Connecting Spaces and Conquering Bodies: The Ideal Soviet Person at the World's Fairs

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Abstract

While several historians have explored the Soviet presence at World's Fairs, few have looked at the presentation of Soviet identity and none have asked questions about how the senses were evoked in the Soviet pavilions and the materials that they displayed. World's Fairs, as international events, provide an opportunity to see how this identity was distilled for a foreign audience. The Soviet pavilions at the 1939 New York World's Fair and the 1958 Brussels Expo were chosen as the center-point of this research so as to explore the differences in Soviet identity as they existed under Stalinism and during the Khrushchev-era cultural Thaw. Using photographs of the Soviet pavilions, accounts by journalists and visitors, and Soviet ephemera from the pavilions themselves, this thesis strives to offer a composite of not only Soviet identity but Soviet presence at these Fairs. It does so by looking at how the senses were evoked and particularly how they were tied into Soviet efforts to expand and connect territorial boundaries, whether in the form of Arctic exploration, aviation or the space race. While the final work is far from exhaustive, it shows how mastery over the senses was deemed an essential expectation of the ideal Soviet person, and how inanimate Soviet elements, like land and machinery, became identified with the human Soviet body. Additionally, the sense of touch and sound found an important place in the Soviet spaces and writing of the Fair, in ways that were unexpected in a modern world which tended to prioritize sight over the other senses.

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Table of Contents

List of figures

Introduction

"Aviation has conquered time and space, has brought us new neighbors, and made us all the more aware of old neighbors. This Pavilion attempts even more. It attempts to bring a bit of the Soviet [world] into Flushing Meadows, to show you what we are like, to show you not only that we are neighbors, but that we are good neighbors." – Konstantin Oumansky

With these words, the Soviet Union's Ambassador to the United States opened his nation's Pavilion at the 1939 New York World's Fair's Soviet. Two days prior, on April 27th, 1939, Colonel Vladimir Kokkinaki and his co-pilot Mikhail Gordienko set off from Moscow on a record-breaking trans-arctic flight. The pair, known as members of Joseph Stalin's 'Falcons', the elite group of aviation heroes that were celebrated in the USSR in the 1930s, were to land on the opening day of the Fair, demonstrating the conquering of space that Oumansky spoke of and representing an activity that Soviet leaders had been concerned with for some time. Soviet aviation in the 1930s had focused on beating international records for long-distance flight. In 1937, the first trans-polar flight brought Soviet aviators from the USSR to California in a little over a day, thereby shrinking the world like never before. This reinvention of space, however, reached its height in the 1950s, when scientists began to explore the possibilities of sending rockets and living creatures into outer space. Just as flight was celebrated in 1939, so too would a spatial pursuit become the center of the Soviet pavilion at the 1958 Brussels' Expo. Sputniks, the first man-made satellites sent into orbit, drew millions of visitors to see them in the six months that they occupied the fairgrounds in Brussels. At the 1958 Expo, as at its predecessor Fair, the Soviets put forward the belief that they could venture into and control the unknown, from the uninhabitable Arctic to the heavens and stars above it.

What are the boundaries of a nation? How does an understanding of space, and the people within it, determine how a people see themselves? For the Soviet Union, space, in both a literal

and figurative sense, became a point of self-definition, part of a larger quest for progress. The Soviet conquering and reinvention of space became quintessential to the way the country's leadership perceived of itself and shared its 'national' ideals globally. Aviation served as an initial foray to showcase Soviet dominance over land, which eventually morphed into the drive to conquer the cosmos two decades later. Yet it was the sensations found in these two activities, of movement through space and the sounds, feelings, sights and tastes that could be found there, that truly showed Soviet progress, embodied by a Soviet person who could occupy and conquer these spaces.

Benedict Anderson argues that the nation is an imagined community, an entity created to foster a sense of unity amongst a plethora of people via a handful of common practices. Typically, it is heritage, or a shared sense of the past, that is used to establish a contiguous identity in the present. Yet, in the case of the Soviets, ethnic national identity gave way to a sense of self defined by membership in a government system that functioned according to the needs of the state's proletariat. Central to the USSR's 'national' identity, therefore, was not membership in a shared past, but a shared present and vision of the future. In an effort to showcase the benefits of their socialist system to the world, the leaders of the USSR pushed for a diplomacy that broadcast and exported Soviet cultural, technological and economic advances abroad. Jessica Gienow-Hecht and Mark C. Donfried describe this cultural diplomacy as a "national policy designed to support the export of representative samples of that nation's culture in order to further objectives of foreign policy," essentially using symbols of progress to show

power.1 In no place was such diplomacy more prevalent than at the World's Fairs (otherwise known as Expositions Universelles), global events that aimed at educating diverse publics, sharing innovation, promoting progress and fostering cooperation.

World's Fairs initially focused only on technological innovation, not international cultural exchange. The first World Fair in 1851, housed in the Crystal Palace in London and influenced by earlier French commercial exhibitions, showed off the technological innovations of the industrial age by exhibiting manufactured products. Though a third of the items on display were created by non-British firms, strong nationalistic sentiment was not the order of the day. Subsequent Fairs expanded upon this model and involved an ever-increasing number of nations. Hence, the spaces became areas of cultural as well as technological exchange. The New York World Fair of 1939-1940 marked one turning point in the history of these exhibitions. The Fair's theme was "The World of Tomorrow," and it was the first exhibition dedicated explicitly to the future progress of society. Such a message was purposely optimistic for a world on the precipice of war. The 1958 Expo in Brussels, the first Fair staged after the Second World War, continued along a similar thematic path – attempting to promote peace by showing the peaceful capacities of nuclear energy and creating a "Balance Sheet for a more Humane World". Both Fairs were also well attended, with visitors to the Soviet pavilions numbering in the millions. According to Soviet figures, the USSR pavilions in 1939 attracted approximately 16.5 million visitors; while that number might be exaggerated, it is likely that the number did go into the

1 Jessica C.E. Gienow-Hecht and Mark C. Donfried, "The Model of Cultural Diplomacy: Power, Distance and the Promise of Civil Society," in *Searching for a Cultural Diplomacy*, eds. Jessica C. E. Gienow-Hecht and Mark C. Donfried (New York: Berghahn Books, 2010), 13.

millions.2 In 1958, the Soviet pavilion was visited by some 30-35 people.3 Given these numbers, it is indubitable that the pavilions at both Fairs were important sites of cultural exchange. Thus, these two Fairs, on each side of the wartime and cold war divide, put forth a thematic focus that became a standard for all future exhibitions. Henceforth, World's Fairs became dualistic sites where nations could present their values, achievements and strengths, while also attempting to promote peace and international cooperation.4

Between 1939 and 1958, both the international and the Soviet context had drastically changed. Beyond their aforementioned placement on two sides of a divide, the 1939-1940 and 1958 Fairs are a point of interest because they represented two different Soviet administrations. The first took place at the tail end of the great purges, a time when Stalinist cultural principles were at their zenith. In 1958, five years after Joseph Stalin's death and two years after he gave his secret speech, Nikita Khrushchev was overseeing a cultural thaw in the USSR. These distinct internal cultural environments, with their own restructuring of cultural values within the Soviet Union, had to be reflected in the ways the Soviet Union presented itself internationally.

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2 "Russia Quits Fair; Finns to Stay; Reds to Raze $4,000,000 Pavilion: Moscow Orders Withdrawal without Giving Explanation--Building must be Down in 90 Days--no Comment by Fair RUSSIA QUITS FAIR; FINLAND TO RETURN no Contract Let Drew Much Comment Filled with Art Objects," *New York Times*, December 2, 1939, 8.

3 Lewis Siegelbaum, "Sputnik Goes to Brussels: The Exhibition of a Soviet Technological Wonder." Journal of Contemporary History 47/1 (2012): 135.

4 Histories of the World's Fairs often end around the Montreal Exhibition of 1967, but several works do look at Fairs after this point by comparing them with Fairs in the 19th and early 20th centuries. Many have centered, additionally, on Fairs that have taken place in America, though this is not ubiquitously the case. Some good overviews of the Fairs include Paul Greenhalgh, *Fair World: A History of World's Fairs and Expositions* (Winterbourne: Papadakis, 2011); Robert W. Rydell, John E. Findling, and Kimberly D. Pelle, *Fair America: World's Fairs in the United States* (Washington, DC: Smithsonian Institution Press, 2000); and Robert H. Kargon, P. Molella, Morris Low, and Karen Fiss, *World's Fairs on the Eve of War: Science, Technology, And Modernity, 1937-1942* (Pittsburgh: University of Pittsburgh Press, 2015).

International outreach was a mainstay of Soviet foreign policy since the October Revolution. Though diminished at times during the Stalinist period, the goal of prompting an international workers revolution was still officially a part of the Soviet cultural ethos. Thus, opportunities to present communism in non-communist countries lined up with Soviet internationalist desires and allowed Soviet ideals to find a sanctioned way to a non-Soviet public.

Additionally, after the 1917 revolution, Russian society needed to be educated to reflect the ideals of a communist society. The new Soviet person, and the future that person was to live in, had to be molded through the efforts of the new Soviet administration. Therefore, Soviet outreach could not simply showcase the differences between the proletarian Soviet way of life and the capitalist ways of life, but had to also instill the values of the new Soviet society. The ideal Soviet person had to put forward attributes that both served the collective while also exemplifying the strength said collective provided.5 Given these multifaceted concerns, my primary question will focus on how Soviet identity was presented differently at the 1939 and 1958 World's Fairs and how the differences related to internal changes in cultural practice and a changing geopolitical circumstance.

Few historians have delved, at length, into the Soviet pavilions at either Fair. Notable scholars have given overviews of the exhibits themselves, or discuss their value as sites of ideological encounter with the capitalist west or on social innovations. The capacity of the exhibits to reflect contemporary Soviet culture is dismissed in lieu of an understanding of them as competitive and propagandistic spaces. Additionally, Fairs are rarely viewed in relation to a

5 A recent look at the development of the new Soviet man can found in Tijiana Vujosevic, *Modernism and The Making of The Soviet New Man* (Manchester: Manchester University Press, 2018).

shifting political context within the Soviet Union; they are presented as spaces connected to technological or architectural changes rather than cultural-political shifts.6 Thus, this work will differ from other histories of Soviet participation at various World's Fairs by making the comparison between two Fair pavilions on either side of the war-time divide its primary locus, thereby showcasing the impact World War II had on external cultural presentation. In conjunction, the focus will be on how the displays, memorabilia and exhibit-related writing reflect evolving cultural values. While national identity is of concern here, I am more intent on exploring the nation not as a multi-person entity, but as it is distilled down to the individual. Scholars of other Fairs have embarked on more comparative analyses and looked at how Fair's contributed a cultural impact in their host countries. Treated as quasi-museum spaces, these scholarly treatments offer a basis for this work's approach to understanding Soviet pavilions.7

To understand how the Soviets converted their pavilion space into a microcosm of Soviet culture and achievement, especially in regards to spatial reinvention, one needs an understanding of exhibition and museum design. Utilizing museum studies is not crucial to interpretation, but can act as a synthesizing element when taking in an exhibit as a whole. Museum and exhibition spaces put forward information in unique ways. As put by Susan McLeod, exhibitions were

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6 One book discussing the general changes in Soviet architecture found at their pavilions, either within the Union or at World's Fairs, is *Architecture of Great Exhibitions 1937-1959: Messages of Peace, Images of War*, eds. Rika Devos and Alexander Ortenberg (New York: Routledge, 2015). Other important works include: Andrew Garn, Paola Antonelli, Udo Kultermann, and Stephen H. Van Dyk, *Exit to Tomorrow: World's Fair Architecture, Design, Fashion, 1933-2005* (New York: Universe Publication, 2007); and Danilo Udovicki-Selb, "Facing Hitler's Pavilion: The Uses of Modernity in the Soviet Pavilion at the 1937 Paris International Exhibition" *Journal of Contemporary History* 47:1 (2012): 13-47.

7 Bradley Smith offers a unique perspective in this regard, discussing the Soviet pavilions at the 1937 and 1925 Paris World's Fairs in his work on the politics of Soviet self-representation and cultural diplomacy at World's Fairs.

places where seemingly disparate cultural objects could be found under the same roof and introduced to the public for the first time. Objects in museums, she continues, were often similarly contextualized through décor to help the visitor understand their origin and help them come to life.8 In effect, the construction of the exhibit was important in imbuing the objects with a particular meaning, and the objects themselves were not left to create their own narrative. Therefore, this work will reference museum studies to help contextualize and understand the source material, though it will not make it integral to its central argument.

