space exploration towards acknowledgment of cooperation in the name of all humankind.

Cooperation after ASTP

While ASTP is celebrated in the four space farer memoirs considered above, the project did not immediately usher in an era of sustained cooperation between the USSR and the US. Krige et al. write that the project had “debatable long-term positive influence on the American end” but that it did foreshadow “a warming and loosening of relations at personal and mid-managerial levels” (142). This is largely consistent with the picture painted in the memoirs, where individual relationships blossomed as a result of ASTP and the memoir writers were able to separate individual astronauts and cosmonauts from their political and national affiliations.

Cooperation between the USSR and the US continued after ASTP but was primarily focused on non-human spaceflight. For example, NASA requested that American experiments be carried out on nine Soviet satellites beginning in 1975 (143). The Carter administration saw less support for cooperation with the USSR after the invasion of Afghanistan and actively retaliated “on a number of diplomatic fronts” including boycotting the 1980 summer Olympics and

[59] «Думается, сегодня проходит проверку не только техника, но то главное, что поможет землянам достичь далеких миров. Я говорю о международной кооперации, о соединении усилий многих стран во имя интересов всего человечества.»

suspending “various cultural and economic exchanges” (146). Krige et al. suggest the importance of individuals maintaining ties across the space programs during this period as a way to continue cooperation and argues that a “level of personal trust and respect that spanned decades” was responsible for the limited non-manned spaceflight cooperation that did continue (146).

The political climate for cooperation changed rapidly in the early 1990s with the dissolution of the Soviet Union. Throughout the 1980s both the US and the USSR had developed space shuttles capable of delivering space farers to Earth orbit and designed to eventually support habitable orbital space stations. The Space Shuttle program on the US side (beginning in 1981) and the Energiia-Buran program on the Soviet side (beginning in 1988) both laid the groundwork for the eventual development of the Mir space station and the International Space Station. The Soviet space program suffered significant setbacks beginning in the 1980s and dissolved completely after the dissolution of the USSR. In 1993, Energiia-Buran was cancelled, and the space program lost thirty percent of its workforce that year (Harvey 8). During this time Russia turned to commercial space tourism to support its space program and flew individuals from the European Space Agency to the Mir space station for a fee (14). The Russian Space Agency was created in April 1992 and was the first organization in either the Soviet Union or Russia dedicated solely to the space program and entirely independent of the military (Krige et al. 159). In 1992 (after the fall of the USSR), President Bush suggested a collaborative mission between the United States and Russia to exchange an astronaut with a cosmonaut on the Mir and Shuttle respectively (159). The so-called Shuttle-Mir cooperation was the beginning of a period of more intense collaboration between the US and Russia and led the way for the development of the International Space Station Program (159). The United States and Russia agreed to collaborate on the construction of an international orbiting space station (the ISS) in 1993 and Russian space

companies began to collaborate with American and European companies on the project (Harvey 16). The 2000s and 2010s represent a period of cooperation between the United States and Russia on the International Space Station. The ISS was launched in 1998 and has been continuously inhabited by space farers from a variety of national backgrounds since 2000. The United States and Russia are the two biggest contributors to the ISS.

Cooperation between Russia and the United States on the ISS has come into question since Russia invaded Ukraine in February 2022. Although astronauts and cosmonauts continue to inhabit the ISS peacefully and have flown together from Kazakhstan to the ISS as recently as September 2022, the tense relationship between Russia and the US calls into question the future of the ISS. Russia's former space chief Dmitrii Rogozin has been vocal on social media about ending Russia's cooperation with the US and current space chief Yurii Borisov has indicated Russia plans to leave the ISS by 2024 ("Russians and Americans share spacecraft").

Internationalism and the Overview Effect

Some of the memoirs examined in this section discuss the purposes of space exploration not in terms of national progress but in the name of international cooperation and a growing sense of the importance of viewing Earth as a whole. Astronauts and cosmonauts reject an understanding of space exploration in the name of their countries and instead increasingly discuss exploration in the name of "all mankind." Discussions of the importance of international diplomacy, protecting the Earth from war, and sharing the new perspective found in space with politicians are given as motivations for writing. These discussions are sometimes paired with a newfound sense of religiosity, mysticism, or spiritualism. In this section I examine memoirs that discuss the experience of space travel in terms of a transcendent experience that impacted the way the individual space traveler thinks about their identity as a representative of a nation.

While this section focuses primarily on memoirs recounting space travel after the 1970s, it is important to recognize that discussions of space travel in conjunction with internationalism are not isolated to this period. In his work on the importance of photos of the Earth from space and the cultural impact of images like the famous Earthrise photo (a photograph showing the Earth "rising" over the Moon taken from lunar orbit during the Apollo 8 mission in 1968), historian Robert Poole discusses the "humanist tradition of internationalist idealism which had come to maturity during the Second World War and after" (40). In this optimistic vision of a post-war Earth, national boundaries would cease to be important because they scarcely mattered when the Earth is viewed from space (41). Mankind would recognize that, in the words of Librarian of Congress Archibald MacLeish, the Earth is "a single sphere, a globe having the qualities of the globe, a round Earth in which all directions eventually meet, in which there is no center because every point, or none, is center—an equal Earth which all men occupy as equals" (40). The moment of international optimism for a peaceful future that would encompass the entire globe was short lived and, as we have seen, discourse surrounding space travel in the 1950s and 1960s was tied to the Space Race and intensely nationalistic. Nonetheless, the language of internationalism was revived in the 1970s and continues to be utilized in conjunction with space travel during the twenty-first century.[60] We can trace this trend in the memoirs included in this study.

In some of the memoirs considered in this section, viewing the Earth as a whole from space is presented to the reader as a turning point or pivotal moment in the narrative not only of the astronaut or cosmonaut's space journey but in their understanding of themselves and their lives. Whether or not that experience is understood on an individual level as religious, mystical,

[60] As mentioned above, the invasion by Russia of Ukraine in February 2022 has called this cooperation into question. All the texts in my corpora pre-date the February invasion.

or simply memorable, the language used to describe seeing the Earth from space often encompasses both a sense of transcendence and pan-nationalism.

Astronauts and cosmonauts use the experience of viewing the Earth from space to give meaning to their time in space. Edgar Mitchell writes in his memoir *The Way of the Explorer* (2008) about the first time he saw the Earth "from the point of view of an extraterrestrial… Earth is but a beautiful blue speck in the midst of a vast emptiness marked by luminous celestial bodies. We inhabit but one of those celestial bodies…From the heavens, in 1971, the Earth looked peaceful and harmonious, but of course all was not as it appeared. Conflict that threatened our very survival lay below" (19). For Mitchell, his view from space of the Earth as peaceful ran counter to his knowledge of the realities of political conflicts. He later remarks about the effects of seeing the Earth after returning to his space capsule after two days of exploration on the Moon's surface. He writes that he felt "something much larger than myself, something much larger than the planet in the window. Something incomprehensibly big" (73). Like Schweickart quoted above, Mitchell makes sense of his experience viewing Earth from space as something outside of his own self, using transcendent language to describe his understanding of the experience. He discusses this moment of seeing the Earth as a critical point in his life and claims that even after many years, "the tableau is so vivid as to have lost none of its clarity" (74). He recalls his awareness that although the Earth appeared "peaceful and inviting" wars were being fought on its surface, including the Vietnam War in which his brother was embroiled (74). For Mitchell, this moment spurred on a completely different understanding of his own consciousness as he felt "a sense of interconnectedness with the celestial bodies surrounding our spacecraft" (74). He continues to discuss his experience using mystical language and elaborates on what would eventually become the foundations of his theory of consciousness,

discussed below. Mitchell's entire sense of himself changed because of his time in space. He writes that he felt a sense of connection to the entire universe and that he was "overwhelmed with the sensation of physically and mentally extending out into the cosmos. The restraints and boundaries of flesh and bone fell away" (75).

Astronaut James Irwin also describes a transcendent moment connected to viewing the Earth from space. He writes, "[a]s we flew into space we had a new sense of ourselves, of the Earth, and of the nearness of God. We were outside of ordinary reality; I sensed the beginning of some sort of deep change taking place inside of me. Looking back at that spaceship we call earth, I was touched by a desire to convince man that he has a unique place to live, that he is a unique creature, and that he must learn to live with his neighbors" (17). For Irwin, seeing the Earth from space was a religious experience that he believes was given to him by God. The only way for Irwin to make sense of his time in space is through religious language. Interestingly, whereas Mitchell describes his sense of interconnection with the universe, Irwin highlight's mankind's uniqueness and isolation in space. Irwin does discuss feeling a greater sense of connection with his fellow humans and claims he is at home anywhere on Earth after being in space and feels "close kinship with everyone" (24). However, both use transcendent language to make sense of their experiences and they both discuss the Overview Effect as transformational in the ways they make sense of themselves.

Critics of autobiography have long defined the genre as based on ideals like autonomy, self-realization, authenticity, and transcendence (Anderson 3). In this formulation of the genre, writers of autobiography can access truths that "anyone" can endorse and understand (3). In this formulation of "essentialist selfhood" transcendent experiences allow writers of autobiography access to a transcendent sense of themselves as mediators able to convey to readers something

true and authentic about what it means to be human. Denice Turner discusses the use of such transcendent language in conjunction with American aviators in the first half of the twentieth century. In her study of aviator autobiography, Turner sees a pattern in which discussions of the self in terms of transcendence, defined as "the ability to exist beyond the material world and reflect upon it from a distance" is a defining characteristic of selfhood (10). Aviators were given a new perspective on the planet from their vantage point in the sky much in the same way as space farers who experienced the Overview Effect. Turner claims aviators describe their selfhood in their autobiographies as universal or what she calls "transcendent personhood" (10). In this formulation of the self, aviators celebrate their "individual participation in an "eternal human nature'" that is outside of the bounds of geography, history, and culture (10).

While the early astronaut and cosmonaut memoirs are mostly devoid of this sense of transcendence as they are firmly located in a specific moment in history and explicitly connect astronauts and cosmonauts with national and ideological concerns, in later memoirs space farers use their experience of viewing the Earth from space to connect with "universal" truths. Mitchell's description of the impact of space flight on his understanding of the universe is one example of this phenomenon. Not only does Mitchell describe the profound personal effect his journey to space had on him, he also claims the experience gave him access to information not available to humans on Earth. Mitchell writes about an ESP (extra-sensory perception, sometimes called a "sixth sense") thought experiment he performed while on the Apollo 16 mission. Mitchell uses his distance from the Earth and his access to a different kind of knowledge separated from the physical bounds of the planet to claim access to a new, universal truth. Mitchell was then motivated to share his knowledge with other people back on Earth and

has since devoted his life to sharing his ideas through his Institute of Noetic Sciences.[61] Similarly, James Irwin claimed his experiences in space brought him closer to God and expresses his desire to share the epiphany he had in space with others. He writes that being in space gave him "the total picture of the power of God and His Son Jesus Christ" (18). He suggests that his experience in space connected him to everyone on planet Earth and writes that "everyone on Earth was a part of this flight" because it was a pan-national effort (18). Irwin thus suggests that he was able to access universal truth in space and share it with all of humanity. This kind of language is concurrent with the trend towards pan-nationalism and the recognition that space travel could benefit all mankind, not just one nation.

Cosmonaut memoirs also discuss the experience of space travel as transcendent. For example, Vladimir Aksënov writes in his memoir *Dorogami ispytanii* [Roads of Trials] (2009) about his desire to share his experiences with all of humanity (chelovechestvo): "All of us who worked in this sphere [of cosmonautics] began only later to judge the full meaning of the events and accomplishments, at first under the influence of the social and political value-judgments of the time and then in the course of our own lives, of age and life experience, which gave more and more meaning to Life" (5, capitalization in original).[62] Aksënov discusses the importance of what he considers the main problem facing humanity: "at this stage of Life—the problem of securing our future for all of our Human Civilization on the Earth and [understanding] how it is connected with our knowledge and understanding of our World, about the Cosmos and about the

[61] *Noetic Sciences*: relating to mental activity or the intellect.
[62] «Все мы, которые работали в этой сфере, начинали ощущать всю значимость событий и свершений уже потом, сначала под впечатлениями от общественных и государственных оценок того времени, затем по мере течения своей жизни, с возрастом и жизненным опытом, который дает все больше и больше понимание Жизни.»

entire Universe" (6, capitalization in original).[63] Aksënov describes his first experience seeing the Earth from space as something he had not expected, even though he had seen photographs and viewed the curve of the Earth from the stratosphere as a pilot (17). He is struck by the beauty of the planet with its various colors and shadows and especially by the vast scale the view gave for an overview of the planet (ogromnyi masshtab dlia obzora). Like the astronauts who describe the Overview Effect, Aksënov gives a detailed account of the way he was able to consider the Earth as a whole, watching it spin in space as if it were a globe (17). Aksënov writes that he could discuss the view of the Earth from space endlessly (beskonechno) and writes in the early section of his memoir that he will return to this topic later in the text, highlighting its importance as an organizational element in his memoir.

Like Mitchell and Irwin, Aksënov uses explicitly mystical or religious language to describe his experiences of being in space. To give one example, Aksënov recounts a mission he was part of whose focus was taking photographs of the territory of the Soviet Union from Earth orbit. He reflects on the image of the spaceship on which he flew as a momentary satellite of the Earth, the Moon as Earth's satellite, and the place of all the planets in the solar system as part of the Milky Way galaxy (21). He then writes that the only object in space during his mission that was manmade was their spaceship and that this makes it distinct from all the other objects in the Universe: "Our spaceship was made and sent on its cosmic orbit by the minds and hands of Humans. It was handmade, it was the creation of Man" (17).[64] However, everything else in the universe, including the universe itself in all its "illimitable complexity" (bespredel'naia

[63] «В Заключении к этой книге я не мог не обозначить самую важную проблему для всего Человечества на данном этапе Жизни—проблему обеспечения своего будущего для всей нашей Человеческой Цивилизации на Земле и как она связана с нашими знаниями и представлениями о нашем Мире, о Космосе и всей Вселенной.»

[64] «Наш космический корабль создан и выведен на свою космическую орбиту умом и руками Человека. Он рукотворный, он—творение Человека.»

slozhnost') was the product of "its Creator which we, earthlings, in the language of symbols have named the Singular God—the Almighty Creator" (17).[65] Aksënov positions the development of space exploration as part of an evolutionary movement towards a higher stage of development and sees the act of creation (in reference to creating spacecraft capable of delivering man beyond the Earth's surface) as a process that moves humankind forward "on the path of its improvement and development" (sovershenstvovanie i razvitie) (21). As humans developed new technologies and made scientific discoveries resulting in spaceflight, man entered a new era of its development called the "Cosmic Era" by Aksënov.

Aksënov 's language should be interpreted within the framework of cosmism, a concept typically associated with Russian culture. Albert Harrison describes Russian cosmism as a mix of "science and technology with characteristically Russian forms of spirituality, mysticism, and fascination with the occult" (27). Russian cosmism is hard to define but can be thought of as an "intellectual tendency" that is at one and the same time "controversial and oxymoronic" (Young 3). According to George Young, two major themes relevant to Aksënov's work in Russian cosmism include "the active human role in human and cosmic evolution…and the exploration and colonization of the entire cosmos" (3). While a complete examination of Aksënov 's memoir in the context of cosmism is outside of the scope of this chapter, it is useful to consider the ways in which Aksënov's language surrounding space travel fits into a cosmic understanding of the justifications of space flight. Aksënov suggests that space travel is the next logical step in human evolution. He makes sense of his experiences in space in the language of cosmic thinking, mysticism, and religion much in the same way as Irwin and Mitchell.

[65] «Все же остальные видимые нами объекты во Вселенной, как и сама Вселенная во всей ее беспредельной сложности, созданы ее Творцом, которого мы, земные люди, на языке символов именуем Единым Богом—Творцом Вседержителем.»

Harrison has suggested that the concept of Russian cosmism is helpful for understanding space exploration in both the Russian and American contexts. He suggests that American justifications for space travel are based on "a mixture of science, belief, and emotion" in much the same way as Russian justifications for space travel (Harrison 27). Harrison considers the intersection of "religious, spiritual, and moral themes" that have emerged in the discourse around space travel and suggests that the concept of cosmism can be a productive way of making sense of these themes together (26). Harrison's work is useful when considering the transcendent experience of space travel on individual astronauts and cosmonauts and the ways in which they describe their experiences.

Harrison suggests the term "American cosmism" as a counterpart to "Russian cosmism" to describe the intersection of myth, religion, and science that surrounds discourse about space exploration in the American context (41). Harrison recognizes that Russian cosmism is rooted in a particular conception of Russian culture as uniquely positioned (in a messianic sense) to advance humankind. He cites Dmitry Shlapentokh who suggests that Russian cosmists see space exploration as "…the fulfillment of human destiny and certain obligations of the universe" and that Russia is uniquely positioned to heed the call for space exploration due to several historical factors including Russia's conception of itself as the Third Rome and home to the true Eastern Orthodox Church as well as a general sense of the Russian people as "special and unique" and having "a moral imperative to unite all people and create harmony throughout the universe" (34). He suggests that national myths about spaceflight in the American context similarly proclaim a unique national destiny tied to space travel based on ideals like "frontier pioneering, continual progress, manifest destiny, free enterprise, rugged individualism, and a right to life without limits" (34).

Conclusion

The memoirs considered in this chapter offer a conception of the self as transcending national boundaries and celebrate space travel as a pan-national endeavor that benefits all of mankind. I have shown how declining support for the space programs in both the USSR and the US, as well as the conclusion of the Space Race, led astronauts and cosmonauts to justify space travel in new ways. Memoirs celebrate the role of international cooperation, particularly the first large-scale cooperative effort between the US and the USSR the ASTP and suggest that national differences can be overcome by working together. The focus on language and communication in memoirs that recount the ASTP suggests that the transcendent experience of viewing the Earth from space was universal; although the space farers might not have been able to communicate via language outside of logistical matters, they were still able to see each other as humans and celebrate the human project of space travel together. Other memoirs in this chapter celebrate pan-nationalism by referring to religious, mystical, or philosophical motivations for space travel and making sense of the experience of seeing the Earth from space as transformative for the space farers' worldview.

Chapter Four: Memoir Boom

In this chapter, I examine memoirs published since the 1990s that fit the trend of the so-called "memoir boom." The memoir boom is a publishing phenomenon recognized both by scholars of life writing and by the publishing industry. Defined broadly, the memoir boom refers to the increase in both publication and popularity of memoirs beginning in the 1990s and continuing to the present day (Anderson 114). The term includes memoirs written both by celebrities and by "relatively unknown people" (Rak 3). To take one representative period, sales in personal memoirs increased four hundred percent from 2004 to 2008 in the United States (Yagoda 7). Beth Holmgren recognizes a similar explosion of memoir writing in the Russian context (xxv). Initially Holmgren credits the boom to "individual attempts to amplify or refute official Soviet historiography" but recognizes that beginning in the 1990s memoir became equally important as a commercial product in the context of a Russian book market centreed on entertainment (xxv).

As discussed in the literature review, the generic distinctions between memoir and autobiography are not widely agreed upon by scholars of life writing. However, for the purposes of this chapter, I make use of the helpful distinction outlined by Linda Anderson and utilized by scholars to argue that one way to conceive of the difference between autobiography and memoir is to consider "literary value" (7). Anderson points to a historical moment in the mid-nineteenth century in which practitioners of autobiography influenced by Romanticism wrote "literary" reflections of their lives. Writers like Wordsworth and Carlyle were influenced not by the market but rather by their desire to establish a sense of self that was without reference to outside judgement or market forces (7). In this way, autobiography was valuable not in terms of its marketability but in terms of its reference to the self and its ability to act as a tool to create the

self in Romantic terms. In contrast to so-called "literary autobiography," memoir has long been seen as a marketable form of writing that is lower or less literary than autobiography. Thus, in this paradigm the value of memoir lies more in its marketability than its literary qualities.

In this chapter I consider the popularity of memoirs written by astronauts and cosmonauts in the context of the memoir boom. I ask why increasingly similar memoirs continue to be written, published, and consumed and how these memoirs differ from the memoirs that came before them. I consider the genre of space farer memoirs and their similarity to self-help memoirs. I also consider the changing role of astronaut and cosmonaut celebrity and the economic connections between their role as motivational speakers and the publication of their memoirs. Ultimately, I argue that contemporary astronaut and cosmonaut memoirs display qualities of self-help memoirs and serve to instruct readers how to be successful citizens in a twenty-first century neoliberal context. I consider both young reader's editions of space farer memoirs and reader reviews to discuss the ways in which the reading public engages with space farer memoirs as didactic cultural artifacts.

Topic Modeling

In this chapter I examine themes delineated by the topic I have called "Identity and Self" from the American topic modeling. This topic includes terms related both to the corporal self like "body," "face," and "hand" as well as terms that speak to a more abstract sense of self like "story," "man," "personal," "experience," and "voice." This topic is represented at a higher rate in the memoirs discussed in this chapter in the context of the memoir boom than the other memoirs in the corpus (Figure 17). Although no analogous topic came out of the Russian topic modeling, I identify similar trends through close reading in the Russian memoirs considered in this chapter.

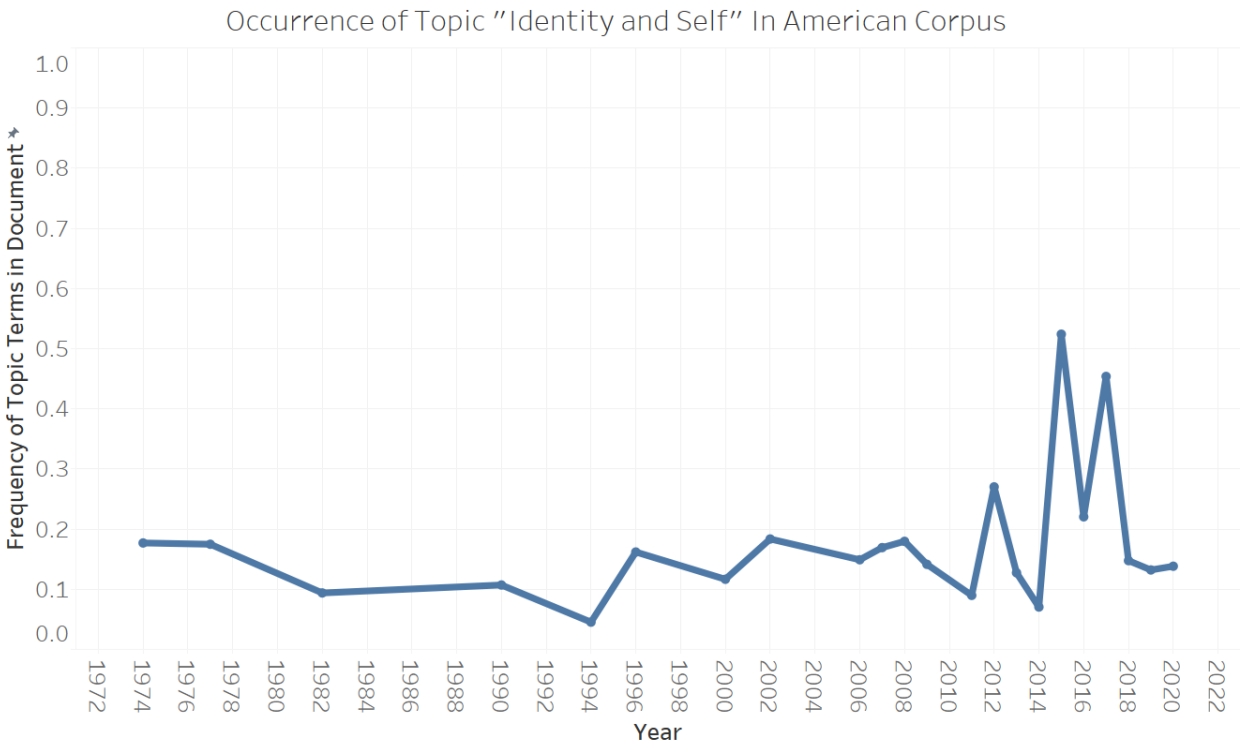

Figure 17 Occurrence of Topic "Identity and Self" in American Corpus

Context: Memoir Boom

The increasing popularity of memoir in the last decades of the twentieth century and continuing to the present in Western and particularly American and British contexts is well documented. It is a reality of the publishing landscape that a sustained high volume of memoirs is published each year, particularly in the sub-genre of celebrity memoir. Large numbers of memoirs are published, purchased, and presumably read each year. What is less clear and deserves attention is why these memoirs continue to be published and whether it is only reader demand that is motivating their publication or if there are other factors at work. The corpora of American astronaut and Russian cosmonaut memoirs I examine in this study that were published beginning in the 1990s and onward are part of the memoir boom and their publication should be considered in this context. They make a particularly compelling sub-set of memoirs because they are, on the surface, incredibly similar in content and form to each other. What can a new

astronaut or cosmonaut memoir tell readers that previous works did not? And how are memoirs published in the last three decades different from their predecessors?

Scholars of contemporary memoir often divide the genre into sub-genres based on authorship, the type of story memoirs tell, or the intended audience. Thus, we see sub-genres such as misery memoirs (stories of childhood hardship that usually feature a redemptive ending like Frank McCourt's 1996 *Angela's Ashes*), self-help memoirs that often feature overcoming challenges like addiction or mental illness, and first-person celebrity memoirs that feature the story of a well-known personality told by a celebrity for the first time. Interestingly, the astronaut memoirs published during the memoir boom, particularly in the American context, feature a convergence of these different categories, with memoirs often explicitly slotting themselves into a sub-genre. For example, José Hernández's memoir entitled *Reaching for the Stars: The Inspiring Story of a Migrant Farmer Turned Astronaut* (2012) offers itself as an inspirational story documenting his journey from suffering to success. Other titles explicitly frame themselves as manuals for living a successful life in the tradition of motivational self-help titles like Buzz Aldrin's *No Dream is Too High: Life Lessons from a Man Who Walked on the Moon* (2015) or Leland Melvin's *Chasing Space: An Astronaut's Story of Grit, Grace, and Second Chances* (2017). These works all promise to offer the reader something more than harrowing anecdotes about space travel. They promise to educate the reader about what it takes to become an astronaut, still seen in American culture as a symbol of success and achieving one's goals.

To better quantify the "boom" in astronaut memoir titles, we can examine the number of titles published between 1960 and the present day (Figure 18). There we see a clear increase in the publication of these types of memoirs beginning in the 1990s and continuing to the present day. Whereas the 1960s, 1970s and 1980s featured only a few titles per year, beginning in the

1990s the number of titles exploded. Certainly, this is partly due to the increasing number of astronauts involved in NASA and the cumulative increased numbers of NASA expeditions.[66] However, it is significant that the number of titles published beginning in the 1990s is consistent with the memoir boom and reflects a sustained interest among the reading public in these kinds of titles.

It is worth considering in greater detail a subset of titles published during the period from 2010 to 2020 to understand which astronauts are publishing their memoirs, how the memoirs position themselves as part of the sub-genres of memoir mentioned above, and who is publishing the memoirs. Between the years 2010 and 2020, at least twenty-one astronaut memoirs were published. Table One summarizes the titles. Astronaut authors during this period range from members of the earlier Gemini and Apollo missions (Gus Grissom was also a member of Mercury but his memoir was published posthumously) to recent participants in International Space Station (ISS) missions. Most of the astronauts who published their memoirs between 2010 and 2020 were participants in the STS space missions (the Space Shuttle program). Twelve of the twenty-one astronauts who published in this period were involved with STS. Four astronauts were involved in the ISS missions. Thus, while there is a focus on more recent missions, memoirs recounting early days of the space program were still being published in the 2010s.