This work will not only look into the presentation of Soviet identity, however, but will focus on how its presentation invoked the senses to exemplify Soviet progress. Prior scholarship surrounding World's Fairs rarely delves into sensory recreations or the complex meanings behind different sensory elements in national pavilions. Instead, scholarship on pavilions focuses on the architecture of the space, on the memorabilia sold or given away at the pavilion itself, on art or artifacts placed within the space, or on providing a meta-analysis predominantly based on sight.9 Other analyses of the USSR's cultural diplomacy at the World's Fairs tend to compare Soviet committee documents with the spatial representation of the final exhibit, ascertaining Soviet intent by contrasting discussions with the visual elements of pavilion construction. A sensory approach, on the other hand, allows for a fuller understanding of how the pavilions were experienced, since it delves into how sound, sight, touch, smell and taste were constructed to

8 Susan McLeod, "From Cathedrals to Disneyland: Archetypes of Narrative Space", in *Narrative Spaces: On the Art of Exhibiting* (Rotterdam: 010 Publishers, 2012), 143-147.

9 Several works discuss memorabilia at the Fair and how it should be interpreted, such as Jon B. Zachman's "The Legacy and Meanings of World's Fair Souvenirs," in *Fair Representations: World's Fairs and the Modern World* (Amsterdam: VU University Press, 1994). Other works contrast American and Soviet presentation at World's Fairs specifically. See Sarah Nilsen, *Projecting America, 1958: film and cultural diplomacy at the Brussels World's Fair* (Jefferson, N.C.: McFarland, 2011).

reflect Soviet ideals and identity. Ideas about the Soviet citizen, the ideal participant in the communist nation, and their interaction with the world at large, I believe, can be found within the exhibits and written works associated with the Soviet pavilion.

Many historians have also previously looked into the drive behind the Soviet space race and the impact of the nation's accomplishments on Soviet culture, yet none have dwelled on how it fit into a new set of Soviet senses and an evolving sense of Soviet space. Since the 1970s, histories of the space race have dwelled on its early twentieth century antecedents, its major figures and the competition with the American push for the stars.10 These studies repeatedly touched on the founder of cosmism, Konstantin Tsiolkovsky, and some of his philosophical ideals, Soviet heroes like Yuri Gagarin, or the scientists behind the experiments, but the research did not consider the general cultural context that may have supported space exploration. While some of these works have explored the cultural role that the Sputniks and cosmonauts have played in the American and Soviet psyche, only a few of them have truly looked at how these accomplishments were presented at sites of international cultural exchange.11 My work will thus

10 Asif Siddiqi is a prominent voice on the history of Sputnik and the space age in the west, as seen in his seminal work *Red Rocket's Glare: Spaceflight and the Soviet Imagination 1857-1957* (New York: Cambridge University Press, 2010). A short list of other works on spaceflight include David Easton Potts, 'Soviet Man in Space: Politics and Technology from Stalin to Gorbachev (Volumes I and II,' PhD dissertation, Georgetown University, 1992; Cathy Sudan Lewis, "The Red Stuff: A History of the Public and Material Culture of Early Human Spaceflight in the U.S.S.R.", PhD dissertation, Georgetown University, 2008; and Michael Stoiko*, Soviet Rocketry: Past, Present and Future* (New York: Holt, Rinehart, and Winston), 1970. A look at the cultural impact of space travel can be found in Eva Maurer, Julia Richers, Monica Rüthers, and Carmen Scheide*, Soviet Space Culture: Cosmic Enthusiasm in Socialist Societies* (New York: Palgrave MacMillan, 2011).

11 The most notable of which being the work of Lewis Siegelbaum entitled "Sputnik goes to Brussels: The Exhibition of a Soviet Technological Wonder" which will be discussed below. Another is Sonja Schmid, "Celebrating Tomorrow Today: The Peaceful Atom on Display in the Soviet Union" *Social Studies of Science* 36:3 (2006).

fill this gap by not only seeing how the 1930s contributed to a discussion about spatial exploration, but how this belief in spatial exploration fit into an evolving notion of the Soviet person and the eventual triumph of Sputnik.

This thesis will be split into three chapters with several subsections. The first chapter will develop a framework for the work through exploring the historical development of the ideal of the Soviet person and Soviet understanding of space, and then expanding on the historiography of both World's Fairs and Soviet/Russian sense history. The second chapter will focus on the Soviet pavilion at the 1939 World's Fair, offering an overview of the pavilion and its conception of space before narrowing the focus to sensory representations of it, in regards to aviation and Soviet spatial expansion. The third chapter will pick up from the 1939 sensory understandings and offer a comparison with the Soviet pavilion at the 1958 Brussels Expo. With the first Soviet forays into cosmic space having occurred half a year before the Fair began, the 1958 Expo offers a unique opportunity to see how the Soviets conceived of this victory as both a product of Soviet development since the 1917 revolution and as a turning point in the country's future development. In exploring the differences between the Soviet Pavilions at the 1939 and 1958 Fairs, this thesis pinpoints how the Soviet senses evolved from human attributes to be mastered to something almost mechanistic. Furthermore, it looks at how Soviet spaces, as an extension of the Soviet body, was meant to be mastered and mapped, its boundaries expanded upon and its corners connected. In sum, this thesis combines elements of several fields and contributes to them in turn. Regarding Russian and Soviet history, the work highlights the sensorium of the ideal Soviet person, i.e. how they inhabited and interpreted their environment, and how this ideal was sold to an international audience. For Cold War studies, this work looks into how World's Fairs, as sites of international exchange and education, served to put forth visions of how persons

living in the ‘ideal communist society’ literally embodied its cultural values. Finally, for the history of the senses, this work highlights how cybernetic thinking and technological mastery transformed a sensory narrative that put heroic humans, as heightened communicators and masters of the body, to center on machines with the same attributes.

Chapter 1: The Evolving Soviet Person and Historiography

As the USSR was formed after the 1917 Russian revolution and the subsequent civil war, ideas about what would make an ideal Soviet person also began to emerge. The model builder of communism was, in fact, a major point preoccupation in many early Soviet works of both a theoretical and educational nature. Many scholars have written about the New Soviet Person's depiction in literature, from both the earliest Soviet writings to those just before the USSR's collapse, but few agree on the exact substance of the idealized Soviet individual. In her analysis of children's literature, Felicity O'Dell, put forward six themes that constitute elements of this kind of person. Collectivism, discipline, love of work, patriotism, internationalism and atheism were the general morals that children in the Soviet Union, from the 1920s to the 1970s, were to be taught. According to her analysis, the future 'Builders of Communism' must value patriotism as the prime virtue, with all other qualities following from it. Love and devotion to the Union is equated to a devotion to the collective and thus to the completion of communism for the benefit of said collective.12 Every other quality benefits these quintessential values of the Union and the collective. In loving to work, one is productive for the sake of the Motherland and its people, and in discipline is explained, an individual subordinates their desires for the sake of the common good.13 However, this distillation of themes is only one interpretation of what values a Soviet person is expected to have.

12 Felicity Ann O'Dell, *Socialisation through Children's Literature: The Soviet Example* (Cambridge: Cambridge University Press, 1978), 185.

13 Ibid, 33.

Under Stalin, the ideal Soviet person was someone of both ambition and temperance, possessing an unrelenting push for success yet still devoted to the dictates of the Party. This tenuous dualism created a figure that was both too idealistic to be achieved and too demanding to sustain. However, the mastery nature was one of the few uncomplicated characteristics that made up this ideal; qualities like bravery, stamina, perseverance, cool-headedness and technological proficiency were meant to turn the contemporary worker into a modern Prometheus who could harness nature for human progress.14 Additionally, in the Stalinist imagination, the ideal Soviet was one who was to be eternally youthful, but who would have the necessary self-discipline to participate fully in society.15 This participation would be fostered through competition. Stalinist rhetoric surrounding the New Soviet person positioned them as warriors, but such figures, in a Marxist society, would engage not in traditional conflict but in society-bettering competition. The way this manifested during the Stalinist period can be seen in the sort of friendly competition for production that produced the Stakhanovite movement, as well as the pieces of literature that Stalin introduced and the popular races that caught the public's attention in the1930s.16 The eternally youthful, competitive and productive figure was further complicated by the belief that the Party (and its leader) had a paternalistic relationship with the people. On top of both maturity and youthfulness, ideal Soviet people were also children of the

14 Jay Bergmen, "Valerii Chkalov: Soviet Pilot as New Soviet Man," *Journal of Contemporary History* 33:1 (1998): 139-140.

15 Ibid, 145.

16 Ibid, 141-142.

party, and had to be obedient to a hierarchy that placed the ultimate father, Stalin, above all else.17

Nikita Khrushchev's 1958 educational reform advocated for the creation of a new Soviet person dedicated to innovation and a love of work, which did away with this earlier hierarchical model. In his 1956 speech to the 20th Congress of the Communist Party of the Soviet Union, Khrushchev noted that under Stalin "many workers began working uncertainly, showed overcautiousness, feared all which was new, feared their own shadows and began to show less initiative at work."18 In his memorandum on how to 'strengthen the relationship of the school with life and to develop further the system of public education in the country,' Khrushchev stated:

> The most important thing here is that we have a slogan and – that this slogan be sacred for all children entering our school, namely, that every child must prepare for useful work, for participation in the building of a Communist society. And any work, whether in a factory or on a collective farm, in an industrial enterprise or on a state farm […] is sacred work and necessary to every man who lives in and enjoys the benefits of society. Every man who lives in a Communist society must contribute his mite of labor to the building and the further development of this social order.19

In essence, Khrushchev called for a reinvigoration of 'love of work' for the sake of building up a stronger collective, particularly in the wake of Stalinist education where theory was dominant and workers feared innovation. In addition, Khrushchev's 1956 speech criticized Stalin's cult of personality for having "caused the employment of faulty principles in party

17 Ibid, 149.

18 Basil Dmytryshyn, *USSR: A Concise History* (New York: Scribner, 1965), 562.

19 Quoted in George S. Counts, *Khrushchev and the Central Committee Speak on Education* (Pittsburgh: University of Pittsburgh Press, 1959), 39.

work and in economic activity; brought about rude violation of internal party and Soviet democracy […] and varnishing of reality." 20 In the wake of such declarations, references to many of the Stalinist-era heroes began to disappear and the style of rhetoric surrounding party leaders changed. Despite this call for change, Khrushchev did rely on heroic paradigms set up under Stalin, namely the figure of the aviator, who became a basis for the lionization of cosmonauts in the 1960s.

Historian Slava Gerovitch offers a convenient paradigm for my look at the new Soviet man at World's Fairs and it is one that captures this continuity between Stalin and Khrushchev. Gerovitch argues that early Bolshevik ideas about the "mechanization of man" continued into the Stalin and Khrushchev periods, though it particularly targeted the heroes of Soviet aviation. Under Stalin, "while individual initiative, even disobedience, were qualities that Stalin considered admirable and highly desirable in the new Soviet man, they were also things that, in Stalin's view, would be strictly limited in the communist society he envisioned."21 However, despite these tensions, aviators and cosmonauts were still held up as the embodiments of the ideal of a Soviet person. Aviators became "ideological prototypes, precursors of the people who would inhabit the future, from whose achievements . . . the Soviet people could develop a sense of what living under communism would be like."22 Aviators became a sign of the Soviet Union's power and progress, being expected to fly faster, farther and higher, and they were toasted as "the little cogs of a grand state

20 Basil Dmytryshyn*, USSR: A Concise History* (New York: Scribner, 1965), 562.

21Slava Gerovitch, ""New Soviet Man" Inside Machine: Human Engineering, Spacecraft Design, and the Construction of Communism," *Osiris* 22/1 (2007): 140.

22 Bergman, "Valerii Chkalov",139.

mechanism."23 During the 1930s, visual imagery often connected the aviator and ideal Soviet Man to the airplanes they piloted. Yet, the Party of that era did not discount the human factor in their pilots, nor was it consistent about its technological focus. A 1931 slogan "Technology decides everything" coexisted in popular literature with a 1935 slogan stating "Cadres decide everything", creating confusion as to Party priorities.24 The mechanization of pilots became a near fait-accompli during the space race of the late 1950s and early 1960s. As Gerovitch points out, the cosmonaut identity was "constructed as part of spacecraft control system design", wherein the cosmonauts were turned into an icon of Soviet power but not fully integrated in the technological process.25 Ground control and the Soviet government expected them to follow protocol more than conduct research and manage-spaceflight.

The mechanization of man and other ideals regarding the Soviet person will be of interest as this paper looks into the presence of space, both extraordinary and ordinary, at the Fairgrounds of New York and Brussels. In conjunction to finding similarities, the differences between the Soviet person of the 1930s and 1950s will be of interest when looking at the prioritization of different senses in different periods.

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Several scholars have offered useful spatial foundations for studying World's Fairs as subjects unto themselves, though they highlight the architectural over the sensory. The World

23 Slava Gerovitch, *Soviet Space Mythologies: Public Images, Private Memories, and the Making of a Cultural Identity* (Pittsburgh: University of Pittsburgh Press, 2015), 51.