When looking at the publishers for these titles, several trends emerge. One is the prevalence of academic presses. Out of the twenty-one titles published, six were put out by university presses including two titles put out by the Purdue University Press and two by the University of Nebraska press. The titles published by Purdue University Press (*Spacewalker: My*

[66] The number of astronauts in NASA's astronaut corps has fluctuated since the first group of seven astronauts was selected in 1959. The highest number of active astronauts was 149 in the year 2000. Currently (as of May 2020) there are 48 active astronauts.

Journey in Space and Faith as NASA's Record-Setting Frequent Flier by Jerry L. Ross and *Calculated Risk: The Supersonic Life and Times of Gus Grissom* by Gus Grissom) are part of a larger series entitled "Purdue Studies in Aeronautics and Astronautics" that aims to "explore cutting-edge topics in aeronautics and astronautics enterprises, tell unique stories from the history of flight and space travel, and contemplate the future of human space exploration and colonization" ("Purdue Studies in Aeronautics and Astronautics"). The series also aims to highlight the accomplishments of Purdue alumni, who include both Grissom and Ross. Similarly, *Apollo Pilot: The Memoir of Astronaut Donn Eisele* published by the University of Nebraska press is part of the "Outward Odyssey: A People's History of Spaceflight" series that focuses "on the lives of astronauts, cosmonauts, technicians, scientists and their families" and aims to prioritize human experiences over "technology and nationalism" ("Outward Odyssey: A People's History of Spaceflight"). Interestingly, Anderson Clayton's memoir *The Ordinary Spaceman: From Boyhood Dreams to Astronaut,* also published by the University of Nebraska press, is not included in this series, and seems to have been published by the University of Nebraska due to Clayton's status as a native Nebraskan.

In his work on scholarly publishing, Albert Greco recognizes the need for academic publishing presses to remain relevant in an increasingly competitive publishing space. He acknowledges that "every university press and commercial scholarly publisher is in a tournament against every other university press and commercial scholarly publisher to acquire and publish the best books that fit into the press's mission" (160). One strategy for remaining relevant is to publish "a diversified portfolio of books" that might include titles that address specific regional issues (160). It appears that many of the astronaut memoir titles published by academic publishing presses fit into this category by featuring either home-town heroes (in the case of

Anderson Clayton and University of Nebraska Press) or famous alumni (in the case of the Purdue University Press).

Smithsonian Books and National Geographic Partners, LLC were also big players in the publication of astronaut memoirs from 2010 to 2020. Smithsonian Books, according to its website, publishes "trade nonfiction" that focuses on areas "where the Smithsonian's authority is unparalleled" including space, aviation and the military (grouped together as one category by Smithsonian) ("About Smithsonian Books"). Similarly, National Geographic Books publishes nonfiction titles written by "our scientists, explorers, photographers, and authors" and explicitly mentions memoir as a category the publishing house features ("Our Program"). Both Smithsonian and National Geographic are recognized as scientific institutions and, like academic publishing presses, lend an air of legitimacy, authenticity, and authority to the astronaut memoirs they publish.

Other publishers of astronaut memoirs include major publishing houses like Harper Collins and Penguin Random House. These publishers are commercially successful and the memoirs they publish presumably meet certain editorial requirements. While it is notoriously difficult to obtain data on the commercial success of individual titles, it is worth noting that Mike Massimino's memoir *Spaceman: An Astronaut's Unlikely Journey to Unlock the Secrets of Space* and Scott Kelly's *Endurance: A Year in Space, A Lifetime of Discovery*, both published by Penguin Random House, were national bestsellers. Massimino and Kelly have both leveraged their status as astronauts into careers as motivational speakers and their memoirs should be read within the context of their image as public figures.

Finally, a group of memoirs published by smaller presses, often with specific foci, make up the remainder of publishers for the works considered in this section. These include presses

with specific political goals like Center Street, publisher of Jose Hernández's memoir *Reaching for the Stars.* Center Street identifies itself as a "leading publisher in Nonfiction Conservative Politics and Military" ("Center Street"). Rhea Seddon self-published her memoir entitled *Go for Orbit: One of America's First Women Astronauts Finds Her Space* and created her own publishing house entitled Your Space Press, meant to celebrate Rhea's dedication both to space and "help[ing] women around the world reach for greater heights in their personal and professional lives" ("Your Space Press"). Seddon's writing is also connected to her career as a motivational speaker and will be considered together with Massimino and Kelly in this regard.

Table 4 American Astronaut Memoirs Published Between 2010 and 2020

Author	Title	Publication Year	Publishing Press	Author's Space Involvement
Hernández, Jose M.	Reaching for the Stars: The Inspiring Story of a Migrant Farmer Turned Astronaut	2012	Center Street	STS-128
Worden, Al	Falling to Earth: An Apollo 15 Astronaut's Journey to the Moon	2012	Smithsonian Books	Apollo 15
Ross, Jerry L.	Spacewalker: My Journey in Space and Faith as NASA's Record-Setting Frequent Flyer	2013	Purdue University Press	STS-61-B, STS-27, STS-37, STS-55, STS-74, STS-88, STS-110
Young, John W.	Forever Young: A Life of Adventure in Air and Space	2013	University Press of Florida	Gemini, Apollo 10, Apollo 16, STS-1, STS-9
Mitchell, Edgar	Earthrise: My Adventures as an Apollo 14 Astronaut	2014	Chicago Review Press	Apollo 14
Stafford, Tom	We Have Capture: Tom Stafford and the Space Race	2014	Smithsonian Books	Gemini 6A, Gemini 9, Apollo 10,

				Apollo-Soyuz
Aldrin, Buzz	Return to Earth	2015	Open Road Media	Gemini 12, Apollo 11
Anderson, Clayton C.	The Ordinary Spaceman: From Boyhood Dreams to Astronaut	2015	University of Nebraska Press	STS-117, ISS Expedition 15
Garan, Ron	The Orbital Perspective: Lessons in Seeing the Big Picture from a Journey of 71 Million Miles	2015	Berrett-Koehler	STS-124 ISS
Aldrin, Buzz	No Dream is Too High: Life Lessons from a Man Who Walked on the Moon	2016	National Geographic Partners, LLC	Gemini 12, Apollo 11
Massimino, Mike	Spaceman: An Astronaut's Unlikely Journey to Unlock the Secrets of the Universe	2016	Penguin Random House	STS-109, STS-125
Seddon, Rhea	Go for Orbit: One of America's First Women Astronauts Finds Her Space	2016	Your Space Press	STS-51-D, STS-40, STS-58
Eisele, Donn	Apollo Pilot: The Memoir of Astronaut Donn Eisele	2017	University of Nebraska Press	Apollo 7
Kelly, Scott	Endurance: A Year in Space, A Lifetime of Discovery	2017	Penguin Random House	STS-103, STS-118, ISS
Melvin, Leland	Chasing Space: An Astronaut's Story of Grit, Grace, and Second Chances	2017	HarperCollins	STS-122, STS-129
Parazynski, Scott	The Sky Below: A True Story of Summits, Space, and Speed	2017	Amazon Publishing	STS-66, STS-86, STS-95, STS-100, STS-120
Grissom, Gus	Calculated Risk: The Supersonic Life and Times of Gus Grissom	2018	Purdue University Press	Mercury 7, Gemini, Apollo
Sullivan, Kathryn D.	Handprints on Hubble: An Astronaut's Story of Invention	2019	The MIT Press	STS-41-G, STS-31, STS-45

Virts, Terry	How to Astronaut: An Insider's Guide to Leaving Planet Earth	2020	Workman Publishing Company	STS-130, ISS

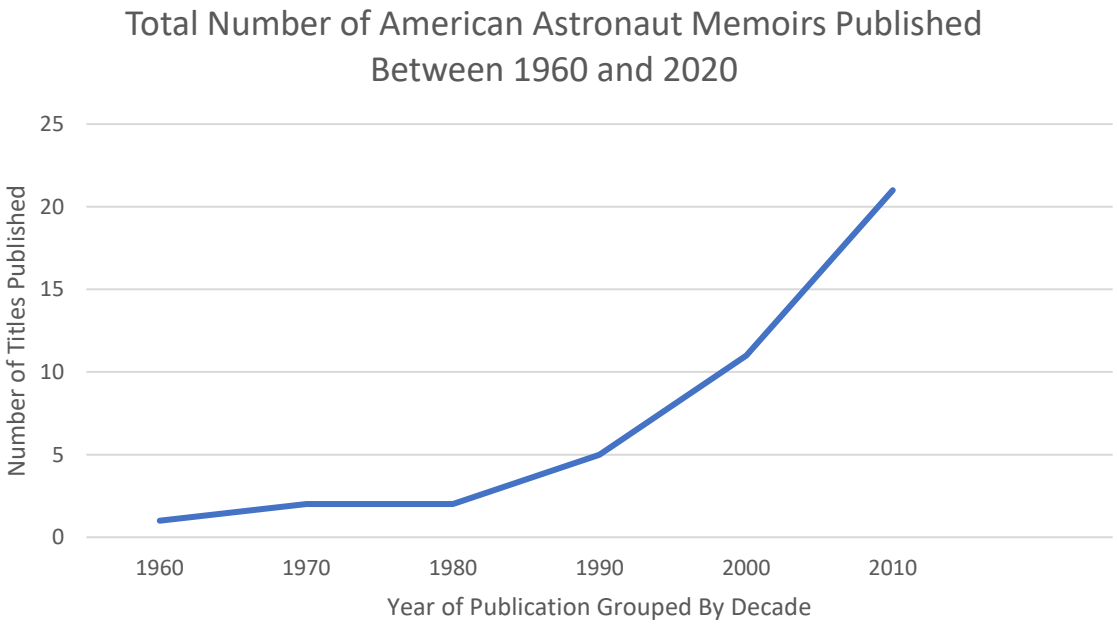

Figure 18 American Astronaut Memoirs Published Between 1960 and 2020

Thus, American publishers of astronaut memoirs during the memoir boom include academic publishers, popular scientific publishers, commercial publishing houses and smaller, niche publishers. The diversity in publishers suggests a diversity in motivation for astronauts to recount their experiences as well as potential diversity in readership and demand for these titles. In the section on reader response, I examine reviews of astronaut titles from this period to gain a better sense of why readers seek out these titles and look for larger trends in American memoir writing that are exhibited by these titles.

In the Russian context, the memoir boom is also relevant, although there is a less marked explosion of titles beginning in the 1990s. Rather, there is a decrease in the number of titles published in the period between 1980 and 1990 and an uptick in titles starting in 1990 and

continuing to 2020 (Figure 19). While the overall number of publications did decrease from 2010 to 2020, the difference was between sixteen and eleven titles, still suggesting sustained publication in these types of memoirs. We can compare the titles published in Russia during the same ten-year period (2010 to 2020) to better understand the publication patterns in the Russian context and how they compare to American patterns.

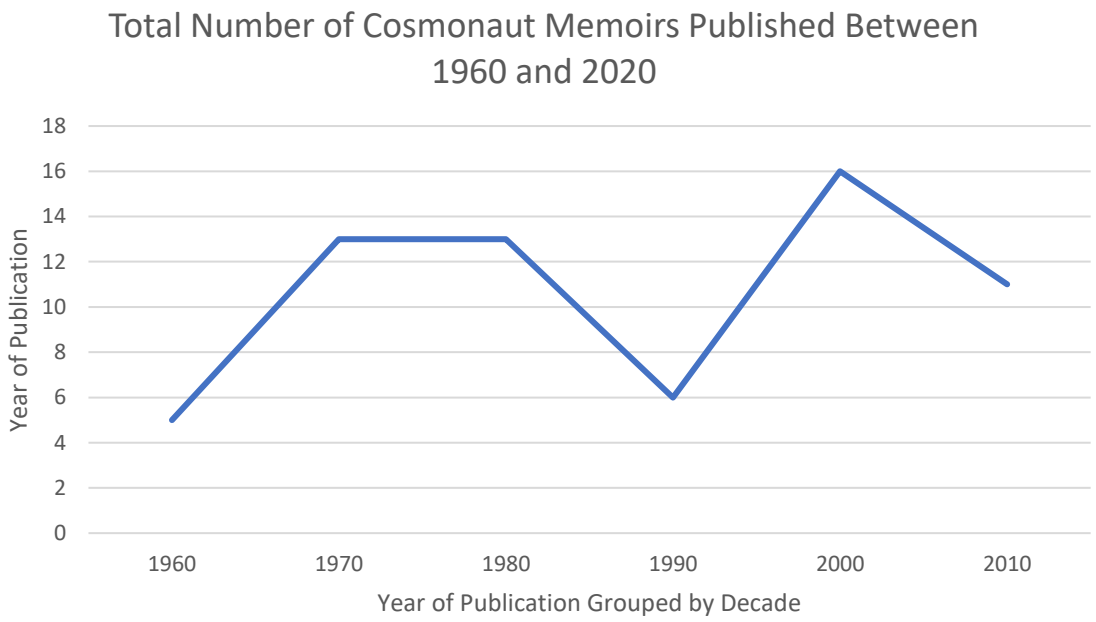

Figure 19 Number of Cosmonaut Memoirs Published Between 1960 and 2020

Certainly, when considering the publishing process for memoirs released in Russia since the 1990s, it is necessary to place into context the dramatic changes in the publishing industry that occurred with the collapse of the Soviet Union in 1991. As discussed in the literature review of this dissertation, the publishing industry changed dramatically from a state-run, centralized industry whose publications were not driven by consumer demand to a market capitalist system. Many of the publishing houses that produced the memoirs in the period considered in this

chapter (2010 to 2020) were established during the 1990s. A brief look at the different publishers and their stated missions will thus be instructive.