24 Ibid, 52.

25 Ibid, 66.

Fair lexicon incorporates dichotomies like Midway versus White City; pavilion versus exhibition hall; and corporate versus national space. The White City, for example, is a term used to represent the culture and business of the Fair, or its ideological and commercial center. In comparison, the Midway is used to describe entertainment and anthropology at the Fair – the pleasures and people that populated it. The structures of the exhibitions – i.e. their buildings, monuments and exhibits - are considered the commercial and ideological heart of the entire exhibition space. However, without the Midway, or the spaces that existed outside of these created locations which were inhabited by people, the Fair could also not exist. As can be seen, scholarship regarding World's Fairs uses spatial, visual and abstract terms. Essays like James Gilbert's "World's Fairs as Historical Events" present the events in such terms and explore pavilions with this language as a framework. Gilbert's work looks at the dynamic ways in which World Fairs idealize and reflect, as cities within cities and multicultural settings within one civilization, the historic contexts within which they appear.26 Robert Rydell furthers that discussion by exploring the cultural shifts in the American Fairs of the late nineteenth and early twentieth centuries, where Fairs became venues to propagate the ideas of their organizers and hosts in order to put forward a vision of reality. Specifically, Rydell argues that Fairs contained a mythopoetic grandeur, in which ideologies of economic and technological development were "translated into a utopian statement about the future."27 Those in charge of the American Fairs used these venues to put forward a specific view of progress, tying such an ideal strongly to science and notions of racial hierarchies. Progress became synonymous with scientific

26 James B. Gilbert, "World's Fairs as Historical Events," in *Fair Representations: World's Fairs and the Modern World* (Amsterdam: VU University Press, 1994), 13-17.

27 Robert Rydell, *All the World's a Fair: Visions of Empire at American International Expositions, 1876-1916* (Chicago: University of Chicago Press, 1987), 4.

achievement, turning World's Fairs into competitive venues where nations put themselves on display according to a prevailing hegemonic. Fairs were triumphs of hegemony as well as symbolic edifices. As Susan Reid has posited, World's Fairs could serve as sites of convergence where a joint notion of modernity was developed and then adopted by participants.28

Several works exist that explicitly look at the Soviet pavilions at the 1939 and 1958 World's Fairs. Alison Rowley's piece, "The New Soviet Woman at the 1939 New York World Fair", demonstrates how the Soviet government used the moment as an opportunity to educate the American public about Soviet ideology and way-of-life, particularly when it came to women.29 The article textures the Soviet pavilion of the 1939 Fair by focusing on how materials were used to teach an American public about Soviet success. Knowing the kind of souvenirs that fairgoers would encounter at the Soviet pavilion is useful to my own research, since it reveals how Soviet pavilion creators envisioned the interests of the American public, crafted a gendered national image to present to the non-Soviet public, and put this tactile vision into the hands of departing pavilion visitors. Anthony Swift has offered further insight into the 1939 Pavilion in his article "The Soviet World of Tomorrow at the New York World's Fair, 1939", wherein he offers insight into the architectural design of the 1939 Soviet pavilion, the social context surrounding its creation and how the Soviet Union utilized the New York Exhibition as an opportunity for the spread of Soviet ideologies and improvement of its international relations.30

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28 Susan E. Reid, "The Soviet Pavilion at Brussels '58: Convergence, Conversion, Critical Assimilation, or Transculturation?" *Cold War International History Project Working Paper* (62), Woodrow Wilson International Center for Scholars (2010): 6.

29 Alison Rowley, "The New Soviet Woman at the 1939 New York World Fair" in *Gendering the Fair: Histories of Women and Gender at World's Fairs* (Urbana: University of Illinois Press, 2010), 53.

30 Anthony Swift, "The Soviet World of Tomorrow at the New York World's Fair, 1939", *Russian Review* 57/3 (1998): 365-367.

While the piece is more descriptive than analytic, it offers an interesting overview of how the Soviet Pavilion and Soviet attitudes fit into the overall theme of the exhibition, "The World of Tomorrow." Susan Reid and Lewis Siegelbaum have both looked at the Soviet exhibit at the 1958 Brussels Exhibition, noting the site's development in relation to the American pavilion and the different voices in the Soviet government that led to the exhibit's eclectic, industry-oriented, display. Reid explores the pavilion as a point of convergence between Western styles of exhibit and Soviet inclinations toward a new kind of cultural exchange.31 Siegelbaum's work, on the other hand, looks at how the Soviet authorities at the 1958 World's Fair tried to encode Sputnik as a symbol of the future and Soviet technological progress, and how the exhibit's readers, whether of Soviet origin or not, decoded it differently.32

For my foray into the Soviet presence at the 1939 and 1958 World's Fairs, one archive - a repository of World's Fair documents, photographs and memorabilia – proved to be seminal. The digital archive, entitled "World's Fairs: A Global History of Expositions", contains ten main collections related to twelve Fairs that serve as case studies, though it hosts miscellaneous documents from more than 200 fairs. The case studies "represent some of the most prominent and influential expositions in history", with the aim of offering "comprehensive insight into the fair, from the earliest planning stages to the legacy it leaves behind, and to represent multiple perspectives including the official, the corporate and the personal".33 Significantly, it contains

31 Reid, "Soviet Union at Brussels '58", 2-3.

32 Siegelbaum, "Sputnik goes to Brussels"135-136.

33 Adam Matthew Digital, "World's Fairs: A Global History of Expositions", Digital Database, Marlborough, Wiltshire, United Kingdom, Accessed August 17, 2019, http://www.worldsfairs.amdigital.co.uk.

ephemera and news articles from the Brussels 58 Expo, which are more hard to come by than materials from the 1939 exhibition in New York.

Given that my thesis moves beyond the traditional ways that Worlds Fairs have been studied by venturing into the history of the senses, I found it imperative to also consider previous works that combine those two fields, particularly ones that intersect with museum studies. Historian Annegret Fauser, for instance, provides an instructive example of how the senses interact with exhibition spaces and reflect the cultural values of the groups who designed them. In *Musical Encounters at the 1889 Paris World's Fair* Fauser focuses not on a specific pavilion, but on the impact of new sound technology, like the gramophone, and an agglomeration of different 'national' sounds on the musical culture of the subsequent decade. In other words, the book explores the soundscape of the 1889 World Fair, showing how it shaped discussions surrounding the performance, authenticity and national character of music. Fauser also demonstrates how the music of the Fair reflected certain cultural discourses of the period, such as racial distinctions, by casting into sharp relief the differences between the French 'Self' of the audience and the exotic 'Other' of the performers.34 Though Russia is of little focus in the book itself, Fauser briefly looks at the reactions French Fair-goers had to the country's sound. French critics attempted to define what made modern Russian music distinctive and decidedly foreign. Russian music's reliance on folk melodies, penchant for exuberance and love of the picturesque, made French listeners see Russian music as both rich and disorganized. What marked a composer as Slavic to the Fair goer, Fauser posits, was their descriptiveness and "lack of

34 Annegret Fauser, *Musical Encounters at the 1889 Paris World's Fair* (Rochester: University of Rochester Press, 2005), 13.

measure and control."35 In effect, the critical reception of Russian music echoed reception of the country at the Fair, wherein the presented "Eternal Russia" was a "strange, barbaric, opulent and rich country which at the same time was modern and full of potential."36

Books and dissertations on food at World's Fairs have provided snapshots of different cultures culinary values, and elitisms, though they do not precisely frame their discourse around the sense of taste. Fair food was both an object of culinary exchange as well as commercialism. Most important to this study, exhibitions could be events where haute cuisines could help new nations put forward a distinct identity. For Czechoslovakia during the 1958 Brussels World Exhibition, for example, gastronomic presentation was part of a wider cultural environment where the "conservative pomposity of the past period was being replaced by moderate modernity, often drawing from the heritage of the interwar avant-garde."37 Many of the meals presented were 'upgraded and lightened variants of national cuisine', in an effort to distinguish Czechoslovakia's culture from those of other Eastern Bloc countries, though it inadvertently reflected some changes in dietary habits.38 As one can surmise from this information, discussion of food presentation is considered more valuable than how that connects to home-bound eating habits.39 Thus, works on Fairs discuss national gastronomy as an opportunity to show-off a

35 Ibid, 45.

36 Ibid, 46.

37 Martin Franc, ""*We're Good Enough to Host the World*! Czech and Slovak Cuisine at World Fairs in 1958, 1967 and 1970," in *A Taste of Progress: Food at International and World Exhibitions in the Nineteenth and Twentieth Centuries* (London: Routledge, 2017), 134.

38 Ibid, 135.

39 Comments in reference to the sense of taste are not expanded upon, such as Martin Franc's observation that during the 1970 Osaka World Exhibition, one can observe signs that Czechoslovakia "aimed at lighter consumption a greater respect for the taste of basic ingredients" in their cuisine.

country's food production industry and educate the world on a country's haute cuisine, connecting said facets to political circumstances. Food, generally, is considered a good reflector of the global economic climate, and exhibitions, as they were originally conceived to be, a good location to stir up interest in trade.

Hence, articles on World's Fairs often present gastronomy at the events as an opportunity for countries recently liberated from colonization to put forward their distinctive identity and showcase their autonomy. Bryce Evans argues that that was the case for Ireland in 1939, which had gained independence from Britain in 1922 but engaged in a trade-war with its former colonizer, and primer importer, during the 1930s.40 The World's Fair, therefore, was a chance to expand their market. In order to do so, however, the Irish had to both make their culture distinct and fall back on the old food features from their colonization, i.e. alcohol, game and fish. Thus, history of food at World's Fairs tends to highlight the political and the influence of these Fairs back home, rather than how it ties into taste.

Several histories exist on the sense of sound in Imperial and Soviet Russia, offering a more cultural-specific framework for my analysis. Scholar Claire Shaw has argued that, in the Soviet sensory hierarchy, "hearing and speech, with their ability to foster communication, orientate the self in their surroundings and facilitate learning of written language, were placed definitively above the visual", effectively placing the oral as the center of communication in Soviet society.41 Shaw used the deaf community in Soviet Russia as an example to show how

40 Bryce Evans, "Food and Drink at 1939 World's Fair: National Rivalry and Irish Aspiration," in *A Taste of Progress: Food at International and World Exhibitions in the Nineteenth and Twentieth Centuries* (London: Routledge, 2017), 217.

41 Claire Shaw, "Deafness and the Politics of Hearing," in *Russian History through the Senses: from 1700 to the Present*, (London: Bloomsbury, 2016), 193-194.

lacking such a sense contradicted the larger paradigm of the Soviet self. In looking at the evolving treatment of the deaf community, Shaw points out that during the Stalin era, those in the upper ranks of the Bolshevik government saw muteness as a form of isolation from the general Soviet community, keeping those unable to engage with the community orally from truly gaining the consciousness needed to bring about socialism.42 Stalin himself, Shaw argues, saw language and communication as an indicator of progress, and as much a necessity as literacy.43 Stephen Lovell further proves that connection between orality and Soviet identity in his article "Broadcasting Bolshevik: The Radio Voice of Soviet Culture, 1920s-1950s." Within that work he argues that public speaking and listening became integral to an emerging Soviet identity once new technologies like the radio brought agitation and Soviet ideals even more solidly into the home. The new Soviet culture that emerged after the Russian civil war called for greater popular participation in the broadcasts themselves.44 Though these became further controlled and 'scripted' under Stalin, participation by regular citizens was still sought after. As Lovell states, "Soviet culture was never merely about turning citizens into passive objects of propaganda. To the contrary, the whole of the Soviet period may be seen as a balancing act between the need to impose authority and the need to elicit involvement", with the latter of these requiring a citizenry that could "speak Bolshevik" appropriately.45

42 Ibid, 199.

43 Ibid, 200.

44 Stephen Lovell, "Broadcasting Bolshevik: The Radio Voice of Soviet Culture, 1920s-1950s", *Journal of Contemporary History* 48:1 (2013): 602-606.

45 Ibid, 94.

The evolving world of Russian taste and food has been explored by several academics in far more in-depth ways then I aim to emulate. Anton Masterovoy has considered the different waves of engineering taste through food during the Soviet era. Of particular interest to my work are his mediations on the "second" and "third" Soviet food campaigns, which span from the mid-1930s to the mid-1960s. The second campaign, which ran from 1935 to 1943, sought to refine Soviet tastes away from traditionally provincial fair. Food was to be richer, tastier and more meat-inclusive, demonstrating the prosperity supposedly ushering in by the Five-Year Plans through better dietary options.46 While the foods the second campaign championed – like the sausages, fish fillets and whiskey found in the 1939 Soviet Cookbook – were not realistically available to a country facing widespread food shortages, they helped to create a rhetoric of food abundance that permeated the Stalin-era press and literature.47 The Third Campaign of the Khrushchev era continued much of what was established under Stalin. Expectations of richer food options met with the intense competition of the Cold War, leading the new government to proclaim that they would overtake the United States in milk and meat production. To fulfill his 1957 proclamation, Khrushchev tried to create an American-style corn belt within the USSR, hoping to increase the availability of animal feed.48 When that venture failed, state authorities began promoting alternatives to typical husbandry animals, by suggesting that the public consume whale or horse meat. Corn was repurposed into a main ingredient for bread, wine and sausages, but was rejected by a consumer population that equated it with animal fodder.49

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46 Anton Masterovoy "Engineering Tastes: Food and the Senses," in *Russian History through the Senses: from 1700 to the Present*, (London: Bloomsbury, 2016), 173.

47 Ibid, 174-175.

48 Ibid, 177.

49 Ibid, 178.

Additionally, production of corn over other grains led to bread shortages, thereby reducing confidence in Soviet leadership and creating an obstacle to the state-driven push for taste adaptation.

Existing English scholarly work on Russian haptics tends to be focused on the medical, the painful or the sexual. In the past, as Sander Gilman has pointed out, the history of hapticity was more concerned with the biology of touch than its representation.50 While these perspectives are useful, they ignore the richer elements of touch that can reflect a unique cultural engagement with the world. As Mark Smith points out, current research has shown that "tactility and consciousness of skin - how it looks, what its color is, and its feel - has proven essential to the elaboration of modern ideas and processes", demonstrating how culture has used the sense to help construct ideas like gender, race, and class.51

One work on Russian tactility that goes in that direction looks at how the humoral medical understanding of bodies interacted with cultural understandings Russian life during the seventeenth and eighteenth centuries. In "Humoral Bodies in Cold Climates", Matthew Romaniello argues that Western European visitors in the early modern era saw Russia's colder climate as the source of poor behaviours like laziness and illnesses such as scurvy, venereal disease and pneumonia. Beyond these Western perspectives, however, Romaniello points to a specifically Russian response to the cold, reflective of a greater cultural attitude toward the natural climate. While most European visitors used the Russian cold to create a bodied

50 Sander Gilman, "Touch, Sexuality and Disease", in *Medicine and the Five Senses*, eds. W.F. Bynum and Roy Porter (Cambridge: Cambridge University Press, 1993), 198.

51 Mark M. Smith, *Sensing the Past: Seeing, Hearing, Smelling, Tasting, and Touching in History* (Berkeley: University of California Press, 2008), 95.

distinction between Russians and themselves, some visitors noted how Russians had treatments that had accustomed them to such extreme temperatures from infancy.52 The *bania* (or sauna/bathhouse) was the Russian treatment for improving their endurance. These local institutions, one foreigner noted while serving in the Imperial army, were chief among "the universal remedies of the Moscovites, whether for cleanliness or health."53 Russian medical treatments, therefore utilized baths both warm and cold to "cure all their distempers."54 Their supposedly increased tolerance of temperature did lead to an understanding that there was an intrinsic difference between Russians and foreigners, an observation which Romaniello notes "became commonplace in references to the Russian constitution."55

However, for this work, it is important to consider how touch is as affected by the advent of new technologies as it is by matters of pain, pleasure and simple contact. The Soviet Union underwent a period of rapid technological growth from 1917 to the 1960s. Given the avid interest in spaceflight and aviation during the 1920s and the 1930s, and the advances that led to Sputnik and the heightened space race of the 1950s, how the Soviet people interacted with technology is a woefully unexplored subject.

Several anthropologists and historians outside of the realm of Soviet and Russian history may offer a framework of approach. Sara Danius looks at "Modernist Depictions of Speed" in the early twentieth century, as the introduction of automobiles coincided with the rise of moving

52 Matthew Romaniello, "Humoral Bodies in Cold Climates", in *Russian History through the Senses: from 1700 to the Present*, ed. Tricia Starks and Mattew Romaniello (London: Bloomsbury, 2016), 31-34.

53 Ibid, 34.

54 Ibid, 35.

55 Ibid, 36.

pictures to create new sensations of movement. Darius argues that such depictions, in nonfiction and fictional form, reflect a growing confluence between new speeds and transformations of space. Writers of the period had to describe an "overwhelming experience of speed and an equally overwhelming mass of visual stimuli", putting together a syntax of velocity that essentially rendered an immobile landscape mobile.56 Trees, hills and homes race toward the person driving a vehicle, the unnatural movement of an automobile making it seem as if it is everything else but the subject that moves.57 The sense of touch is connected with sight here, if confused. Danius continues by discussing early cinema as a well-fit metaphor for lived experience of velocity, in which "the world incessantly races forward and disappears behind the human subject."58 That era of cinema experimented with ways simulating movement and speed in order to reflect the camera's ability to explore and mobilize space for a seated audience. This connection between space, speed and time is especially illuminating for international Soviet presentation, where such themes combined in their exhibits and writings on space and flight.

The connection between speed, modernity and touch were also echoed in Constance Classen's book, *The Deepest Touch*, particularly in regard to the modern city. Trains played an important role in this developing modern touch, wherein the acceleration of the new form of transport left passengers feeling like they were moving in a whirlwind through the city. As Classen frames it, "in premodernity touching the stone walls of the church had conveyed a sense of stability and of the immutable cosmic order. In modernity, rushing along in a steam-powered train exemplified contemporary ideals of speed and progress", shifting importance away from the

56 Sara Danius, "Modernist Fictions of Speed", in *Book of Touch* (New York: Berg, 2005), 414.

57 Ibid, 414-416.

58 Ibid, 414.

eternal permanent to the fast-paced impermanent.59 Machines, whether transport-related or otherwise, created a gap between the body and the natural environment. The streets of the modern city also began to prioritize sight over touch. Broadened into wide boulevards and made so as to be as well-lit at night as during the day, the new streets of capital cities, with Paris as a prime example, became exemplary of a new kind of order and efficiency that ensured that everything was visible.60 In this way, the visible body became more important than the felt body in modern European culture, and the change coincided with the rise of photography and the increased presence of mirrors in the household. Both gaslight and railway were seen as taking away individual autonomy and obliging all to be dependent on and interconnected through a dominating industrial system, a system increasingly run by electricity, which encouraged the associated view that the senses would become dominated by both speed and vibration.

At Fairs, hapticity could be invoked by objects visitors encountered as well as the texts they read. These objects, as Constance Classen and Elizabeth Edwards have discussed in several works, become involved in rituals of touch that tether visitors to another time or place. Through touch, visitors assure themselves of the realness of places unseen, and turn these items, if temporarily, into relics of pastness or otherness. In "Grasping the Image", Edwards discusses how photographs are inherently tactile objects that become imbued with narrative meaning through their placement in specific locations, such as family albums or frames. Through such, photographs are given a social biography; wherein "ordinary remains (family snapshots) become treasured, linking" memories that have literal weight and that render something intangible

59 Constance Classen, *The Deepest Sense: A Cultural History of Touch. Studies in Sensory History* (Urbana: University of Illinois Press, 2017), 179.

60 Ibid, 181.

permanent.61 The photograph becomes an object of remembrance. Similarly, Constance Classen notes in *The Museum of the Senses*, while museums, and their close cousin World's Fairs, are meant to be spaces where the senses are muted, visitors still respond to things in a full-bodied way, handling objects out of yearning for a connection with stories and their people. Classen argues that people in the modern world look to relics for a tangible link with the past. People's "hunger for a sense of reality in connection with the men of the past, [can] only be satisfied by some material link."62

To understand how space was seen and presented at the World's Fair, therefore, one needs a combination of the senses. To understand how people interacted with space, and the ways the Soviets conceived of their own spaces and explorations, one must see how the senses interacted with the Soviet idea of the 'Builder of Communism' under Stalin and Khrushchev and different Soviet spaces. As Mark Smith has pointed out, societies have always historically employed a mixture of the senses in the development of their world view, with but a few members of the elite privileging one sense over the rest.63 Thus my work will function against the notion of a hierarchy of the senses in historiography, while also using sight and space-based World's Fairs language to redefine the Soviet pavilions and demonstrate how the Soviet Union evolved in its understanding of Soviet space and its relation to Soviet identity.

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61 Elizabeth Edwards, "Grasping the Image: How Photographs Are Handled", in *Book of Touch* (New York: Berg, 2005), 421-423.

62 Constance Classen, *The Museum of the Senses: Experiencing Art and Collections* (New York: Bloomsbury Academic), 2017.

63 Mark M. Smith, *Sensing the Past*, 12-15.

Chapter 2: 1939 - Flying Falcons and Arctic Heroes

"The Colossal Statue Represents the new Soviet citizen, strong and intellectually alert, in whom all differences between manual and mental labour are eliminated."

– New York 1939 Union of Soviet Socialist Republics Pamphlet

The 1939 New York World's Fair was a venue of mixed messages at a time of increasing global tensions. The Fair was dedicated to the "World of Tomorrow" and encouraged national and commercial participants to put forward their image of modernity, predicting the world to come. As put by an official pamphlet for the Fair:

> the eyes of the Fair are on the future — not in the sense of peering toward the unknown nor attempting to foretell the events of tomorrow and the shape of things to come, but in the sense of presenting a new and clearer view of today in preparation for tomorrow; a view of the forces and ideas that prevail as well as the machines.64

Wanting multiple nations to present their vision of progress, however, brushed up against realities that undermined the Fair's goal of peaceful cooperation. The Soviet Union, among others, took the opportunity to celebrate its progress and the impact of communism on its development. The 1939 Fair came at the end of a decade of Soviet 'triumphs' in both aviation and exploration; these achievements coincided with a geopolitical environment shaped by an economy that was recovering from war and by the increased threat of a new potential conflict. In these conditions, Stalin and his fellow Communist Party members wanted to put forward an image of the Soviet citizen that reflected the movement and sensory mastery of the Soviet heroes of air and ice. As will become apparent in this chapter, the New York Fair proved to be an

64 Bill Cotter, *The 1939-1940 New York World's Fair – World of Tomorrow* (Charleston: Arcadia Publishing, 2009), 9.

opportunity for the USSR to show, internationally, how the Soviet people had modernized through a simultaneous conquering of sense and space.

The process for designing the main USSR pavilion began in 1937, before the end of that year's World's Fair in Paris. Many of the artists who had been involved in designing the earlier Fair pavilion partook in creating the exhibition spaces that were needed eighteen months later. Sergey Merkurov, who had decorated parts of the Paris proplyea, and Vera Mukhina, the sculptor behind the "Worker and Kolkoz Woman" statue that topped the 1937 pavilion, came back to provide sculptures for the 1939 exhibition.65 Boris Iofan and Karo Alabian's won the architectural competition to design the new pavilion and were tasked with completing the plan in August 1938.66 While some of the planning was delayed by the arrest of the head of the USSR's Fair commission, Ivan Mezhlauk, in late 1937, the pavilions were completed in time for the Fair's opening in April of 1939. 67 Soviet workers functioned alongside Americans to put together the pavilions – with materials pre-assembled in the USSR and then shipped to the United States for final construction.68 Much of the exhibit was made of marble, providing it with a kind of permanence as well as monumentality. The intent behind the design of the 1939 pavilion was arouse a "supposedly typical Soviet mood of joyfulness, cheerfulness, [and] optimism", as well as show that "the old wooden Russia has turned into the strong industrial

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[65] Vasily Bourgman, "The Soviet Pavilion at the New York World's Fair", *Soviet Russia Today,* May 1 1939, 36.

[66] Iofan had also designed the USSR pavilion at the 1937 fair, to great acclaim, as well as the unbuilt Palace of the Soviets. Alabian was also a well-known architect who had designed the Red Army Theater in Moscow.

[67] Swift, "The Soviet World of Tomorrow at the New York World's Fair, 1939", 367-368.

[68] Bourgman, "The Soviet Pavilion at the New York World's Fair", 10.

Soviet power."69 While American workers were not always sympathetic to socialism, they were often impressed by the size and magnitude of the Soviet designs, and were especially drawn in by Soviet locomotives.70 Planes featured heavily in Soviet Fair plans, either in the form of vehicles on display or in attention-drawing stunts.

This attention to flight was not unexpected. Since the late imperial period, aviation had a symbolic significance for the Russian people. During the 1910s, many Russian citizens gathered in airfields outside of Moscow, St. Petersburg and Odessa to watch flying demonstrations - technological feats that captured the imagination. A small network of air clubs and societies emerged, and with them a belief in the liberating potential of aeroplanes. As discussed by the historian Tijana Vujosevic, aeroplanes and flight became a symbol of technological and social progress for the masses of the urban poor, merchants and workers, signalling the potential for change through an elimination of technological backwardness.71 Popular enthusiasm continued after October 1917, when new utopian dreams cemented that ideal that "taking off into a better world was semantically and psychologically linked to taking flight."72 As the Russian civil war came to an end in 1921, Soviet leaders envisioned and hoped for an integrated nation that would benefit from the future that communism would provide. Flight became linked with this new cultural endeavour. A transport network would be the first step; as Richard Stites described it,

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[69] Referenced in Anthony Swift, "The Soviet World of Tomorrow at the New York World's Fair, 1939", 367.