As with the American astronaut memoirs, there are a variety of different types of publishers producing cosmonaut memoirs in the contemporary context. These range from popular publishing houses like AST to publishers who focus specifically on producing historical content related to Russia like *Russkii raritet*. There are also publishers associated with factories or other enterprises like *OOO Svet*. *Eksmo-AST* is a giant in Russian publishing formed in 2012 when Eksmo acquired AST after AST threatened bankruptcy due to taxes owed to the Russian government (Kalder 153). *Eksmo-AST* claims their goal is to preserve the intellectual legacy of world literature as well as to remain up to date in current trends in world literature. They regularly publish translations of major Western authors like Stephen King and Susan Collins. *Eksmo-AST* is rated forty-fifth in world rankings of book publishers according to their website (153). In keeping with its role as a major commercial publisher, the three books published by *Eksmo-AST* between 2010 and 2020 all position themselves as popular non-fiction meant for a wide audience. Alexei Leonov's *Era of the Pioneers* (2017), Oleg Artem'ev's *Space and the ISS* (2019) and Sergei Riazanskii's *Can You Hammer a Nail in Space and Other Questions* (2019) all offer themselves as popular titles meant to be read for entertainment. Similarly, Olma Media Group is recognized as one of the top ten publishers in Russia and publish best-selling titles by authors like Boris Akunin (Grigoriev and Adjoubei 40). Olma Media Group published Georgii Grechko's memoir *Kosmonavt No. 34: Ot luchiny do prishel'tsev* [Cosmonaut No. 34. From A Rushlight to Aliens] (2013).

Smaller publishers of cosmonaut memoirs have stated goals related to preserving specifically Russian culture. For example, *Russkii raritet*, publisher of Aleksei Gubarov's

Kosmos nachinaetsia na zemle [Space Begins on Earth] (2011), regularly publishes works of "social-political literature" including books on spiritual development related to Russian Orthodoxy ("Russkii raritet"). OSLN, the Society for the Preservation of Literary Heritage (Obshchestvo sokhraneniia literaturnogo naslediia) has also published a series of religious texts related to Russian Orthodoxy as well as history texts focused on Russia. They are the publishers of *Space is My Destiny* by Oleg Baklanov (2014) as well as a recent volume also by Baklanov entitled *Kosmonavty: Zvezdnye trassy zemlyan* [Cosmonauts: The Stellar Routes of Earthlings] (2020), a compendium of works by Soviet and Russian cosmonauts containing a short biography of each space farer and their portrait. *Al'pina Pro*, publishers of Iurii Baturin's *Vlasteliny beskonechnosti. Kosmonavt o profesii* [Masters of Infinity: A Cosmonaut on the Profession] (2018) focuses on business publications as well as self-help works and emphasizes on their website their role in helping authors publish their work ("Al'pina knigi").

Table 5 summarizes the titles published in Russia during the years 2010 to 2020. As with the American titles, we see a variety of different kinds of publishers as explored above. We also see representation from cosmonauts who flew earlier space missions during the Soviet era as well as titles published by cosmonauts who participated in the Mir space station program and the International Space Station program.

Table 5 Russian Cosmonaut Memoirs Published Between 2010 and 2020

Author	Title	Publication Year	Publishing Press	Author's Space Involvement
Savinykh, V.	*Vyatka, Baikonur, Kosmos* [Vyatka, Baikonur, Outer Space]	2010	MAKD	Soyuz T-4, Soyuz T-13/T-14, Mir EP-2
Popovich, P.	*O vremeni i o sebe* [About the Times and Myself]	2010	MAKD	Vostok 4, Soyuz 14
Gubarev, A.	*Kosmos nachinaetsya na zemle* [Space Starts on Earth]	2011	Russkii raritet	Soyuz 17, Soyuz 28

Baklanov, O.	*Kosmos—moia sud'ba* [Space is My Destiny]	2012	OSLN	Engineer
Grechko, G.	*Kosmonavt No. 34. Ot luchiny do prishel'tsev* [Cosmonaut No. 34. From a Rushlight to Aliens]	2013	Olma Media Group	Soyuz 17, Soyuz 26, Soyuz T-14
Savitskaya, S.	*Baiki kosmonavtov* [Dreams of Cosmonauts]	2014	OOO "Svet"	Salyut 7-EP2, Soyuz 7-EP4
Leonov, A.	*Vremya pervykh. Sud'ba moia—ia sam…*[Era of the Pioneers. My Fate I Myself…]	2017	AST	Voskhod 2, Soyuz 19
Branets, V.	*Zapiski inzhenera* [Notes of an Engineer]	2018	Kosmoskop	Engineer
Baturin, Iu.	*Vlasteliny beskonechnosti: Kosmonavt o professii* [Masters of Infinity: A Cosmonaut on the Profession]	2018	Al'pina Pablisher	Mir EP-4, ISS EP-1
Artem'ev, O.	*Kosmos i MKS: kak vse ustroeno na samom dele* [Space and the ISS: How It Actually Works]	2019	AST	Soyuz TMA-12M, Soyuz MS-08, Soyuz MS-21 (ISS)
Riazanskii, S.	*Mozhno li zabit' gvozd' v kosmose i drugie voprosy* [Can You Hammer a Nail in Space and Other Questions]	2019	AST-Eksmo	Soyuz TMA-10M, Soyuz MS-05 (ISS)

Astronaut and Cosmonaut Celebrity

The first astronaut and cosmonaut memoirs published in the 1960s were commissioned and written by mass media outlets and assumed readers would be interested in details about the lives of space farers who were public figures. Astronauts and cosmonauts can be alternatively thought of as heroes or celebrities depending on the definition used. Definitions of celebrity vary depending on the period and cultural context in question. Graeme Turner quotes Daniel Boorstin's definition of celebrity which suggests that "heroic figures" were distinguished by their achievements or by "the great simple virtues of their character" whereas celebrities became well known due to the "trivia of personality" (5). Whereas heroes are marked by society for concrete actions (such as going to the Moon in the case of the astronauts), celebrities become famous "not

by achieving great things, but by differentiating their personality from those of their competitors in the public arena" (5). The nature of celebrity changed dramatically over the course of the twentieth century in both the United States and the Soviet Union and later Russia. Figures like astronauts and cosmonauts were known by the public because they had achieved something significant or had a prominent social position as did other public figures (G. Turner 3). In his taxonomy of celebrity, James Monaco suggests three different categories: the hero, the star, and the quasar (Cited in Turner 21). Heroes are those who have "actually done something spectacular to attract attention in the first place" and here Monaco directly calls out astronauts. Stars are those who have a public persona that becomes "more important than their professional profile" like movie stars who become known outside of their films. Finally, quasars are accidental celebrities or people who become famous overnight and whose celebrity quickly fades (sometimes called flash-in-the-pan celebrities). Thus, in Monaco's taxonomy, astronauts represent a specific kind of celebrity grounded in achievement. Turner suggests that this kind of celebrity (the hero), while still present in contemporary culture, represents an earlier form of celebrity that is quickly being supplanted with stars and quasars.

In her work on American pilots during the Golden Era of Flight (1920s and 1930s) cited above, Denice Turner discusses the image of pilots as heroes who were seen in "romantic, epic, or spiritual terms" and frequently compared to Greek gods or figures from the Bible (10). As discussed in Chapter One, astronauts and cosmonauts were frequently presented to the public in similar terms to aviators as heroes who possessed specific qualities necessary to overcome the bounds of the Earth and take to the skies. Particularly in the context of the Space Race, space farers were seen as heroes for their bravery and willingness to participate in dangerous endeavors. This image of the hero changed somewhat after the Space Race had ended and space

travel came to be seen as less dangerous, more routine, and more commonplace. Nonetheless, astronauts and cosmonauts still hold a place in contemporary discourse as being exceptional and representing positive qualities associated with heroes.

The rise of mass media at the turn of the twenty-first century led to a democratization of celebrity: anyone could be a celebrity regardless of their background or achievements. Turner suggests that modern celebrity is different due to its pervasiveness across multiple media and its "contemporary cultural visibility" (4). He argues that the modern-day celebrity is valued more for their private life than their professional achievements. This trend fits with the increase in memoirs published since the 1990s that promise to give the public a look into an individual's private life that has previously remained hidden. How do astronaut and cosmonaut memoirs align with modern celebrity culture? In some ways, we can see elements of celebrity in the production of space farer memoirs including attempts to tie these memoirs to self-branding (discussed below). However, I maintain that astronauts and cosmonauts should still be classified as heroes according to Monaco's dichotomy and that their memoirs do not focus on space farer's private lives as much as they continue to promote individual qualities celebrated by society.

Celebrity memoirs exploded in popularity as part of the memoir boom beginning in the 1990s. Jonathan D'Amore identifies public interest in celebrity and "reality narratives" as a driving factor in the publication of life writing written by public figures like "[m]ovie stars, professional athletes, famous CEOs, national politicians, and flash-in-the-pan curiosities" (10). He suggests that publishers were aware of and continue to leverage the profits they can make from memoirs written by celebrities or other public figures. Thus, the driving forces for the publication of celebrity memoirs in the context of the memoir boom are demand for "real" stories about well-known figures and publishers' expectation of turning a profit with these titles.

Concern with the quality of writing or the literariness of the published memoirs comes second to their economic profitability and popularity. As we have seen, the idea that memoirs are less literary than autobiography and intrinsically linked with the market has long been a defining feature of memoir.

In the case of astronaut and cosmonaut memoirs, literary merit is once again not the driving force behind publication of these stories, but neither is the same kind of celebrity as those memoirs written by stars or quasars in Monaco's taxonomy. While astronauts and cosmonauts are well-known for their professional associations, they are not stars in the sense that their celebrity does not exist outside of their professional achievements. Readers are typically not interested in details of the space farer's private lives except insofar as space travel impacted their lives. In the reader response section, I examine reader reviews of space memoirs to gain a better sense of what readers get out of the texts. However, before exploring why readers are interested in space farer memoirs, it is necessary to identify the writing process that drives their production, and examine how the astronauts and cosmonauts come to be authors and what degree of involvement they have in producing the final text.

Ghost Writing and Celebrity Memoirs

The authorship of the astronaut and cosmonaut memoirs examined in this section can be mapped along a spectrum from texts written entirely by an acknowledged co-writer to those written solely by the astronaut or cosmonaut themselves. Of course, within this spectrum are layers of involvement by editors and ghost writers. I use the term *ghost writer* to refer to a writer who is not openly acknowledged on the cover or title page of the text but has contributed significantly to the text's production. Co-writer is used to refer to a writer who is acknowledged on the cover or title page of the text, typically using the term "with" as in *No Dream is Too High*,

written by Buzz Aldrin with Ken Abraham. Among the American memoirs examined in this section, seven have acknowledged co-authors. Co-authors include authors with expertise in space history like Francis French, a professional author; James R. Hansen, professor of history at Auburn University; and Margaret Lazarus Dean, professor at the University of Tennessee. Michael Cassutt, television producer and writer whose work includes *The Outer Limits* and *The Twilight Zone*, has co-written memoirs with Deke Slayton and Thomas Stafford. Other co-authors specialize in co-writing, particularly co-writing memoirs. Ken Abraham is the author of several celebrity memoirs including those by Chuck Norris, Bill Gaither, and George Foreman. Susy Flory also specializes as a co-author and memoirist according to her website and is the founder of "Everything Memoir," a private Facebook group for people who wish to write a "memoir or personal story." These professional co-writers specialize in helping either celebrities or people with enough financial means to produce their life story. They are thus distinct from the co-writers who have a background in science or space history.

The remaining fourteen memoirs give no acknowledgement of having been co-written or ghost-written. However, we can use clues from the memoir's forewords, afterwords and acknowledgements to gain a better sense of the publication process and attempt to understand the writing process the astronauts used in crafting their memoirs. For example, several of the astronauts reference the person or event who inspired them to write their life story. José Hernández credits talk show host Oprah Winfrey with motivating his memoir. He writes that after appearing on her show, she encouraged him to write his story (viii). Hernández worked with writer Jorge Ramirez-Martinez who helped with the "composition of my stories" (viii). The level of Ramirez-Martinez's involvement is not clear, but Hernández openly acknowledges that he had help writing his story. Leland Melvin similarly credits Jeanette Suarez with encouraging

him to “share my testimony with the world” as part of his “why” or purpose for being alive (235). Melvin thanks Jabari Asim (professor of writing, literature and publishing at Emerson College) and Doug Lyons (writer and actor) in his acknowledgements: “You helped shape and craft these words, and I appreciate your passion for rich, powerful storytelling” (235). Again, while not listed as co-authors, Melvin acknowledges the support of professional writers like Hernández. Agents play another important role in the production of astronaut memoirs in the American context. For example, Terry Verts credits his agent Geoffrey Jennings for pitching his book idea to the publisher Workman and acknowledges that Jennings’s approval and support were instrumental to his writing process (301). Thus, while only seven of the texts considered in this section openly acknowledge co-writers, the trace of third-party writers including ghost writers can be felt when digging deeper into these works.

In her study of celebrity memoir, Hannah Yelin discusses the ghost writer in the context of memoirs of female celebrities and the ways in which texts “frequently actively veil the collaborative production process and seek to collapse the distinctions between narrator, implied author, and actual author” (22). While the texts considered in this section are not celebrity memoirs per se, it is still important to consider the production of the texts as a nexus of different actors and acknowledge that these memoirs were written by individuals who do not regularly write for a living. Yelin argues that ghost writers are derided by both academics and literary critics and offers a gendered reading of the ways in which memoirs of female celebrities that are ghost written are seen as low brow or not worth reading. The same derision does not extend to memoirs like those written by astronauts or politicians who frequently use ghost writers but many of the astronaut memoirs still hide the ghost writer in the acknowledgements section and strive to preserve the astronaut’s voice as an important element attracting readers to the work.

In the case of the Russian corpus, Aleksei Leonov's memoir *The Age of Pioneers* (2017) is a collection of some of the many "interviews, conversations and stories" told by Leonov as written by his daughter Oksana Leonova "in the words of [her] beloved father" ("Vstupitel'noe slovo" [Foreword]).[67] She considers the work to be a reflection of the respect she has for her parents and writes that it was their relationship as married partners for fifty-seven years that allowed her father to "develop in himself the best qualities that were part of his character and to become a complete, successful, sure in himself and absolutely unordinary Hero of the era and Real Person ("Foreword," capitalization in original).[68] Leonov's memoir should thus be considered alongside ghost-written memoirs as his words went through an intermediary, his daughter. Leonova claims her motivations in writing the book were to describe her father as a successful individual in much the same way that contemporary astronaut memoirs position the astronaut as an example for readers to follow. It is interesting that Leonova discusses her father's success in relationship to his marriage and his role as a husband, positioning Leonov's faithfulness to his wife as one of the most important qualities that make him a hero for readers. Leonova suggests that it is this quality that should most be emulated by readers.