[70] Ibid, 378.

71 Tijana Vujosevic, *Modernism and the Making of the Soviet New Man* (Manchester: Manchester Univ Press, 2018), 13.

72 Richard Stites, *Revolutionary Dreams: Utopian Vision and Experimental Life in the Russian Revolution* (New York: Oxford University Press, 1989), 170.

"an air transport network for the new Soviet state was a way of constricting time and space, promoting social communication and health, supplying a far-flung population, and educating the people of that vast republic."73 Thus, planes were not only a means by which to find freedom from the constraints of contemporary life, but something to link all peoples of the fledgling Soviet state together. Aerospace and what lay beyond it, the cosmos, represented spatial freedom when compared to the crowded conditions below. As a symbol, therefore, the plane became an object of interest for the elite as well as the layman.

As early Soviet culture shapers, the Russian Futurists saw the arrival of aeroplanes as a means by which to connect to the celestial as well as fellow people. For Futurists, flight was an inevitable step of development tied to the 'will of the universe', wherein the time of earthly history would come to an end. Futurists relied on pre-Revolutionary ideas of the duality of earthbound and celestial life in communist struggle to explain their own ideas about the future man. *Byt*, banal everyday life, would come to coexist with *bytie*, the enlightened or true self. Therefore, the Futurist protagonist of the Revolution and the new communist utopia was one in the process of becoming an "ideal person", much like how socialism was a step toward communism.74 Transcendence could be achieved through conquering the material world and landscape, transforming it to allow the Soviet people to rise above its limitations. Vladimir Tatlin tried to prompt this kind of transformation with his experimental Letatlin, a set of portable 'wings' whose name was a portmanteau of the Russian verb to fly – *letat* – and the surname of the artist. During the 1920s, Tatlin devoted his time to designing works of everyday use, like

73 Ibid, 171.

74 Vujosevic, *Modernism and the Making of the Soviet New Man,* 20-21.

pots and furniture, but the Letatlin was meant to be the culmination of his *byt*-related efforts. The machine would turn "anyone using it into a winged creature, and thus improve everyday transportation" by physically launching members of the proletariat into the skies above Soviet cities, much as communism was to symbolically launch them into a classless utopia.75 The wings were to become an essential part of the communist education, so that everyone in Soviet society could "master the realm of the skies as an alternative habitat."76 Though they were not ultimately transformative, Letatlin reflected the artistic and philosophical motivations of the era.

The place of aviation and flying vehicles, like dirigibles, took on a distinctly nationalistic character during Stalin's leadership. As an unpublished conference paper by Alison Rowley demonstrates, support and media coverage of international flying events and efforts were avid during the 1920s.77 The arrival of the *Norge* airship in Soviet airspace in 1926 showed that, at least in the media, flight and exploration went hand-in-hand in the Soviet imagination.78 Rowley's research reveals that the most important Soviet newspapers, *Izvestiia*, *Pravda* and *Komsomol'skaia Pravda,* covered the dirigible's visit and the overall expedition extensively. The route the airship took, and a description of the expedition, was printed in *Izvestiia* and *Komsomol'skaia Pravda*, and the journey avidly followed in the papers.79 Various subjects

75 Ibid, 22-23.

76 Ibid, 24.

77 Alison Rowley, "Flight as Media Event: Soviet Newspaper Coverage of International Airship Flights, 1926-1931", 1-2.

78 Part of the interest in the *Norge*'s aerial flight to the North Pole, beyond the time spent in Soviet airspace, was because of the involvement of explorer Roald Amundsen. Having traveled to the South Pole and the northern passageways in the 1910s, Amundsen was a figure of intrigue as well as one associated with daring feats and global celebrity. Ibid, 3-4.

79 Ibid, 4-5.

about Arctic exploration, the flight's connection to the history of aviation and exploration, and the dangers of such journeys were covered as well.80 However, the following trips of the *Italia* dirigible, which flew to the Arctic in summer 1928, and of the *Graf Zeppelin*, which crossed the length of the Soviet Union in August 1929, saw a greater focus on Soviet contributions than the journeys themselves. In *Komsomol'skaia Pravda*, daily progress reports about the *Italia*'s progress over Russia were put between other articles describing flights by foreign and Soviet airplanes. After the dirigible's crash, *Pravda* wrote of the rescue and flight with less enthusiasm than its counterparts, focusing more on critiques of the international response to the crisis than celebrating Soviet efforts.81 Rowley also found that the possibility of a regular northern air route to the Far East was also of particular media interest, as became evident in coverage of the 1929/1930 *Graf Zeppelin* flights, and the route was spoken of as a means to integrate distant parts of the Soviet Union with the centre.82 Such a turn to Soviet-centered aviation affairs coincided with the consolidation of Stalin's power within the party, as people in high-profile positions in the media were removed. In the case of *Pravda*, its tone reflected the Stalinist adoption of "Socialism in One Country", which pushed for a greater focus on national accomplishments and aggression towards foreigners. *Pravda* offered very little coverage of the 1929 *Graf Zeppelin* around-the-world flight, for example, and coverage of the airship's second 1930 visit was accompanied by calls for mass funding of Soviet-made dirigibles and messages

80 Ibid.

81 In *Izvestiia*, the coverage of the rescue of the *Italia*'s crew gave more space to the decisions and deliberations of the committee created to head the Soviet rescue operations than other aspects of the journey, putting Soviet efforts into a positive light. Ibid, 7-9.

82 Ibid, 11.

that “technological advancement relied on mass support.”83 High profile aviation needed to become Soviet, in other words.

During the 1930s, the Soviet Union turned this national enthusiasm for aviation into competitive feats, where setting international flying records took precedence. Stalin’s so-called “Falcons”, as these Soviet heroes came to be called, were meant to be both exemplary figures within the Soviet Union and without. In order to legitimize his position as head of the Party, Stalin positioned himself as a man of action, staking his reputation on a view of himself as a practical organizer. Achievements in technology, therefore, logically tied into this idea of action and organization.84 Aviation was raised to a point of even greater importance, and in 1933 it was given its own secular holiday in August. By fall of the same year, the Soviets had entered into the international competition for air records. Pilots were pushed to go “flying farther than anyone, faster than anyone, and higher than anyone”, thereby demonstrating that the Soviets could conquer heights unconquerable by any other state.85 By the time of the World’s Fair in 1939, the Soviets had collected some sixty-two records, among them were landings at the North Pole and the first transpolar flight.

Given the amount of attention paid to aviation, it should not be surprising that signs of Soviet pride in their aviation feats could be found at the 1939 World’s Fair, both within the physical spaces of the exhibits and at other Fair events. Principle amongst these was the flight

83 Ibid, 13.

84 K. E. Bailes, "Technology and Legitimacy: Soviet Aviation and Stalinism in the 1930’s," *Technology and Culture 17* (1976): 58.

85 *Grazhdanskaia aviatsiia* (November 7, 1933), as quoted in K.E. Bailes, “Technology and Legitimacy: Soviet Aviation and Stalinism in the 1930’s”.

by Colonel Vladimir Kokkinaki and Major Mikhail Gorienko, a non-stop transatlantic flight from Moscow to New York, that was meant to coincide with the opening of the Fair. Part celebration of participation in the Fair, the flight also was intended to pioneer a new route from Europe to America. Though they did not ultimately reach their planned destination, the pair were interviewed by sympathetic Soviet media extensively after the fact. At the opening of the separate Arctic Pavilion in June, the Soviet Deputy Commissioner to the Fair, Georgi Zaroubin, gave a speech wherein he declared that "no doubt now remains that the route of the [Soviet] heroes will become a normal functioning air route in the near future."86 His words were uttered in front of the plane piloted on the first transpolar flight from Moscow to the United States, meaning that such a statement showcased the might of Soviet progress in both aviation and along the Arctic Frontier. Clearly, Soviet airplanes and their pilots were meant to take primary focus when it came to the nation's presence in New York. Additionally, both events suggest that the Soviets were attempting to position themselves as pioneers of new routes and aviation accomplishments.

86 "Soviets' Pavilion Hails Arctic Feats: Russia's Achievements in Air and Land Exploration are Praised at Dedication," *New York Times* (1923-Current file); Jun 12, 1939; ProQuest Historical Newspapers: The New York Times, 10.

Figure 2.1. Plane used in 1937 Transpolar Flight by Valery Chkalov and co. in front of Soviet Arctic Pavilion (Collection of Dr. Alison Rowley)

Within the main Soviet pavilion, aviation and aviators were not given the center-stage but woven into other narratives of progress. In the Hall of Transportation and Electric Power, busts of famous pilots were placed alongside models of several airports, thereby allowing their narrative of record breaking to be connected with important developments in industrial and commercial transport. Railways were also highlighted in this portion of the exhibit, showcasing transport's expansion into remote corners of the USSR. The presentation of railways at the Fair was meant to reflect the Soviet government's push to further unite the Union, since they aided in "the rapid growth of industry and agriculture, the development of new regions and the strengthening of the country's defense powers" through the creation of new railroad service.87

87 V. Obraztsov, *The Railroads of the U.S.S.R.* (Moscow: Foreign Languages Publishing House, 1939), 6.

Under the Third Five-Year Plan (1938 to 1941), the goal was to connect "Georgia, Armenia, Azerbaijan, the Urals, Siberia, the Ukraine and the central regions of the U.S.S.R" through new lines.88 Though air routes were viewed in a similar way, being presented in Fair pamphlets as seminal to "building up a system of rapid transportation and of linking the central sections of the country with important industrial centers and with the outlying districts", the exhibit mostly discussed specific aviators and their record-breaking achievements.89

The intent behind tying the extension of railways to individual achievements of Soviet aviators was to not only tell of "the development of machines", and the connectivity of the Soviet peoples, but "also of the people who man the machines." As put in pamphlets created for distribution at the Fair, such juxtaposition demonstrated that "here too is the man who not so long ago pushed a wooden plow" transformed into one that "now flies an airplane over the Pamirs."90

The Soviets who 'man[ed] the machines' often had to conquer themselves and the elements in order to become Soviet heroes. For example, the vocabulary surrounding flying often posited it as a battle, even when its aims were peaceful. Aviators physical encountering of the landscape was equated to a military campaign, wherein the occupation of the space meant conquering it. In the Fair pamphlet "Soviet Civil Aviation", for instance, Soviet Hero and airman Vasily Molokov discussed the first aerial landing at the North Pole in war-like terms. The group of aviators undertook a "heroic onslaught on the North Pole", until they "were crowned", via

88 Ibid, 29-30.

89 V. Molokov, *Soviet Civil Aviation* (Moscow: Foreign Languages Publishing House, 1939), 10.

90 Official pamphlet for Soviet Pavilion, *Union of Soviet Socialist Republics. New York World's Fair 1939*, [1939], collection of Dr. Alison Rowley.

landing at the Pole, "consolidating their victory over the [area]."91 Pilots were made into active figures in the same way as the heroes of folklore, like knights or *bogatyrs* of medieval Russia who had fought for the sake of their liege lord and exhibited the strength needed to accomplish their task.

The movement of aviators was equivalent to the conquering of the space, but the touch of the aviators had to be mastered if such a conquest was to occur. Visitors to the Fair were reminded in written form that the aviator Kokkinaki "did not wear any special suit for high-altitude flying, nor was the airplane equipped [with] a hermetically-sealed cockpit" during his record-breaking 14,575 meter high flight in 1935.92 Kokkinaki further insisted upon an aviator's abilities to overcome the elements when discussing his failed flight from the Soviet Union to the 1939 Fair; in interviews on the subject, Kokkinaki mentioned resting through freezing conditions and piloting the plane with slowly freezing hands and feet, the latter not leading to frostbite thanks to Soviet-produced flying suits.93 Through Soviet equipment and the ability of the Soviet aviators, the cold that accompanied high-altitude flight could be overcome and amazing feats achieved. Polina Osipenko, one of the most famous Soviet female pilots, spoke of the cooler temperatures of higher altitude in a similar fashion to Kokkinaki. In her account, Osipenko mentioned that one of her fellow pilots, Marina Raskova, had feet that were frost-bitten from having spent the entire night in the ice-covered cockpit during their record flight across the Soviet Far East, yet she "took off her fur-lined boots and covered the transformer" when

91 Molokov, *Soviet Civil Aviation*, 21.

92 M. Vodopyanov, *Outstanding Flights by Soviet Airmen* (Moscow: Foreign Languages Publishing House, 1939), 13.

93 *The USSR at the World's Fair 1939: Facts about the Land of Soviets,* (New York: S.R.T. Publications, 1939), 69-70.

communication with Moscow threatened to be cut-off by increased ice-build up.94 The need to hear Moscow was prioritized over the haptic feelings of the flight crew, making it seem that they were capable of overcoming the feeling of the cold for the sake of Soviet success and remaining a part of the larger collective.