Leonov's memoir should also be considered in conjunction with the film of the same title released in 2017 about him. The film celebrates Leonov's role as the first human to perform a spacewalk and is a nostalgic celebration of the Soviet space program. While a full discussion of the film is outside of the scope of this dissertation, it bears mentioning that Western scholars have considered similar contemporary Russian films in the context of "cinepaternity" or the

[67] «В эту книгу вошла лишь часть интервью, бесед и рассказов, записанных мной со слов моего любимого папы…».

[68] «Уверена, что именно великая любовь к незаурядной женщине, преданность и верность ей помогли моему папе развить в себе все лучшее, что было заложено в его характер и стать таким целостным, успешным, уверенным в себе и абсолютно неординарным, --Героем эпохи и Настоящим Человеком!»

relationship between film, the state, and father figures (Trimble 201). Trimble argues that contemporary Russian films present father figures to the viewing public for emulation and that these characters are "charismatic celebrity figures—political, historical, and fictional" and that the male figures in the films should be seen as role models for viewers (203). Leonov's presentation in the film should be read in this context as a role model for viewers to emulate and his memoir can be equally considered as a presentation of a father figure for readers to emulate. In addition, as previously mentioned, Leonov's memoir was published as part of the "Exclusive Biography" series published by *AST* and containing biographies of well-known individuals in the tradition of the *Zhizn' zamechatel'nykh liudei* [The Lives of Remarkable People] series. Leonov is presented to the Russian reading public as a remarkable individual whose life is worth emulating.

In his memoir, Leonov comments on the nature of celebrity and what he considers the tragedy of modern celebrity culture in Russia. He questions why television stations in Russia have stopped televising events from the space program and laments the fact that in their place television shows only "the events of the week…For half an hour they talk about how some 'star' got a boob job, then half an hour about some American spy…And during this time a team has returned from space after being there for six months!" ("Reformy v kosmonavtike [Reforms in Cosmonautics]).[69] Leonov equates the status of the cosmonaut with that of a true celebrity or hero in the Russian context and writes that it was only during Nikita Khrushchev's tenure as leader of the USSR that cosmonauts were given their proper respect. Leonov links the celebrity status of the cosmonauts with their involvement in advancing national ideas: "A national idea!

[69] «Ну что они показывают? События недели…Полчаса говорят о том, как какая-то «звезда» увеличила себе грудь, потом—полчаса про какого-то американского шпиона…А в это время вернулись из космоса экипаж, который пролетал шесть месяцев!»

The start of socialism is the launchpad of humans into space…Space was the victory of our country! And this is truly the case" ("Reformy v kosmonavtike [Reforms in Cosmonautics]).[70] Thus, for Leonov, the cosmonaut's celebrity was directly linked to their affiliation with the state and advancing a national ideal. This idea has become complicated in the post-Soviet context but cosmonauts are still presented to Russian readers as figures worth emulating.

Motivational Speakers

From the publication of *We Seven* onwards, astronaut life writing has been associated not only with the public image of the astronauts but with public appearances and speaking engagements. But while the Mercury Seven astronauts and subsequent Apollo astronauts were required by NASA to deliver their life stories through *Life* magazine or not at all, the current publishing dynamic has changed as astronauts are given more autonomy over their life stories. Instead of representing NASA directly, many former and current astronauts now represent themselves (or are represented through PR agencies) through a series of media tours, speaking engagements, and book tours. For example, the Washington Speakers Bureau represents Jerry Linenger and Mike Massimino, both of whom have written memoirs about their time in space. Scott Kelly is represented by Keppler Speakers and is listed as the author of a New York Times best-selling memoir on their promotional website. No doubt audience members are able to purchase copies of the astronaut's memoirs at their speaking events.

The connection between the astronauts as authors and motivational speakers might seem to be merely one of marketing: the astronauts can advertise and sell books at these events and readers of the books might find themselves inclined to seek out speaking events featuring authors

[70] «Национальная идея! Старт социализма—стартовая площадка человека в космос…Космос—это была победа нашей страны! А ведь это действительно так.»

whose work they enjoyed. However, I argue here that the link between motivational or inspirational speaking and the content of the memoirs themselves is strong and central to the larger argument I am making in this dissertation. The astronauts' memoirs are offered to the public as guides for pursuing one's dreams, becoming a hero, and fulfilling one's role in the larger national story of American success. Motivational speakers are meant to inspire audiences not only with stories of personal success but with lessons that audience members can emulate in their own lives. Those lessons are culturally based and celebrate elements of character that are seen as desirable in a given cultural or national context. These same lessons can be found in the astronaut memoirs, as we have already seen.

For example, Scott Kelly is described by Keppler Speakers on their website as "an American hero" who will share with audiences "transcendent insights on embracing risk and discovering their potential." These insights are available both to audiences of Kelly's speaking engagements and to readers of his memoir. The promotional material claims that Kelly will "encourage audiences to achieve the impossible" and to understand that the sky is not the limit. All American Speakers, another public relations firm, represents Clayton Anderson, José Hernández, Leland Melvin, Mike Mullane, and Scott Prazynski, all of whom have published memoirs. The promotional material for Clayton Anderson promises a "story of humility, perseverance and hard work" that will "challenge attendees to examine how they may apply the same concepts to their everyday work and personal lives."

In the Russian context, Sergei Riazanskii positions himself as a motivational speaker on his website where interested parties can book different lectures around themes like believing in yourself, the "physiology of success," and positive thinking. Much like American astronaut motivational speakers who claim lessons from space are applicable to everyone, Riazanskii has a

program entitled “Positive Thinking: Cosmic Lessons for the Modern Person” (“Avtorskie programmy”). Riazanskii lists among his clients Russian media giant Yandex, Pochta Rossii (the Russian postal service), Gazprom (Russian state oil company), and Sberbank (Russian state-owned bank). Riazanskii claims to offer listeners to his talks with information about how to find motivation to realize their dreams, how to overcome daily challenges and stop procrastinating (“Avtorskie programmy”). In this way, Riazanskii positions himself as an example for listeners to follow in much the same way as American astronauts.

Reader’s Reviews

Up to this point in the dissertation, I have considered space farer memoirs in isolation from their readers. To better understand why readers choose these texts and continue to read them in the contemporary context, I utilize reader reviews of two contemporary spare farer memoirs I collected from two of the largest online bookselling platforms: Amazon.com in the US context and Ozon.ru in the Russian context. These reviews help illuminate what readers find memorable from the texts as well as provide insight into how readers characterize the texts generically.

Reviews of José Hernández’s memoir *Reaching for the Stars* show that many readers choose the text for its inspirational qualities. The most commonly used terms across forty-four reviews collected from Amazon.com after “book,” “story,” and “read” (not surprisingly) were “inspiring,” “great,” “dream,” “perseverance,” and “American.” Across the reviews, eighteen described the text as “inspiring,” meaning nearly half of the reviewers highlighted this quality of the memoir. One reviewer mentions reading the text as a “true example of perseverance and a model of the true American dream” while another similarly describes the memoir as showing that the American dream is “still attainable” (Dr. JC, Katalina). In this way, the text is celebrated

by readers as an example of how to achieve success in the American context and as confirmation that hard work and dreaming pay off. This is particularly significant in the context of Hernández's memoir because the text, as shown above, follows the rags-to-riches tropes prevalent in American life writing since its inception. Hernández's memoir was published by Center Street, which describes itself as a "leading publisher in Nonfiction Conservative Politics and Military" ("Center Street"). Hernández's memoir is lauded for its adherence to the bootstraps trope or the idea that anyone can "'get ahead' in life through hard work and perseverance," called such because it promotes the idea that one need only pull oneself up by one's bootstraps to be successful (McCall 141). Such a narrative ties into long-enduring themes of self-reliance and independence in the American context but are also connected to neoliberal themes including viewing the self as a project or enterprise that can be managed without external governmental support. The bootstraps trope suggests that anyone can be successful even when faced with great odds. It entirely ignores the very real systemic inequalities that many Americans face while also inherently suggesting that achieving success is entirely within one's control.

To compare with a Russian cosmonaut title, reviews of Sergei Riazanskii's work entitled *Mozhno li zabit' gvozd' v kosmose?* [Can You Hammer a Nail in Space?] focus both on the content of the book and on the book as an object itself. Out of eleven reviews, the most commonly used terms were "book," "very," and "interesting." Many of the reviews comment on the book as a physical object, describing the quality of materials used to make the book or discussing whether the book was worth its cost: "[The book] is very high-quality and expensive. It is worth your money" (Mariia K.).[71] Or to give another example: "Original format. Many

[71] «Сделано качественно и дорого, своих денег стоит.»

drawings and photographs" (Medvedeva).[72] These reviews are consistent with Birgitte Beck Pristed's description of the modern Russian book industry's commitment to increasingly expensive hardback books she calls in the style of "capitalist realism" (83). Other reviews discuss the content of the book, including its motivational qualities. One reader explicitly discusses the book's genre. The reviewer writes that Riazanskii positions the text as popular science but that they found the text to belong to what they call "motivational literature" (motiviruiushchaia literatura):

> The book is truly interesting and written in accessible language. But for me this book became closer to a motivational book. Sometimes I specifically choose motivational literature but it does not have a strong influence on me…But in this case, having read through the book, I did get a motivating, encouraging energy. The book describes not 'the feat of flying to space' but rather the daily effort and daily striving of people towards a goal. That is the strongest impression from the book (StaSv).[73]

This reviewer establishes the fact that Riazanskii's book follows similar trends in the American context towards self-help and didactic texts that are written to inspire readers not to become space farers but to dream big and find their calling in life.

Both Riazanskii and Hernández's books are sold in association with the space farers as inspirational speakers. Hernández is represented by GDA (Gail Davis and Associates) Speakers and offers a keynote address entitled "Reaching For Your Own Stars: A Recipe to Succeed in Life." Multiple reviewers of Hernández's book cite attending his speaking events. One reviewer writes, "I had a chance to meet José—he couldn't have been a nicer guy!" (Gassman). Another explains: "Had the opportunity to meet him and organize a local speaking engagement. Every

[72] «Оригинальное оформление. Много рисунков и фотографий.»
[73] «Книга действительно интересна и написана доступным языком. Но для меня эта книга стала скорее книгой-мотиватором. Иногда специально приобретаю мотивирующую литературу, но сильного воздействия она на меня не оказывает... А в данном случае, помимо приятного чтения получила мотивирующую, побуждающую энергию. Описан не "подвиг слетать в космос", а ежедневный труд и ежедневное стремление людей к цели. Это самое сильное впечатление от книги.»

seat in the 1,000 seat theatre was packed. The audience was mesmerized…!!!" (Babs K.). Many reviewers also mention purchasing the book for young people in their lives. Similarly, Riazanskii wrote on a post on his Instagram account that he is the chairman of the Russian Movement of Schoolkids (Russkoe dvizhenie shkol'nikov) and regularly speaks to groups of young people about his career as a cosmonaut. He writes about his interactions inspiring school children to discover their dreams, pointing out that, "Where once we had dreamed of being cosmonauts and working hard for the good of the Motherland, today children dream about becoming entrepreneurs or bloggers" (Riazanskii).[74] Riazanskii thus discusses his career as a cosmonaut as inspirational for the same reasons American astronauts present their exploits when public speaking, not to encourage the audience to become space farers but because the astronaut and cosmonaut still stands in for a symbol of national success in both the American and Russian contexts.

Citizenship in the Neoliberal Context

Julie Rak has written convincingly on the relationship between life writing and citizenship (*Boom! Manufacturing Memoir for the Popular Market*). Rak argues that popular memoir ("life stories that are written for mass-markets and are published by big publishing companies") is implicitly about citizenship because of the public nature of the works ("Popular Memoir and the Roots of Citizenship: Rousseau, Mountaineering, Autobiography" 10). Memoirs are designed to be consumed and read by the public. Furthermore, she argues that life writing has played an important role in helping delineate "what the relationship of the individual to the State actually is through the figure of the citizen and his/her right to write and act politically" (11).

[74] «Если мы мечтали быть космонавтом и трудиться на благо Родины, то сейчас дети мечтают стать предпринимателями или блогерами.»

Rak traces this relationship back to Rousseau's *Confessions* (1770/1782) as well as his *Social Contract* (1762). She sees in both works "the ideology of liberalism, its view of the modern state, and the idea of the citizen's obligations" and links these ideas to the profitability of popular memoirs (12).

Rak discusses a French memoir written by mountaineer Maurice Herzog entitled *Annapurna* (1950). Her analysis of this text provides a useful methodology for considering citizenship in popular memoir. She argues that Herzog "idealizes his experiences [as a daring mountaineer] so that they are a triumph for France, and he shows himself as a selfless citizen of France…" (15). Rak discusses Herzog's usage of transcendental language upon summiting Annapurna and the way in which he envisions his quest as "a victory for France, and then for all of mankind" (16). Such language echoes similar accounts of space travel and provides a useful framework for examining the ways in which astronauts and cosmonauts make sense of their citizenship while in space. Rak also points out that Herzog's work became required reading for French children during the 1950s and that his status as a "heroic mountaineer" became linked "directly to the idea of citizenship" (16). Similar work is being performed by astronaut and cosmonaut memoirs which celebrate the act of going to space as an act of universal but ultimately national significance.

In their work on core American values, Helen Youngelson-Neal and Arthur Neal identify several values that are relevant to this discussion: the pursuit of happiness, equality of opportunity, and national unity. Each of these three values can be seen in the memoirs examined in this section and are touted by both the authors of the memoirs and readers as motivating factors for writing and reading the memoirs. For example, the pursuit of happiness, defined as having lofty goals that include achieving high levels of wealth, education, becoming famous and

achieving power, is at the centre of most of the astronaut memoirs that champion becoming an astronaut as fulfilling one's destiny and finding one's purpose in life (Youngelson-Neal and Neal 35).

Another value, equality of opportunity, closely connected with Americans' conceptions of themselves as self-made, is also prevalent in the memoirs considered in this section. The self-made myth is at the core of this value and is defined as "the assertion that individual and business success is the result of personal characteristics of exceptional individuals, hard work, creativity, and sacrifice with little or no outside assistance" (122). This narrative of individual success echoes the rags-to-riches stories popular in the United States from its founding and particularly articulated in Horatio Alger's stories (123). Many of the astronaut memoirs present their stories following a rags-to-riches arc in which a small town nobody works his way through school and eventually through hard work and perseverance finds success as an astronaut. This is reflected in the titles of some of the memoirs in this section like Anderson Clayton's memoir *The Ordinary Spaceman: From Boyhood Dreams to Astronaut* and Leland Melvin's *Chasing Space: An Astronaut's Story of Grit, Grace, and Second Chances.* Clayton frames his story of becoming an astronaut as the tale of an ordinary American boy (raised in a town of "good solid midwestern folk") who was by his account "pretty normal" (18). Clayton is careful to invite the reader to identify with what he views as his typical American childhood including his participation in church, his membership in the Boy Scouts, and his involvement in sports teams (18). He identifies his ability to become an astronaut both as the result of his ability to "dream big" and "fortuitous circumstances" (26). Melvin similarly discusses his journey to become an astronaut as the result of both chance and his ability to persevere when faced with challenges: "In the thirty-four years before I was selected to become an astronaut I experienced my share of setbacks

and failure. Each time I stumbled I got back up and tried again" (15). This celebration of tenacity, adherence to fulfilling one's dreams, and conceptualizing one's life story as a narrative of success all point to the American value of equality of opportunity.

Finally, national unity is a prevalent value in the astronaut memoirs discussed in this chapter. Youngelson-Neal and Neal draw on Benedict Anderson's definition of the modern nation state as an imagined community (167). In their formulation, national pride (patriotism) ties members of imagined communities together. In the context of American astronauts, national pride in the space program as a display of patriotism is one of the features of those memoirs that ties the narrative to nationalism. Pride in the United States can be either overt or implied in these memoirs but engagement with patriotic themes is a central feature of many. For example, Leland Melvin recalls the pride he felt after his space flight when he and a group of other astronauts attended a Houston Texans football game and were seated with former president George W. Bush:

> [t]he best moment occurred when we stood…on the sidelines in our blue flight jackets, singing 'The Star Spangled Banner.' During my football days, I'd always felt patriotic every time I heard the anthem before going on the gridiron to do battle. But there in Reliant Stadium, while I stood with my crewmates and the athletes arrayed nearby, the song's familiar refrains offered a stirring coda to my athletic and astronaut careers (187-88).

Although Melvin was a professional football player and recalls many different instances in which he heard the national anthem before a football game, it is in connection to his status as an astronaut and his association with a former head of state that he feels the most patriotic.

Young Readers Editions

One of the clearest signs that astronaut and cosmonaut memoirs give readers messages about citizenship and nationalism is the preponderance of young reader's editions of these texts. Children's literature often contains both implicit and explicit ideological messages designed to

impart values to its readers. As Kate Douglas writes, children's biography in particular has "consistent, close alignment with children's moral and historical education" and children have often been seen as "vehicles for perpetuation of dominant values" in society (36). Biographies of famous historical figures have long been part of the canon of children's literature. Scholarship focusing on this phenomenon in both the American and Russian contexts shows the ways in which children's biographies have been used to give children role models and impart important cultural values to the younger generation. For example, Courtney Weikle-Mills writes about the role children's biography played in creating a sense of citizenship among children in the early American context (Weikle-Mills). Similarly, Olga Voronina discusses the role children's literature, in particular biography, played in crafting ideal citizens in the Soviet context (Voronina). Memoirs of astronauts and cosmonauts written for children present the lives of their authors as blueprints for children to follow to achieve future success in much the same way that contemporary spare farer memoirs instruct adults how to become productive citizens. However, this messaging is far more explicit in works written for children.

To give one example from the Russian context, Yuri Isachev's recently published *Prosto kosmos: ekspeditsiia na MKS s nastoiashchim kosmonavtom* [Simply Cosmos: An Expedition to the ISS With a Real Cosmonaut] (2021) purports to give young readers a real-life look at what living on the International Space Station, home to the "heroes of all civilization—cosmonauts," is like (Cover copy).[75] The book includes information about how to become a cosmonaut, instructing readers that they need to study well in school, be physically fit, and that space is closer than it seems (Cover copy). Young readers editions of astronaut memoirs are more prevalent in the American context and include adapted editions of Leland Melvin, Mike

[75] «Ты проведёшь один день на Международной космической станции и увидишь, как живут герои всего человечества — космонавты.»

Massimino, Scott Kelly and Buzz Aldrin's memoirs. Scott Kelly's young readers memoir is promoted on his website as helping readers answer the question: "How does a boy struggling in school become an American hero and a space pioneer?" (Kelly "On Sale Now"). Kelly's story is presented to readers with the clear goal of inspiring them not necessarily to become astronauts but to cultivate traits Kelly identifies as being instrumental to his success. These traits include courage, endurance, and inspiration. In both the Russian and American contexts, young readers are presented with examples of "heroes" who they should emulate to become productive citizens.

Self-Help Memoirs

In both the Russian and United States contexts, some space farer memoirs draw generic connections with self-help books aiming to inform readers how to become better versions of themselves by emulating astronauts or cosmonauts. While none of the titles examined in this chapter openly market themselves as self-help, many of the texts operate similarly to self-help books in that they present the reader with information about what it means to be successful in contemporary society and offer the lived experience of the author as proof that success is available to anyone and offer specific lessons for how to achieve success. The generic distinction between memoir and self-help has become blurred in the context of the memoir boom and a hybrid or sub-genre of self-help memoirs has emerged. Rebecca Tuhus-Dubrow defines this phenomenon as "the self-help memoir, a kind of long-form personal narrative fused with life coaching" (Brown 34). Tuhus-Dubrow argues that self-help memoirs have become increasingly popular in contemporary reading culture; Megan Brown advances this argument and includes a wider range of memoirs in the self-help memoir category including addiction and recovery memoirs. Brown argues that memoirs that address "darker aspects of life, such as drug abuse and family dysfunction" should be read as self-help memoirs because they address issues like self-

care and often present a narrative of successfully overcoming setbacks to the reader (35). Brown goes beyond reading self-help memoirs as instructive tales of redemption and success. She argues that in addition to providing readers with information about "physical and psychological self-care" they "teach readers about the biopolitically linked matters of normative productivity, efficiency, and the management of relationships, particularly as these function within the context of intensified US neoliberalism in the post 9/11 era [after September 11, 2001]" (35). Brown draws upon Foucault's concepts of biopolitics and biopower to argue that self-help memoirs should be read as "biopolitical guides for living" (35). Here Brown draws connections between Foucault's understanding of confession and government and cites his formulation of the confession (in this case memoir) as a "mode of self-care" that is meant to serve as an instructive example to readers showing them how to govern themselves in society (35):

> The confession…can work as a mode of self-care for both the confessing subject and the listener/reader; audience members may interpret the confession as cautionary tale, act of bravery, instruction for proper conduct, or all of these possibilities and model their comportment accordingly (35).

In addition to serving as "modes of self-care," Brown argues that self-help memoirs should also be considered biopolitical technologies, another term from Foucault. Foucault discusses biopolitics as "the endeavor…to rationalize the problems presented to governmental practice by the phenomena characteristic of a group of living human beings constituted as a population" (35). Brown interprets biopolitical phenomena as including such factors as health, birthrate, and longevity and connects these concepts to both "institutional intervention" and self-care. Biopolitical technologies are those that can be used for controlling populations by helping people "learn and perpetuate norms for health, productive citizenship, for contributing to society" (35). Thus, for Brown, self-help memoirs are biopolitical technologies that help readers understand what it means to be a successful member of society.

Brown links the explosion in self-help memoirs in the post 9/11 era with neoliberalism and argues that neoliberal values and self-actualization through self-care are linked. Here she cites scholars who argue that neoliberalism has changed the modern conception of the self to be viewed as an enterprise that requires constant attention. The self in these self-help memoirs is a project undergoing constant "transformation and improvement" to ultimately arrive at self-fulfillment (37). While the tendency to focus on self-improvement has been present in American life writing since its inception, Brown argues that contemporary self-help memoirs are reflective of neoliberal trends in American society such as privatization, self-reliance, and governing at a distance.

Suvi Salmenniemi has similarly used Foucault's concept of bio-power and biopolitics in her work on post-socialist consumer culture in Russia. Salmenniemi's work also focuses on self-help literature. She argues that contemporary Russian self-help books reflect a larger consumer culture that champions a "healthy and happy lifestyle" and like Brown claims that self-help books should be viewed as biopolitical technologies (Salmenniemi 134). Self-help books in her formulation are cultural tools that allow individuals to work on themselves: "self-help books provide models of how 'things should be' in order for one to be happy and healthy and shape and reflect cultural values and ideals" (134). Both Brown and Salmenniemi connect the rise in popularity of self-help literature to decreasing governmental and societal support for individuals. Brown discusses this phenomenon in a neoliberal framework while Salmenniemi contributes it to the post-Soviet context in Russia. Brown argues that self-reliance in the American context "is increasingly made literal and concrete as private corporate care and individual self-management replace public assistance and services" (36). Similarly, Salmenniemi cites the lack of a robust social welfare system including inadequate social and health services as well as structural

distrust of the state and the medical system as motivating the popularity of self-help in Russia. In other words, both Salmenniemi and Brown attribute twenty-first century governmental policies with influencing the popularity of self-help texts, particularly self-help memoirs. The astronaut and cosmonaut memoirs I examine in the context of the memoir boom also reflect this tendency to some degree.

In the American context, Buzz Aldrin's most recent memoir entitled *No Dream Is Too High: Life Lessons From a Man Who Walked On The Moon* (2016) offers one example of a memoir that purports to equip readers with life lessons Aldrin cultivated during his career as an astronaut. Aldrin addresses his readers with motivational axioms in each chapter of this text and organizes his memoir around themes that implicitly support a neoliberal understanding of how to achieve success in the American context. For example, the work opens with a chapter entitled "The Sky Is Not The Limit…There Are Footprints On The Moon!" From the first pages, Aldrin assures readers that they can achieve success if they simply follow their dreams: "I know the sky is not the limit, because there are footprints on the Moon—and I made some of them! So don't allow anyone to denigrate or inhibit your lofty aspirations. Your dreams can take you much higher and much farther than anyone ever thought possible! Mine certainly did" (15). He goes on to explain that he wrote this text to encourage readers and share the lessons he learned in his career that led to his success: "I know the lessons I will share with you in this book will *work*, because I have tested them for more than 86 years…One truth I have discovered for sure: When you believe that all things are possible and you are willing to work hard to accomplish your goals, you *can* achieve the next 'impossible' dream" (24). Aldrin attributes his success as an astronaut with his ability to work hard and dream big, indicating that anyone who applies similar dedication to a dream will be able to be equally successful. Other life lessons in his work

include: “Keep your mind open to possibilities,” “Show me your friends, and I will show you your future,” and “Maintain your spirit of adventure.” Aldrin’s memoir enthusiastically supports the idea that hard work, education, and maintaining connections with the “right” people will lead to success.

In his chapter entitled “Keep Your Mind Open to Possibilities,” Aldrin discusses his career in the context of other “innovators and explorers” who, like him, allowed themselves to “stay open to new ideas” (25). Aldrin cites several NASA innovators including John Houbolt, a NASA engineer who developed the concept of having both a command module and lunar landing module on the Moon, as innovators he admires (27). He discusses these innovators in the context of the lone genius, people who are “out of sync with many people around them” and are often “arrogant, stubborn, or unreasonable” (29). Aldrin places himself in the company of others such as Elon Musk, Jeff Bezos, and Steve Jobs and suggests that their success, like his own, was born of their ability to “s[ee] things differently” (30). He claims that “[a]verage people tend to think about merely maintaining the status quo; unsuccessful people think about simply surviving (30). It is significant that Aldrin attributes the success of each of the white men he lists to their ability to work hard and innovate. Aldrin invokes the myth of the lone genius, an enduring cultural archetype of someone who “has forged something new and original by struggling against and rising above the limiting, stultifying forces of the conforming masses” (Montuori and Purser 74). The lone genius is outside of society and is able through his own volition and innate brilliance to discover secrets that are unavailable to wider society. Lone geniuses are usually white, Anglo-Saxon males (98). The myth of the lone genius also speaks to the methods by which these individuals come to success; they are assumed to achieve great feats simply because they are “gifted” or in some way special (78). The social networks, family connections, and

inherent privileged position these geniuses occupy in society are left out of the narrative entirely. However, Montuori and Purser argue that it is actually connectedness that is a key feature of their success. They cite research at Bell Labs that shows networking is "one of the essential features that actually distinguishes the more innovative scientists from the merely competent ones" (92). In addition, "other social and environmental forces…influence and inspire individuals" (93). Although Montuori and Purser discuss these forces in the context of artistic creativity, the same idea can be applied to my argument. Astronauts like Buzz Aldrin often present their success as the result of individual pursuits and entirely ignore the role social networks and privilege play in helping them achieve success.