The Arctic was also presented as something to be conquered physically by aviators and scientists alike. Planes, and those who controlled them, were meant to render the north into a chartered landscape, making it both knowable and distinctly Soviet. Mikhail Gromov, who flew equipment to help establish a scientific ice floe station at the North Pole in 1937, spoke of the placement of the station as a testimony "to the successful conquest of a region of the globe which perhaps offers more difficulty to flying than any other."95 In the Soviet imagination, the North was often presented as an inhospitable landscape, where explorers had to overcome "the grim trail over the rugged ice" but often only found "an icy grave in its boundless wastes".96 During the late imperial period, modernizers and Marxists viewed nature as an instigator of Russian stagnation. The Soviets came to view nature under similar, though less malevolent terms. The "struggle with the elements" (*bor'ba so stikhiei*) became a prominent leitmotif in Soviet culture during the First Five-Year Plan and, while losing some of its momentum after 1932, the concept still maintained its presence in Soviet media for the remainder of the 1930s.97 The landing of

94 Paulina Ossipenko, *The Soviet Far East*, (Moscow: Foreign Languages Publishing House, 1939), 26.

95 Mikhail Gromov, *Across the North Pole to America*, (Moscow: Foreign Languages Publishing House, 1939), 6.

96 Ivan Papanin, *The Soviet Wintering Station on the Drifting Ice*, (Moscow: Foreign Languages Publishing House, 1939), 7.

97 John McCannon, *Red Arctic: Polar Exploration and the Myth of the North in the Soviet Union, 1932-1939* (New York: Oxford University Press, 1998), 82-83.

planes at the North Pole was a feat that “exploded the theories held by the majority of Polar explorers” that it was impossible to land so far north. It served to complete a long quest into the territory – one that had started in the 1890s but had never gone as far or been as sustained.98 A common theme in Soviet propaganda pieces at the Fair that discussed this triumph was the ability to conquer the ‘unevenness’ of the Polar landscape, or in other words, to treat the uncontrolled as controllable. The Soviets assured Fair visitors that the Arctic space, flown over first by the Soviets and then further explored by them, belonged and was best survived by the Soviets as well.

The Arctic frontier had had its own heralded set of heroes and its own mythologized adventures within the Soviet Press. Under the First Five-Year Plan, Siberia and the Arctic region became a focus for economic development. As put by historian John McCannon, the Soviets began to see "the Northern Sea Route as the key to unlocking the material potential of Siberia and the Arctic".99 Just as much as it became a region of industrial interest, so too was science considered a crucial element of Arctic development. *Glavsevmorput*, the government agency that oversaw the administration of the Northern Sea Route, saw science as necessary to the development of industry, since science would help gain 'physical mastery' over the landscape in addition to encourage rapid economic development.100

Polar stations were presented to the Soviet public as the "foreposts of Soviet civilization", state-of-the-art facilities filled with the USSR's most educated people as well as those suited to

98 Papanin, *The Soviet Wintering Station*, 10.

99 McCannon, *Red Arctic*, 33.

100 Ibid, 42. Scientific research was necessary to answer key questions about Arctic features such as weather conditions, ice pattern formation and how permafrost would interact with engineering.

cope with the harsh environment.101 The Arctic was an important component of the Stalinist era mythos and was often presented, alongside Arctic explorers and Arctic exploits, in the cultural ephemera of the period. One figure who was prominent in these accounts was the scientist Ivan Papanin. Papanin was one of the better recognized members of *Glavsevmorput* and the leader of the Soviet science station at the North Pole in 1937. Papanin went on to head the agency in 1939, but only after he had made a reputation for himself as a Hero of the Soviet Union for his efforts in the Arctic. The Papanite research group, consisting of Ernst Krenkel, Pytor Shirshov, Yevgeny Fedorov and Papanin himself, established and maintained the first research base at the North Pole, *North Pole-1*, from May 1937 to February 1938. While others had reached the pole before them, the Soviet expedition was unique not only because it established a base there, but because it was the first expedition to reach the pole by air and involve landing aircraft there.102 On June 6th, a week after the landing, a ceremony commemorating the official opening of the research station was held; it included the raising of flags over the spot marking the Pole and a rifle salute.103 After participating in the set-up of the Polar station and leaving the base, Otto Shmidt, the head of *Glavsevmorput* throughout most of the 1930s, claimed that "today we bid farewell to the Pole—a warm farewell, for the North Pole has proved for us not terrible, but hospitable and friendly, as if it had been waiting for ages to greet the Soviets, its true masters."104

101 McCannon, *Red Arctic*, 46.

102 Ibid, 73-74.

103 Ibid, 76.

104 Lazar K. Brontman, *On the Top of the World* (London: Victor Gollancz, 1938), 182.

Figure 2.2. North-Pole 1 Team Raising Flag at Ice Floe Research Station (From the Collection of Dr. Alison Rowley)

A pamphlet about the ice-floe station was written by Papanin for the 1939 World's Fair, and it discussed the activities of his scientists as well as the conditions the Papanites dealt with at the Pole. Toward the end of the text, an image of Soviet victory was established by showing the final raising of the Soviet flag before the closing of the drifting station, an effective testament to Soviet triumph where no one else had succeeded before.105 As the Americans would do on the moon in 1969, the Soviets staked a claim to the North Pole by leaving a standard and then disseminating an image of that triumph to an international audience - i.e. Fair-goers - who would be assured of the Soviet claim.

Similar flag-oriented iconography was used in Soviet postcards and stamps throughout the 1930s. Images typically consisted of heroes of the Soviet Union who accomplished Arctic or

105 Papanin, *The Soviet Wintering Station,* 23.

aviation-related feats being shown alongside an image of a flag bearing Stalin's profile or an official flag of the Soviet Union. These ephemera placed the Arctic and the flag that signified its conquest at the centre, as much a point of celebration as the Soviet individuals and accomplishments on display. Papanin's image brought that iconography to the World's Fair audience, turning Arctic space into one that could only be conquered, and whose atmospheric elements could only be overcome, by Soviet heroes.

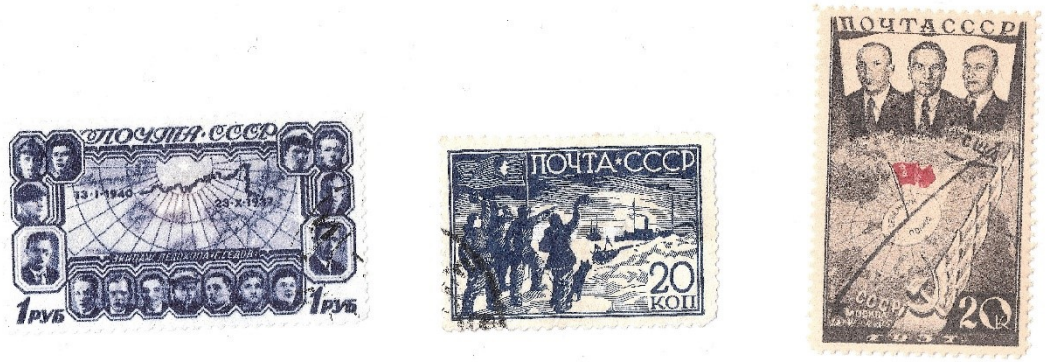

Figure 2.3 Postage Stamps from 1937 celebrating Soviet efforts in the Arctic (Collection of Dr. Alison Rowley)

Figure 2.4 Postcard "Heroes of the Soviet Union – Conquerors of the North Pole" (Collection of Dr. Alison Rowley)

Figure 2.5 Postcard celebrating transpolar flight from Moscow, USSR to San Jacinto, USA, featuring Mikhail Gromov, Andrei Yumashev and Sergei Danilin (Collection of Dr. Alison Rowley)

The Soviet expeditions to the Arctic during the late 1930s were given their own designated pavilion at the Fair and presented a unique understanding of 'Soviet' space. Within the Arctic pavilion, the equipment used by Papanin's team on the ice floe was displayed, amongst other items celebrating Arctic expeditions. Interestingly, as seen from images of the interior of the pavilion, the equipment therein was not all scientific. Furs were placed alongside replicas of the radio station and other testing equipment, creating a spectrum of Soviet production that put clothing, and a sense of warmth, on the same level as scientific progress. Some of this may have been done in accordance with changes to general pavilion design that the Soviet Union had embarked on since 1937. While production and trade had not been central concerns at the 1937

Paris Exhibition, Soviet-produced goods had still been prominently displayed.106 In New York, the Soviets wanted to streamline their pavilions and humanize their endeavours by focusing less on the trade elements. The muted way the furs were included in 1939 may have been a by-product of such a consideration, an attempt to show Soviet goods while also not emphasizing them, but that does not explain their appearance in other Fair ephemera. Pamphlets discussing the Arctic expeditions that were distributed at the Fair placed an emphasis on the quality and usefulness of such furs, and thus recreated the haptic sensorium of an Arctic explorer. Yevgeny Fyodorov, another member of the *North-Pole 1* team, wrote in his account that Soviet furs "won recognition on the ice floe", keeping "legs and feet as warm as toast" or "comfortable enough to walk in" when their research forced Papanin's crew to sit for hours in freezing climes.107 Such praise demonstrated how the strength of Soviet products and the power of Soviet people rendered the Arctic hospitable. The pavilion reasserted that the Arctic was now a habitable part of Soviet space.

Nor was touch the only sense evoked in World's Fair ephemera, for the sense of sight often mixed with touch, creating a vision of the boundaries of Soviet 'space' and the Soviet landscape. Polina Osipenko noted in her pamphlet 'The Soviet Far East" that "the further away the earth receded beneath our feet the more schematic became its design, the more it resembled the map we have so carefully studied before our flight."108 During flight, the landscape was reduced to something that the hands could replicate – a map drawn by a human hand rather than

106 Anthony Swift, "The Soviet Union at the 20th-Century World's Fairs," *World History Connected,* October 2016, accessed November 23 2018, http://worldhistoryconnected.press.uillinois.edu/13.3/forum_01_swift.html.

107 Papanin, *The Soviet Wintering Station*, 27-28.

108 Ossipenko, *The Soviet Far East*, 8.

a landscape seen by the human eye. The language used in reference to flight often turned maps into an embodiment of space that was both an abstraction and something humanly created. Mikhail Gromov spoke of his early flights across the North Pole in similar terms, as a "reconnoitering the ice and tracing the movement of fur animals" – his plane effectively recreating the path of those who walked underneath by dint of observation, and thereby creating an understanding that is both still and moving.109

The mapping of the flown-over and traveled-over Soviet landscape found several manifestations within the Soviet pavilion. A similar approach to sight occurred on the plane placed in front of the Arctic pavilion, which had been used for the 1937 transpolar flight from Moscow to Vancouver, Washington undertaken by Valery Chkalov and two other pilots. On the plane's tail a map of the historic route was painted; it replicated the journey the craft took through space, acting as a figurative schematic of the landmass Chkalov and his fellows covered. Painted only after the record-breaking flight, it turned the flown-over landscape into something replicable. It was as if the flight above the land had left a tangible, haptic mark on the place as well as the pilot. Moreover, the map put Chkalov's flight into visual terms for people who could connect it with the artifact on display. In the Arctic pavilion proper, an illuminated map documenting Valery Chkalov, Mikhail Gromov and Kokkinaki's flights from Moscow to America, as well as the route of Ivan Papanin's ice floe station, stared down at visitors from the ceiling.110 The record setting distances covered by Soviets were documented for the whole world to see.

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109 Gromov, *Across the North Pole*, 6.

110 New York World's Fair, *Union of Soviet Socialist Republics – New York World's Fair 1939* (Moscow, 1939), 11.

The map also established a center-periphery dynamic between Moscow and the Arctic. As put by historian John McCannon, the Arctic was considered a blank slate onto which the Soviets could inscribe their visions of the future. The socialist-realist mythos that arose from that vision created a cultural geography that placed Moscow as the state's physical and spiritual center with the Arctic as the "essential elsewhere".111 Other contemporaneous Soviet ephemera echoed that conquering narrative. A postcard celebrating the Soviet arrival at the North Pole, entitled "Heroes of the Soviet Union in the Arctic", showed the expedition's initial trajectory and directly linked Moscow to a North Pole that bore a flag with Stalin's image. The image functioned similarly to the Pavilion's, demonstrating the ability of Soviet bodies to conquer space while connecting it to the Soviet center.