In this way, the lone genius is associated with the so-called cult of individualism. The individual is presumed to be responsible for his fate and success is attributed entirely to the individual. This idea goes hand in hand with neoliberal ideals that celebrate individual's abilities to "pull themselves up by their bootstraps." In Aldrin's formulation, his success is largely due to his own innate traits and not to his social position or connectedness. Although Aldrin does acknowledge the importance of social networks in his chapter entitled "Show Me Your Friends and I Will Show You Your Future," he does not recognize the privileged position in society that enabled him to occupy social circles like the alumni of West Point. He suggests his readers should "[c]hoose friends who will bring out the best in you," suggesting that one is able to simply choose networks that will lead to success, when in fact many of the networks he lists can best be thought of as old boys' networks, only available to connected rich, usually white men (98).

Megan Brown uses Foucault's concept of biopolitics discussed above to argue that memoirs published after 9/11 suggests changing relationships between the individual and the

state. She argues that popular American memoirs dealing with themes of addiction and recovery should be read as self-help memoirs meant to serve as "lifestyle instruction, telling readers how to recognize, assess, and respond to 'shortcomings'" (Brown 35).[76] Brown reads these memoirs not for what they have to say about self-care but rather examines the relationship between "the biopolitically linked matters of normative productivity, efficiency, and the management of relationships…within the context of intensified US neoliberalism in the post 9/11 era" (35). Brown argues that American addiction memoirs can serve as "biopolitical guides for living," giving readers "strategies for self-care" in the face of decreasing support from public services (35). She links these strategies for self-care to the Foucauldian concept of biopolitical technologies arguing that self-care serves "the broader goal of governing at a distance as subjects learn and perpetuate norms for healthy, productive citizenship, for contributing to society" (36). Thus, for Brown, self-care memoirs act as guides for individual citizens that tacitly provide instructions for what it means to be a healthy, normal, participatory individual in the modern United States.

Brown's theoretical framework for understanding the relationship between self-care memoirs and the state is useful as I consider the memoir boom works (published after 1990) in my corpus. Although none of the memoirs I consider are self-help works per se, they absolutely fit with Brown's understanding of memoirs serving as guides for individuals meant to demonstrate how to be a normative participant in American society. As Brown writes, one of the major themes running through these works is self-reliance and self-actualization in the context of neoliberalism (37). The self should be viewed in this context as a project or an enterprise with

[76] Brown cites Cheryl Strayed's *Wild: From Lost to Found on the Pacific Coast Trail* (2012), Koren Zailckas's *Smashed: Story of a Drunken Girlhood* (2005), and James Frey's *A Million Little Pieces* (2003) as examples of addiction and recovery memoirs that are also self-help books.

"constant attention to improving or maximizing the self" as paramount (37). While Brown locates this trend as particularly salient in the "anxious" post 9/11 era, as we have seen, the tendency to link life writing and self-improvement has been an important feature of American life writing from its inception.

Many of the American astronaut memoirs I consider situate themselves as, if not overtly self-help books, at least guides for applying the lessons learned in space to everyday life on Earth. For example, the promotional blurb on the back of Leland Melvin's memoir *Chasing Space* (2018) claims to offer the reader "an examination of the intersecting roles of strong community, personal commitment, and unwavering faith that align to shape our opportunities and outcomes" (Cover copy). Similarly, José M. Hernández's *Reaching for the Stars: The Inspiring Story of a Migrant Farmworker Turned Astronaut* (2012) is described on the back cover as a "classic American autobiography" for its "message of hard work, education, perseverance, of 'reaching for the stars'" (Cover copy). The memoirs implicitly encourage readers to identify with the authors and provide clear clues about the traits needed to achieve one's dreams. These traits are also intrinsically linked with being a successful citizen and member of the American state.

Internationalization of Book Market

A final note should be made to discuss the ways in which Russian and American space farer memoirs are increasingly becoming more similar both in style and content. Whereas earlier memoirs served different cultural functions, as we have seen, many of the recent memoirs considered in this chapter mirror each other and are written and organized around similar themes. For example, one such theme is framing the narrative around a series of commonly asked questions about space travel. This organizational method is used in Riazanskii's memoir

examined above as well as Terry Verts's *How to Astronaut: An Insider's Guide to Leaving Planet Earth* (2020). These memoirs contain more than personal information about the author and promise the reader how-to knowledge about space travel, perhaps somewhat naively as real space travel requires far more expertise than can be transmitted in a novel-length book.

Another theme prevalent in both astronaut and cosmonaut memoirs is offering the astronaut and cosmonaut's story as an example of individual success while at the same tame tacitly supporting space farer's personal brands. Astronauts and cosmonauts are now active on social media and communicate with the public across a variety of platforms. Oleg Arter'ev's 2019 memoir *Kosmos i MKS: Kak vse ustroenno na samom dele* [Space and ISS: How It All Actually Works] contains photographs taken by Arter'ev from the ISS, images that he regularly posted on his Instagram account. Instead of representing Russia as a cosmonaut, Arter'ev increasingly represents his own brand and promotes himself across multiple platforms and through his book. Arter'ev's Instagram posts from space are in some ways a kind of visual memoir. Such forms of self-promotion fit the larger trends discussed earlier in this chapter where individuals in the neoliberal context are increasingly seen as enterprises or brands. Astronaut Scott Kelly's Instagram functions similarly to Arter'ev's. During his "Year in Space" in 2015 Kelly regularly shared photos he took from the International Space Station. He later utilized his experience spending a year in space for his memoir *Endurance: A Year in Space, A Lifetime of Discovery* and regularly promotes the book on his social media accounts. Kelly also gives talks as a motivational speaker at which he promotes his memoir as well as other books he has written for children (discussed above). While both Arter'ev and Kelly undoubtedly represent their respective countries, the discourse surrounding their time in space and the ways in which they

publicize their time in space focuses far more on their individual experience and is more in line with current memoir culture and the development of the self as a brand.

In their work on transnational popular psychology, Nehring et al. argue that the mode of self-help popular in the West is becoming increasingly influential worldwide (154). While they do not see this as a process of globalization and are quick to remark that regional variations in self-help exist and should not be ignored, they point to the role of neoliberal homogeneity in influencing the production of an increasingly similar self-help culture across the globe (154). They claim that self-help books express neoliberal ideals as "common sense" by endorsing "norms, values, emotional sensibilities, and behavioural logics to be learned and adopted" by their readers (154). Their argument is helpful when considering astronaut and cosmonaut self-help memoirs that tacitly endorse a neoliberal understanding of individual success. Nehring et al. claim that self-help texts contain "careful and systematic examinations of everyday life and conduct" and that this examination leads both the writer of such texts and the reader to understand that it is an individual's behaviour and mindset that influence their success in life rather than external circumstances (158). According to this formulation, anyone can succeed if they simply believe in themselves; success is not the result of external factors but rather stems from the "cognitive orientation of individuals" (158). We see this understanding of success across the contemporary self-help memoirs examined in this section of my dissertation where the process of becoming an astronaut or cosmonaut serves as a metaphor for success and "daring to dream" leads to fulfilling one's dreams. Whereas earlier memoirs focused on the experiences of astronauts and cosmonauts in conjunction with national success, contemporary memoirs locate success squarely with the individual. The self in these memoirs is thus differentiated from the self in earlier memoirs and is increasingly "desocialized, depoliticized and atomised" (158). The

challenges astronauts and cosmonauts face in contemporary memoirs are personal rather than national.

Conclusion

Astronaut and cosmonaut life writing in the context of the memoir boom is tied to the figure of the space farer as an exemplary citizen in the neoliberal context. Space farer's life stories are offered as evidence that anyone can be successful in the twenty-first century if they possess the right skills and qualities. Increasingly this narrative is divorced from state support and suggests that individuals should be able to make it on their own if they only have the requisite amount of dedication. Astronauts and cosmonauts offer their life stories not to celebrate space travel but rather as self-help guides for readers looking for inspiration. This is particularly clear when looking at young reader's editions of these memoirs that aim to instruct children not how to become astronauts or cosmonauts but rather how to find their passion in life and become productive citizens.

The proliferation of astronauts and cosmonauts who also work as motivational speakers independent from their affiliation with either NASA or Roskosmos suggests that space farers increasingly view themselves as personal brands to be cultivated via an online presence and through public speaking events. The memoirs written by these space farers are merely a tangible version of the real product on offer, the astronaut or cosmonaut themselves.

Discussion

In this dissertation I consider memoirs as cultural artifacts and discuss the ways in which space farers use memoir writing to make sense of themselves. I consider the selves space farers create in the process of writing memoirs and the ways in which the cultural environment in which those memoirs are written influences them. I trace the changing relationship between space farers and the state and argue that this relationship influences the ways astronauts and cosmonauts make sense of themselves. In using a comparative approach, I seek to understand how the cultural context in which space farer memoirs are written impacts their production and find unexpected similarities across both corpora. I argue that astronaut and cosmonaut memoirs reflect changing relationships between the individual and the state: whereas early life writing, ghost written for astronauts and cosmonauts, suggests heroic selves that are aligned with the state's larger goals, later memoirs question this relationship and assert the role of the individual as separate from the master narrative of space travel created by the state. Contemporary memoirs in the context of the memoir boom in some ways represent a return to earlier forms of the ideal self posited in ghost written space farer memoirs from the 1960s but reflect neoliberal ideals that position the individual as an enterprise separate from the state.

In this discussion I address the central arguments I have made in the dissertation as well as critically reflect on the methodological approach I used to make those arguments. By choosing to compare two larger corpora of memoirs published over a period of fifty years I am able to see both temporal and thematic trends. Considering a corpus of space farer life writing as opposed to simply reading the memoirs of one astronaut or cosmonaut allows me to consider the figure of the space farer in both the American and Russian contexts and to understand the extent to which individual space farers helped confirm or refute this image.

To identify themes in the memoirs, I utilized topic modeling, a digital textual analysis method. Topic modeling enabled me to identify trends across a large corpus of texts that would be impossible for a single human reader to identify and quantify. As discussed in the methods section, I obtained a list of ten topics for each of the corpora I consider in this study. Some of these topics proved fruitful for further analysis and formed the basis for each chapter of my dissertation.

In Chapter One, I argue that the master narrative of space exploration pushed by both the United States and Soviet Union conceived of astronauts and cosmonauts as heroic figures with culturally specific (but often overlapping) characteristics. I examine two largely ghost-written memoirs (*Doroga v kosmos* and *We Seven*) that actively work to create and promote the image of astronauts as ordinary supermen and the cosmonauts as New Soviet Men. These works were products of mass media, with *Life* magazine publishing the American memoir and *Pravda* publishing the Soviet memoir. They were both connected with public celebrations including parades and media appearances designed to promote the aspirational image of the space farers. The image of the self that comes out of both these texts is largely one-dimensional and we can assume the space farers themselves had little involvement or indeed agency in creating these images of themselves. The texts both follow formulaic tropes that celebrate the astronaut or cosmonaut's humble beginnings and credit their success to desirable traits in their national contexts.

In the first chapter I focused on topics identified in the Russian corpus that reflected a master narrative of space travel including the topics "War" and "Hero." The ubiquity of both these topics in early memoirs of space travel in the Soviet context suggests that the narrative of space flight in the Soviet Union was strongly connected both to the lived experience of the

Second World War and the active promotion of the cosmonauts as heroes confronting overwhelming odds. The topics "War" and "Hero" were not found in the topic modeling in the American corpus; however, astronauts were typically portraited as heroes during the Space Race and was a common theme in the close readings.

In Chapter Two I examine memoirs that call into question the master narrative of the space farers as heroes and attempt to assert the individual experiences of cosmonauts and astronauts into the narrative. These memoirs function differently from their predecessors and the individual selves that are created in these texts are unique, flawed, and reject the characterization of space farers as heroes. In both the memoirs written during the tell-all period of American spaceflight (the 1970s) and during the glasnost era in the Soviet context (the late 1980s) astronauts and cosmonauts use memoir writing as a method to assert their own understanding of the experience of going to space, an understanding that is often in conflict with the official version memorialized in the first ghost-written memoirs. These memoirs promise to give the reader an inside look at the space programs. While the historical context of these memoirs differs on the American and Soviet sides and certainly must be considered, there are strong similarities in the motivations for writing these memoirs. The writers assert their desire to counteract the image of the space farer produced by the American and Soviet governments and media. Both astronauts and cosmonauts reject the label of hero and discuss their lived experiences in space, focusing more on their emotions and the ways in which space travel affected them personally. In the Soviet context, this tendency can be read as part of a larger glasnost trend to reject officially sanctioned versions of history and champion the lived experience of individuals over the narrative offered by the state. In the American context, although there was less secrecy surrounding the space program, the desire for individual astronauts to assert their identity not as

homogenous heroes but as unique selves is a direct response to the media-created image of astronauts.

In the second chapter I considered the topic I call "Everyday Life" in both the Russian and American corpora. This topic includes terms related to activities outside of space flight like "school," "day," and "home." I argue that the propensity of these reactionary memoirs to discuss life outside of the space program highlights the desire of the space farers to write about all aspects of their lives and to make sense of their identity within the context of their lived reality. Close readings revealed that the individual's personal life was often overshadowed by their career accomplishments, and astronauts and cosmonauts both aim to define their identity as separate from their role as heroes.

In Chapter Three I discuss space farer memoirs that engage with versions of the self that are less individualistic and more focused on transcendental selfhood. I engage with conceptions of the self that attempt to make sense of space travel less as something an individual does and more as a calling that affects all of humanity. This calling may be explained by individual memoir writers in religious terms, in metaphysical language, or through the lens of international cooperation in space. These memoirs engage in the concept of space travel being "for all mankind" and reject the nationalistic goals of space travel used as justifications by the US and the USSR during the Space Race. They also reflect the reality of increased cooperation in space, particularly between the US and the USSR. The memoir writers discussed in this chapter are less engaged with questions of individual identity and more focused on understanding how space travel and the experience of seeing the Earth from space influenced their belief systems. These memoir writers thus use their memoirs for a very different purpose from writers who sought to correct images of space farers pushed by the state and mass media.

The third chapter focuses on a sub-set of memoirs that engage with the topics "Perspective and Thought" and "International Cooperation" in the American context as well as "Goals and Relationships" and "Life on Space Station" in the Russian context. This chapter identifies a trend in space farer memoirs toward utilizing transcendent language to make sense of the experience of going to space. Whereas earlier space memoirs discuss motivations for space travel (largely in national terms as per the master narrative of space travel) and champion the experience of the nation and space farers as representatives of that nation, later memoirs give space farers a chance to seek different motivations for space flight. These motivations include religious callings, metaphysical explorations, or a desire to overcome national boundaries in the name of pan-nationalism. Close readings demonstrated that, despite the cultural differences between astronaut and cosmonauts, the transcendent language used to describe the act of going to space was a recurring theme in both contexts.

Finally in Chapter Four I consider contemporary memoirs written by space farers in the context of the memoir boom. I argue that space farers produce a version of themselves that is in some ways consistent with the first memoirs of astronauts and cosmonauts, celebrating traits that are seen as leading to success. However, instead of these traits being ascribed to the space farers by ghost-writers, many of the astronauts and cosmonauts who have written memoirs since the 1990s promote themselves as examples of successful individuals and offer their own life stories as evidence that anyone can be successful. In this way, the memoirs promote a neoliberal understanding of success as directly tied to the individual and their ability to work hard. These memoirs offer individual space farers as exemplars who not only have achieved the paragon of human exploration (space travel) but have also mastered the art of selling themselves, the ultimate achievement of neoliberalism. The memoir writers offer their texts as proxies to offering

themselves to the public, giving their life stories as guides to follow in the hopes of achieving similar levels of success. This trend can be seen in both the American and Russian contexts as the book market becomes increasingly internationalized. It is important to note that individual works still feature cultural differences and that memoirs written by former Soviet cosmonauts (for example Alexei Leonov) engage with the memory of the Soviet space program, an entity which no longer exists.

In Chapter Four, I analyzed the topic "Identity and Self" in the American context. In this topic we see terms like "hand," "body," "face," "find," "career," "story," "past," "question," "personal," "begin," "experience," and "voice." The prevalence of terms related to identity confirms my argument that these memoirs are less concerned with what it means to be an astronaut or cosmonaut and focus instead on how space farers can make sense of their lives in writing. This is part of the larger memoir boom trend. Space farers come to terms with their life stories through writing and offer their understanding of themselves to readers as examples of a fully formed self. Modern space farers are still figures to be emulated but readers are expected to be awed not by their actions as astronauts or cosmonauts but by their ability to master themselves and achieve success.

This project illuminates the different ways memoir writers can use the story of their lives and suggests that those stories are never isolated from the cultural and historical contexts in which they are written. Memoirs that are written for the mass market and are not considered "literary" works nonetheless grapple with many of the same issues of identity, history, and selfhood that have long been hallmarks of life writing.

Limitations of Topic Modeling

Performing topic modeling on my corpus yielded meaningful results that guided further literary analysis; however, there are several limitations to this technique. First and foremost, topic modeling merely produces lists of terms that frequently occur together across texts. From these lists, the researcher must identify a common theme that links the list of terms; unfortunately, sometimes no clear theme emerges. For example, the topic I chose to call "Everyday Life" contains terms like "space," "told," "school," "asked," "day," "force," "looked," and "president." As the researcher, I attempted to find common themes among these terms and decided there were enough words pertaining to quotidian affairs to call the topic "Everyday Life." However, another researcher could very well identify a different theme (such as "Duty and Training") to unite these terms. Thus, resulting topics from a given corpus may not be reproducible, even though the list of terms and the method of producing these lists are reproducible.

Furthermore, it is challenging to compare terms that are different parts of speech like "school" and "looked." Because topic modeling groups terms that appear frequently in a text (word frequency) as well as terms that frequently appear together in texts (collocates), phrases like "felt great" show up in topic modeling as separate terms rather than the colloquial phrase. Topic modeling is agnostic to parts of speech, which makes topics with multiple parts of speech challenging to analyze and interpret.

While topic modeling purports to be a more objective method to understanding themes discussed in texts, the necessity of the researcher to name topics and identify meaningful trends means topic modeling still requires a high degree of interpretation which is inherently subjective. While some of the topics produced from my corpora led to fruitful interpretations and pointed

me in the direction of more meaningful categories of analysis, other topics (particularly those that merely confirmed the high proportion of terms related to space travel in my texts) did not add to my understanding of space farer life writing. These unrelated topics may, however, offer insight into other fields or lines of research. Yet, as a focused method for finding and consolidating topics with a specific aim, as I did in this dissertation, topic modeling requires intensive interpretation and can produce lots of superfluous topics.

Another limitation in using topic modeling for multi-lingual analysis is that comparisons between topics are never entirely equivalent. The topics produced for the Russian corpus are entirely separate from those produced for the American corpus. Attempting to compare my American and Russian corpora, I was not able to directly compare topics across the corpora in a one-to-one fashion because each corpus produced ten disparate topics. For example, the topic I have called "International Cooperation" emerged in the American context and not in the Russian context. This does not mean that international cooperation is not a theme in the Russian context but simply that not enough terms related to this topic occurred at a high enough frequency for the computer algorithm to identify them as a topic. Two possible approaches to this limitation are to consider each corpus as a separate entity and focus on the independent lists of most common topics and make comparisons where possible (as I did in this analysis) or alternatively to generate larger lists of topics and attempt to match as many as possible which limits analysis to only topics found in both corpora.

Another challenge with topic modeling across my corpora was that the topics produced were extremely similar to one another and many terms appeared across multiple topics. Instead of ten distinct topics with unique word lists that could be meaningfully utilized for analysis, I encountered topics that were so similar they were hard to separate from one another. It was only

the inclusion of time-bound terms related to specific space missions (for example STS on the American side and Salyut on the Russian side) that I could differentiate these topics. While some of the topics identified by the computer were fruitful for analysis, the size and similarity of my corpora raise the question of best practices for topic modeling thematically similar texts. This may also be a limitation of the type of language used in my corpora, as these memoirs often include jargon and terminology that is very specific to space travel.

While the topics I used for analysis formed the basis for my argument, it was ultimately the close reading I performed that led to the clearest understanding of how the topics identified by the algorithm work as themes in the memoirs studied. This affirms the importance of the researcher when working with computer algorithms in humanities research. While topic modeling can provide useful insights across large quantities of text, it is still the role of the researcher to draw meaning from those topics and synthesize the topics within overarching cultural, literary, and historical contexts. The topics I examine in this dissertation were largely interesting when considered diachronically to better understand how space farer writing has changed over time. However, there were topics that were present across the texts during the entire period in question (1960-present) and these topics were less useful than those that were most prevalent during a specific period.

Topic modeling ultimately proved to be a useful way for me to consider two corpora in comparison with one another and make sense of a large body of work that I would not have been able to read in its entirety. To continue this line of inquiry it would be useful to break down my corpora into smaller sections and perform topic modeling on sub-corpora as suggested by Tangherlini and Leonard. It would also be useful to harness the power of digital tools to compare different editions of space farer memoirs to see how those editions have changed over time. For

example, Walter Cunningham's *All American Boys* was first published in 1977 and re-issued in 2009 and 2016 with revised text. It would prove instructive to consider how the text changed from its original publication and what elements Cunningham revised. Similarly, Yuri Gagarin's *Doroga v kosmos* [Road to the Stars] was published in 1961 and re-issued in 1963, 1969, 1978 and 1981. Tracing the changes in the narrative over time would prove instructive, particularly in the case of Gagarin as most of the republished editions of his memoir were issued after his death in 1968.

Further Directions

In performing a global comparison of Russian cosmonaut and American astronaut memoirs, I have identified themes through topic modeling that I confirmed with close readings of individual memoirs. Given more time, it would be productive to expand my analysis to explore additional themes and to identify memoirs that deviate from the themes. One area ripe for future analysis is to consider the memoirs included in my study through a gendered lens. The majority of texts I included in my analysis were written by males and although there have been some memoirs authored by female astronauts (Rhea Seddon and Kathryn Sullivan to name two), the figure of the astronaut and cosmonaut is still tied to traits typically associated with masculinity in both the Russian and American contexts. I briefly touch upon this theme in my analysis of the master narrative of space travel in Chapter One and my discussion of normativity in Chapter Four. Given more time, I would engage with questions of gender and sexuality in these texts and the ways in which changing gender norms might have influenced contemporary space farer memoirs.

Another area for future study is the way in which astronauts and cosmonauts engage with questions of the body as it relates to the self. One of the topics identified in topic modeling

included terms related to the corporeal self like “hand,” “face,” and “body.” Traveling in space is at its core a corporeal experience: the body is literally transported to a different environment and the ways in which the individual engages through their body with the environment are entirely different in space. It would prove instructive to examine the ways in which space farers describe their bodies in relationship to their sense of self. Furthermore, space farer bodies are subject to control and observation in a way that bodies on Earth usually are not, since all their vitals and activities are monitored by mission control and medical staff 24/7. The tension between the individual space farer as an autonomous body and the degree of control exerted upon that body from Earth is another area that is ripe for future analysis. Close readings revealed that space farers often have a jarring physical and mental return to Earth that causes them to reconsider their experience and identity, which further relates to this tension between autonomy and control.

Finally, much of the discourse surrounding space travel has shifted from print media to social media. Space farers represent themselves on Twitter and Instagram, posting photographs and updates from the International Space Station and promoting both NASA and Roskosmos and their own brands. Social media is arguably a form of life writing, particularly when used to document elements of daily life and to build a persona that is consumable by the public. It would be instructive to analyze social media postings by astronauts and cosmonauts and see how they write about their time in space on social media. Social media also provides an opportunity to see how the public respond to posts about space travel and could add depth of understanding to the ways in which the public conceive of astronauts and cosmonauts.

Limitations of Study

My study was limited by a lack of access to materials, particularly to physical texts in the Russian context. Due to the COVID-19 pandemic, travel to Russia to access materials was not

possible and the availability of inter-library loan was also limited for a large duration of this project. As such, I often relied on freely available digitized versions of Russian texts. While this was useful for the digital portion of my analysis, it was also limiting in that I was unable to gain a sense of the Russian memoirs as physical objects. Initially I planned to include paratextual elements and book design in my project, particularly when thinking about memoirs as commercial objects. Unfortunately, I was unable to obtain physical copies of most of the Russian memoirs in my corpus.

Another limitation on my study was lack of access to data about publishing and sales figures for the memoirs in my analysis. An important element of considering the memoirs in my corpora as cultural artifacts is to understand their production. While I consulted academic sources that describe the publishing practices in the US, the USSR and later Russia, it would be beneficial to obtain actual sales figures to understand which memoirs were commercially successful and whether some astronaut and cosmonaut memoirs sell better than others.

Conclusion

Memoirs are an enduring form of life writing that offer a glimpse into the ways in which cultures perceive the self. In this project I have considered a sub-section of memoirs written by individuals with an unusual life experience in common: going to space. By comparing the memoirs of Russian cosmonauts and American astronauts, I have explored the ways in which cultural background can influence one's sense of self. In my methodology I spelled out four questions I explored in my analysis:

1. *Themes and topics.* What topics do space farers write about in their memoirs and do these topics change over time?
2. *Memory and the state.* How do individual space farers remember their participation in the space program and how do their memories engage with the official version of memory promoted by the state?
3. *Transcendence and the universal self.* How is the relationship between the individual and the state different when the individual is removed from the referents that mediate this relationship? How do space farers make sense of their selfhood when in space?
4. *Citizenship and personhood.* How do individual astronauts and cosmonauts understand their role as citizens of a larger state and how do their memoirs tacitly or overtly demarcate what it means to be a successful citizen?

Through topic modeling, I was able to determine the major themes and topics discussed in the memoirs I considered. As was only to be expected, space travel was the primary theme that emerged. However, other themes that were less expected also surfaced. On the Russian side, themes related to historic events such as the dissolution of the Soviet Union were clearly demarcated through topic modeling. In addition, the theme "hero" emerged, clearly linking

cosmonauts to ideas of bravery and the model cosmonaut Yuri Gagarin. On the American side, themes related to the self and identity and perspective and thought informed my analysis and confirmed that the memoirs grapple with questions of the self.

In considering memory and the state, I found that a significant portion of memoirs engage with the master narrative of space travel, particularly those written by space farers who were part of the space program during the Space Race. I have argued that memoirs written by astronauts during the "tell-all" period respond to images of the astronauts that reflected the state's desire to promote astronauts as one-dimensional heroes. Similarly, cosmonaut memoirs written during the glasnost period directly and explicitly respond to the Soviet master narrative of space and attempt to re-write history to make public knowledge elements of the space program that were previously censored from the public.

To investigate the third question in my study about transcendence and the universal self, I focused on a sub-set of memoirs written during periods of international collaboration in space. I identified via topic modeling memoirs in which the authors identified a change in their understanding of themselves and their place in the universe and used that transformation to structure their narrative. I compare religious, philosophical, and metaphysical responses to space travel and argue that all these responses can be considered part of a larger trend to view space travel as a pan-national enterprise. These memoirs do not emphasize national goals in space travel but rather argue for the benefits of space travel for the human species.

Finally, to answer my last question regarding citizenship and personhood, I considered contemporary memoirs written during the memoir boom. I argue that these memoirs highlight personal qualities seen as positive in a neoliberal context including self-reliance, perseverance, and independence. I argue that space farers who write memoirs are increasingly part of a trend

towards self-branding and that the space farer operates less as a hero in the contemporary context and more as a motivational speaker. I identify the prevalence of astronauts and cosmonauts who give public appearances and suggest that their memoirs should be considered extensions of their motivational speaking engagements. I consider reader reviews and young reader's editions of these texts in order to argue that the texts are designed to instruct readers how to be successful citizens.

This project considered a body of writing that has frequently been overlooking in scholarship. Non-literary memoirs, however defined, are usually ignored by literary scholars. I have argued that the prevalence of these memoirs and their continued publication demands attention. In a book market that is increasingly marked by internationalization, new astronaut and cosmonaut titles continually emerge and are more and more alike. The continued presence of these titles in the book market suggests they are enduring cultural artifacts.

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Appendix: Memoirs Included in Topic Modeling

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