Other maps in the main pavilion similarly traced the visual evolution of Soviet space. One map, originally used at the Paris exhibition two years earlier, showed the steady progression of electric lines being laid across the country. Covered in precious stones and lit up by neon lights, it was designed to catching the eye through sparkle and light. The map itself was meant to put Lenin's comment that "communism is Soviet government plus electrification of the whole country, since industry cannot develop without electrification" into context.112 In the 1939 version, the map showed not only the emerging electric grid, but the Lenin-predicted development of industry which resulted from it under the First and Second Five-Year Plans. Such a physical representation suggested that Stalin's economic efforts were a natural successor

111 McCannon, *Red Arctic*, 89-90.

112 Vladimir Lenin, "Our Foreign and Domestic Position and Party Tasks", Speech delivered to the Moscow Gubernia Conference of the R.C.P.(B.), November 17th, 1920, *Marxists Internet Archive*, accessed May 5th, 2019, https://www.marxists.org/archive/lenin/works/1920/nov/21.htm.

to initial Lenin's electrification plan. Such sentiments were similarly echoed in pamphlets that discussed new Soviet cities, where Soviet capitals, like Alma-Ata in the Kazakh Soviet Republic, that once had "dark, tortuous streets […] ha[d] given place to asphalted avenues, brightly lit with electricity."113 Additionally, a handful of other maps graced the interior of the main pavilion and showed the Soviet Union's changing spaces. One in the Hall of Socialist City Planning showed the widening of boulevards and new streets as well as other projected changes to Moscow. In the Hall of Transportation and Electric Power, a map of the waterways of the USSR was made so that rivers, canals, reservoirs and lakes appeared "[in] gleaming white metal."114 These various representations fit with a popular conception in the Soviet Union at the time – that modernization was visually tied to the conquering of a geographic landscape.

Interestingly, the gaze and touch of Stalin found a place in many of the Fair's stories involving aviation. Throughout the 1930s, published statements by aviators and flight organizers had turned the leader into the grand master behind aviation feats, claiming that he was personally involved in planning routes, making various logistical preparations, and giving warnings against risks.115 Polina Osipenko's account of the crash of the *Rodina* in the Far East goes even further; as she writes, "the government, and Stalin personally, gave their unflagging attention to the search." The eyes of the leader, as well as those of the entire nation, were turned to the Far East, while the three women were missing.116 In these narratives, Stalin became an important

113 I. Golossov, *Soviet Cities New and Renewed* (Moscow: Foreign Languages Publishing House, 1939), 13.

114 *The USSR at the World's Fair 1939*, 66.

115 Bailes, "Technology and Legitimacy," 60-61.

116 Ossipenko, *The Soviet Far East*, 37.

talisman to unite the disparate Soviet population and give them a single cultural space – in this case, one which celebrated Stalin as a leader. Osipenko again alludes to the centrality of Stalin when discussing the indigenous groups that she and her fellow aviators encountered. "Everywhere you hear of him in song and poetry", Osipenko wrote, "the best mines, factories, school, clubs and theatres are named after him. He is constantly referred to as teacher, friend and guide."117

With Soviet aviator prestige rising at the same time as the infamous purges, Stalin's depicted warmth clearly offered an alternative narrative to the show trials and arrests of the period which so dominated the news cycle from the middle of 1937. In May 1937, when the first plane landed at the North Pole, the event "virtually monopolized Soviet media in a way similar to the dramatic launching of the first Soviet Sputnik", as historian Kendall Bailes noted.118 A radio broadcast that day celebrated Stalin in terms that made him appear warm: "We gathered under an open sky but we didn't feel the cold, wrapped as we are in the glowing words pulsating with the concern of the great Stalin."119 In this instance, sound and touch were combined – the voice of Stalin had the ability to be heard as well as evoke a haptic sensation within the listener.

The sound and instructions of Moscow, and the government that rested there, were a repeating theme in the pamphlets distributed in New York, and an essential part of any Soviet explorer's mission. Radio signals from Moscow were treated as beacons of civilization in written accounts by scientists and aviators alike. Moscow was a touchstone, auditorily, for the groups

117 Ibid, 41.

118 Bailes, "Technology and Legitimacy," 63.

119 A. Y. Yegorov and V. P. Kliucharev, *Grazhdanskaia aviatsiia SSSR* (Moscow, 1937), quoted in Bailes, "Technology and Legitimacy", 63.

who traveled outside its boundaries. To give but one example, Gromov, when describing his trip across the Arctic, frequently mentioned how the flight to San Jacinto, California was coloured by contact with the Soviet centre and with other Soviet communication hubs. While blind to the world below, Gromov and his fellow pilots were able to keep their course via radio signals coming through from Rudolph Island.120 The final loss of contact with Moscow was treated with great importance by Gromov: "While over Canadian territory, we heard for the last time the signals of the Moscow radio station that had been maintaining contact with our plane."121 His comments were echoed by Ivan Papanin when he referred to the ice floe station's radio; Papanin's team members "thought the world of [their] little radio station" because it "kept [us] in touch with our country."122 Simply put, communication with the center tied one to Soviet civilization.

While explorers were tracked and guided by these signals, the sounds of Moscow were not one-sided. Communications from the scientists on the ice floe were considered vital for other Soviet successes. Mikhail Vodopyanov, who helped bring supplies to the ice floe and was a famous pilot in his own right, hailed the station as having "raised the semaphore and signalled all's clear on the Transarctic Route from the U.S.S.R. to the U.S.A."123 Those on the floe knew the importance of their work as well, assuring Fair-goers in writing that they were expected to offer useful information to the Soviet people. Papanin emphasized that the researchers supplied weather reports for potential transpolar flights at least four times a day. Additionally, the

120 Gromov, *Across the North Pole to America*, 25.

121 Ibid, 28.

122 Papanin, *The Soviet Wintering Station*, 26.

123 Vodopyanov, *Outstanding Flights by Soviet Airmen*, 23.

researchers treated this sending of information not as work for the government, but as a service for the whole Soviet people: “as far as possible we supplied information for the Soviet public, which was tremendously interested in our work, transmitting over 75,000 words in nine months.”124 The emphasis on communication well reflects the Soviet belief, as put forth by other scholars, on the place of speaking and communication in Soviet society.125 The ability to communicate with the public, for Papanin and other scientists, was a necessity if their research was to benefit the wider Soviet collective. Participation was as important as guided listening.

The importance of contact with Moscow in everyday life was also underscored. In teaching the American public about developments in Eastern Russia, Polina Osipenko emphasized that even the most remote hamlet on the taiga had the means to communicate swiftly with Moscow by both telegram and wireless.126 Such development was tied to economic expansion, or in Osipenko’s words, “the expansion of the raw material and manufacturing industries”, because such development “necessitate[d] the expansion and perfection of communication systems” in order to unite the Soviet people into one economic machine.127 Thus, modern technologies of sound served to link the entire population as the nation continued on its path to industrialization.

Taste was also presented to fair-goers as both a marker of the Soviet Union’s new affluence and a sign of the advanced senses of the new Soviet citizen. Generally, Soviet food at the World’s Fair attempted to not only rely on traditional Russian flavours, but also put forth the

124 Papanin, *The Soviet Wintering Station*, 26.

125 Lovell, "Broadcasting Bolshevik", 602-606.

126 Ossipenko, *The Soviet Far East,* 44.

127 Ibid.

idea that contemporary Soviet cuisine was affluent. Caviar, wines and high-quality vodka were put alongside traditional dishes like borscht and shashlik. The tastes and textures found in flight, however, were not meant to replicate the richness of the 'common' palette. In an interview for a Soviet-sympathetic magazine, aviator Vladimir Kokkinaki spoke at length about how taste was affected by flight, and how Soviet scientists attempted to handle such measures: "At a great height, all taste senses become sharpened and in addition the need for food also increases, only it must be food that will refresh the mouth but not be sweet at the same time – in such an altitude, sweet things are cloying."128 Thus overly sweet and salty flavours had to be avoided, as the taste buds were more attuned. Yet, Soviet scientists were less capable in assessing what would not bother the taste-buds than the aviators. While Kokkinaki then claimed that "judging from the experience of my flights, I say that we have […] solved the food preparation for long flights", he goes on to make several comments that contradict this assertion. Within their scientist-prepared food rations, marmalade is included but considered an inappropriate choice – "Strange – a person is hungry and he is offered jam!". Apples and other denser foods, like meats, froze at high altitudes, making it necessary to find some way to thaw them. Finally, coffee, which had been prepared before the trip, was also over sweetened by nutrition-focused scientists on the ground, aggravating the heightened sensitivity to taste.129 Kokkinaki's comments suggest that taste in flight was a sense in transition in the Soviet mindset, one which the pilots themselves had a better mastery of than their scientific counterparts.

128 *The USSR at the World's Fair 1939*, 24

129 Ibid.

It should also be noted that aviators and explorers, those Soviets who had 'mastered the machine' and themselves, were turned into models of the ideal Soviet citizen within the artistic narrative of the main Soviet pavilion. It is telling that aviators stood amongst other Soviet heroes of production in the largest mural in the exhibit, the "Outstanding People of the Land of the Soviets", which greeted visitors as they entered the building. Representations of people like Chkalov (who had been killed in an accident before the Fair opened) were placed alongside Stakhanovites and other prominent figures in a group demonstrating Soviet progress through a forward march. The artist in charge of that particular mural, Vassily P. Yefanov, believed that, by arranging people into 'natural' groups, the Soviet Union's democracy was put on display, showcasing how scientists, workers, flyers, students and peasants were of equal standing and comrades under communism.130 Before this floor-to-ceiling mural red marble statues of both Lenin and Stalin were placed, thereby showcasing how the leaders of the party were both one with the Soviet people while also leading them. Murals in the pavilion were meant to be engrossing representations of space, acting as a window that transported the viewer visually to the Soviet Union. Visitors to the exhibit mentioned that the mural "overwhelmed the spectator as [they] first enter the pavilion with an avalanche of light and colour", in which one does get the sense of "being greeted by a happy, hospitable, democratic folk, by thousands of them."131 Corliss Lamont, for one, described it as if the "fifty leading figures of the USSR [were] walking forward and emerging from the crowd of people in the background."132

130 *The USSR at the World's Fair 1939*, 72.

131 Ibid.

132 Ibid, 30.

Another mural in the Hall of Unity and Friendship of the Soviet Peoples drew similar attention, but integrated aviators in a more explicit way. The panorama, extending 265 feet and two stories high, was a collective work that was meant to display the unity and friendship of the many Soviet peoples. Most importantly, the official pamphlets the Soviets produced for the pavilion made a point of highlighting that "the background is a vast landscape of the whole Soviet Union showing its natural features and the constructions of man, new and old cities, industrial centers […] across the sky fly squadrons of planes." While the people in the foreground were meant to be representative of everyday citizens, those on the edges of the crowd were from the ranks of the Red Army; they were soldiers and sailors as well as aviators who were seen as "defenders of the peaceful toil of the land of Socialism." In a similar vein to the portrait that greeted visitors, the pilots in this gargantuan painting were part of a landscape that the viewer was being visually displaced into, entering the scene by virtue of its overwhelming size. Greer Crowley explained this phenomenon in relation to museum spaces wherein exhibits can be constructed into specific scenes, directing visitors to focus on particular objects and narratives. As Crowley states, exhibit spaces are often "almost totally enclosed, enabling the spectator to focus on the object in a controlled, staged environment. […]. A certain expectation is created in the spectator by the framing of the spectacle and the act of looking becomes performative. In these installations, the spectator becomes explorer, flanêur, actor, director, performer, witness."133 In effect, the Soviets took up this staged appearance in their own exhibits, thereby immersing visitors in the scenes they were setting forth. The aviators, therefore,

133 Greer Crowley, "Staging Exhibitions: Atmospheres of Imagination," in *Museum Making: Narratives, Architectures Exhibitions* (London: Routledge, 2012), 14-16.

were not just objects of scrutiny but actors who could affect the lives of viewers in the same fashion as they 'defended' the Soviet people.

Finally, a metaphor for real Soviet spaces was also present in another element of the 1939 World's Fair pavilion: its physical structure. The semi-circular structure of the pavilion reflected their centre-periphery understanding of Soviet space. On the outside walls of the pavilion, tall pilasters divided the façade into eleven sections were ornamented by large bas relief panels. Each panel contained a seal of a republic of the USSR, surrounded by symbols and people representative of those areas. To paraphrase Herman A. Tikhorminov, the commissioner of the USSR to the New York World's Fair, the pavilion was made up of two 'wings' that surrounded a central court, in the middle of which was the pylon bearing the sculpture of the Soviet worker holding a Kremlin red star to the heavens.134 In effect, the pavilion imitated the centre and peripheries of actual Soviet space, with representations of the republics along the edges and the star of the Kremlin and the seal of the Union, identifying both Moscow and Soviet Russia, located at the centre. The structure of the pavilion not only outlined Soviet space for visitors, but also put the new Soviet individual at its center, holding aloft a symbol of the Soviet government. The figure was, according to its sculptor, a "typical man of the Soviet epoch", born with the revolution, who "looks forward […] [seeing] the road leading to the happiness of all mankind."135

In conclusion, the written ephemera and structure of the Soviet pavilion reflected changing understandings of space and the mastery of the ideal Soviet person over said space

134 *The USSR at the World's Fair 1939*, 20.

135 Ibid*,* 72.

under Stalin. Visitors to the Fair encountered a Soviet narrative that not only spoke about the expanding Soviet presence in regions like the Arctic and Far East, but of the Soviet heroes who linked these peripheral spaces to the proverbial centre. Within the exhibits, aviators and explorers were portrayed as leaders of the Soviet people, masters of air and land who had the superior senses needed to overcome the challenges contained within these hostile locations. The unknown and impossible could be mastered by the disciplined individuals "manning the machines" created by a developing Soviet Union. However, the individual feats accomplished by these idealized Soviet citizens could also be replicated through the efforts of the Soviet people *en masse*. The Moscow metro, amongst other projects displayed at the Fair, was an example of the power of conjoined Soviet efforts, as well as a representation of the modernization of Soviet spaces. Not only were the Soviets demonstrating their expansion at the New York Worlds' Fair, as we have seen most notably through their use of maps, but they were showcasing the new forms of modernization made possible through this expansion. The new Soviet person – symbolized by the statue of the worker holding a Kremlin star – was at the centre of this new narrative of progress and growth.

Chapter 3: Moving into the Cosmos

> "The [1958] Soviet pavilion seems to be saying: 'See how far we have come and look what we can do." – *New York Times*, 1958, 136

In October 1957, the world was introduced to the sound of Sputnik, a 58-centimeter metal ball with four external radio antennae. The first man-made satellite to be sent into orbit, Sputnik I was both a triumph for Soviet science and the starting shot in a technological race between two global superpowers. Its signal was heard around the world, making Sputnik I a cultural as well as a scientific icon within both the Soviet community and globally. Interestingly, on April 17th, 1958, six months after its launch, Sputnik I was given a human voice as well. Printed in the inaugural issue of the Brussels' Fair newspaper *Sputnik*, the story of 'Beep Beep' was delivered to the Fair-going public. "Any newborn tells the world of its existence with a cry," the issue explained. "I conformed to this tradition and hardly had I appeared, when I cried 'beep beep.' The entire planet heard my voice. What is the secret of my popularity? I serve humanity and progress..." The newspaper had anthropomorphized the sound (radio beep) sent out by the first Sputnik on its voyage and made it a 'person' that served human progress. This limited issue newspaper was created specifically for the USSR pavilion at the Brussels' World's Fair. Brussels was a venue concerned with 'the transformation of space and the communication of information while manipulating the emotional response of spectators-occupants;" in other words, the Brussels' fair was the ideal battleground Cold War era ideologies.137 Culture and political power had greatly shifted in the Soviet Union since the 1930s, and the Fair reflected some of these new sensibilities. Most

136 Walter H. Waggoner, "Soviet's Pavilion Emphasizes Gains: Sputnik Given Prominence at Brussels Fair", *New York Times* (New York City, NY), April 14, 1958.

137 Siegelbaum, "Sputnik goes to Brussels," 178.

importantly, it captured a sensory moment in transition, one without distinct cultural heroes but that exalted the machine. Part product exhibition and part scientific celebration, the 1958 Soviet pavilion portrayed the essence of the Soviet self in Soviet technology and heralded the imminent spatial ascendency of the Soviet people.

The 1958 Brussels International Exhibition was an opportunity to re-envision World's Fairs. It was the first *exhibition universel* organized since the 1939 Fair in New York City, and the international circumstances, and the style of global encounter, had changed. Organized around the theme of "A Balance Sheet for a More Human World", the Fair was devoted to presenting the knowledge of an epoch that had seen recovery from a devastating war and the introduction of nuclear warfare. Particularly for the latter, Brussels was meant to be a meeting place away from the threat of nuclear devastation, in which the atom could be reinvented and the activities of contemporary man drawn into focus. While cultural achievements had been central to the pre-war Fair, cooperation and reinvention were the goal of the first largescale international post-war encounter. Yet, despite this desire to encourage cooperation, the Fair's organizers utilized the tension between the world's superpowers to foster interest and international investment. While not necessarily meant to encourage direct competition, both powers viewed it that way. As Brigitte Schroeder-Gudehus and David Cloutier have noted in their research, "the Belgian organizers kept the American government abreast of Soviet plans as one of several stratagems intended to lure the United States to attend the exposition".138 The Soviet planning committee believed the Belgian organizers wanted to use the Exhibition as a chance to show the

138 Brigitte Schorder-Gudehas and David Cloutier, "Popularizing science and technology during the cold war: Brussels 1958" in *Fair Representations: World's Fairs in the Modern World*, eds. R.W. Rydell and N. Gwinn (Amsterdam, V.U. University Press, 1994), 169.

advantages of the capitalist order over the socialist one and that a real “Bolshevik struggle” was necessary to counteract that impression. The Americans similarly saw the fair as a confrontational ground between socialism and capitalism.139 Going into the Fair then, both superpowers saw the other as the main cultural contender and sought to organize their exhibitions in juxtaposition to one another.

Planning for the Soviet pavilion began in June 1956. The initial phase determined the architectural design, chosen by competition, for the pavilion and coordinating with the commissars from the Soviet bloc countries. The aluminum and glass pavilion structure was designed by a team of young Moscow-based architects.140 Parallelepiped, 72 feet high and built of steel, aluminum and glass, the 1958 pavilion was a different creature from its 1939 predecessor. It was one of the simplest designs put forth, not meant to "perform extravagant tricks" but a space that was simple, clear and fit for competition.141 Inner displays tended to be "straightforwardly factual, showing concrete technical and scientific achievements".142 The pavilion was to consist of four themes: "the USSR as a socialist, multi-national, peace-loving state; the achievements of industry, agriculture and transportation; the development of a socialist culture; and the growth of material well being".143 As Susan Reid points out, those involved in

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139 Susan E. Reid, "The Soviet Pavilion at Brussels '58”, 4.

140 Ibid, 24.

141 GARF f. 9470, op. 1, d. 22, ll. 39-40

142 Catherine Cooke and Susan E. Reid, “Modernity and Realism: Architectural Relations in the Cold War”, in *Russian Art and the West: A Century of Dialogue in Painting, Architecture, and the Decorative Arts,* Rosalind P. Blakesley and Susan E. Reid (eds), (Illinois, U.S.A.: Northern Illinois University Press, 2007), 189.

143 Siegelbaum, “Sputnik goes to Brussels”, 126.

the development and construction of the pavilions were uncoordinated and often at odds about the Fair's purpose.144 The All-Union Chamber of Commerce, headed by M.V. Nesterov, and the State Committee for Cultural Links with Foreign Countries, headed by Georgii A. Zhukov, were in charge of the overall exhibition's planning and were at the heart of the dilemma. The latter eventually won out, their vision of the Fair as a site for a cultural offensive overtaking the former's vision of a trade fair, though it only led to small changes to individual displays.145 Regardless, such an approach made it possible for the pavilion to eventually be reoriented to emphasize the cosmic events that were the Sputnik launches.

In 1958, the Soviets wove the competition to conquer space, and their successes in that area, into the hyper-idealized sense of self they exported to the Fair. By the opening of the Soviet pavilion that year, two Soviet satellites had flown in orbit and a third was fast approaching completion. The original plans for the first artificial satellite, known as Object D (*Ob'ekt D*), were for a 1.3-ton scientific observatory, meant to record various conditions in space and relay them back to earth during an intense year of solar activity.146 When delays bogged down the development of the satellite's instruments, designers Sergei Korolev and Mikhail Tikhonravov began looking at alternatives. As a potential solution, Tikhonravov suggested reducing the satellite's size and scientific components. Sergei Korolev, the satellite's head designer, simplified the design along these parameters to create the PS-I (*Prosteishyi sputnik-I*), which

144 Susan E. Reid, "The Soviet Pavilion at Brussels '58", 16.

145 Ibid, 17.

146 Asif A. Siddiqi*, The Red Rockets' Glare: Spaceflight and the Soviet Imagination, 1857-1957* (Cambridge, UK: Cambridge University Press, 2010), 334.

bore the spherical design and inner components that would become emblematic of Sputnik I.147 The launch was eventually set for October 1957, a date chosen to pre-empt the American satellite launch that was thought to be planned for the 1958 International Geophysical Year.148 Sputnik I shot into orbit on October 4th, circling the earth every ninety-five minutes for ninety days. The global response to the first satellite prompted Nikita Khrushchev to ask Korolev to launch another to celebrate the fortieth anniversary of the October Revolution the following month. On November 3rd, the Soviet Union launched Sputnik II, a larger satellite whose real innovation was a separate pressurized compartment that contained a dog and equipment to sustain it, demonstrating that it was possible to send living creatures into space and keep them alive. Object D would eventually return in the form of Sputnik III, which took flight in May 1958.149 These satellites launched the global media into a frenzy of both enthusiasm and fear, while they also positioned the Soviets as oriented toward the exploration of space. As put by Lyndon B. Johnson in January 1958, "the Roman Empire controlled the world because it could build roads. Later when men moved to the sea, the British Empire was dominant because it had ships. Now the Communists have established a foothold in space."150 The Soviets took this view to the fairgrounds.

147 These two men were the architects of the Soviet Satellite project. The latter had been involved in the early development of the Intercontinental Ballistic Missile and headed research team at the NII-4 institute to study possible ways to launch satellites and what to do once arrival was ensured. (Asif Siddiqi, *Red Rockets Glare*, 313.)

148 Ibid, 335-346.

149 Brian Harvey, *Race into Space: The Soviet Space Programme* (Chichester: E. Horwood, 1988), 33.

150 Ibid, 34.

The move toward space was not just a series of recent accomplishments, however, but presented as a continuation of a long, yet to be completed, scientific journey. As put by Asif Siddiqi, the "space program of the 1960s [can be] seen as both an outcome of the long and close relationship between socialism and science and technology and an expression of that association. The triangulation among socialism, science, and space served as scaffolding for a multiplicity of meanings and symbols to be ascribed to Soviet cosmic achievements."151 For the Soviets, the Russian mathematician and teacher Konstantin Tsiolkovskii was considered the grandfather of the Soviet space tradition and one of its principle actors. Tsiolkovskii's writings were presented as a native origin for the theoretical basis of space travel and he was deemed the first to determine that space flight was only possible with the aid of rockets. His 1903 essay, "Investigation of Cosmic Spaces by Reactive Devices" put forward a mathematical model that showed how rockets could viably propel objects into space and work in the vacuum of outer space to move them.152 Between 1911 and 1912, Tsiolkovskii also published a series of articles discussing several aspects of space exploration: life support systems and the food necessary to keep future explorers alive; the different kinds of propellants for rocket engines; and the mathematics of space travel were some examples.153 These works became more widely circulated during the 1930s, when the efforts of contemporaries helped raise him to national prominence for his writings on airships. Tsiolkovskii's works gained even more attention in the late 1940s, as spaceflight advocates took advantage of the post-war cultural campaign to

151 Asif A. Siddiqi, "Tsiolkovskii and the Invention of 'Russian Cosmism': Science, Mysticism, and the Conquest of Nature at the Birth of Soviet Space Exploration", in eds. Paul Betts and Stephen Smith, *Science, Religion and Communism in Cold War Europe* (London: Palgrave Macmillan, 2016), 129.

152 Siddiqi, *Red Rocket's Glare*, 26-27.

153 Ibid, 29-30.

repudiate foreign influences in Soviet culture and draw attention to Russian heritage.154 It was at this time that Soviets suggested that his written works had only found an audience due to the triumph of Bolshevism in Russia and it was this success that allowed his work to move past the barriers erected by elites under the Tsars and find avenues to reach the interested public.155 Tsiolkovkii helped establish a narrative that make spaceflight part of a Soviet continuum.

The Soviet Union wanted visitors to their pavilion to see that the Soviets had transcended the boundaries of the earth and had begun conquering the cosmos. They largely accomplished this through the design of their pavilion exhibits. In the main hall of the pavilion, a monolithic statue of Lenin was centered between soaring planes.

154 Ibid, 294-296.

155 One purported beneficiary of the writings and enthusiasm generated by the mathematician was Valentin Gushko, who went on to design the rocket engines for the first Sputnik. Asif Siddiqi, *The Red Rockets' Glare*, 57.

Figure 3.1 Statue of Lenin and Planes in Pavilion Center (From the Archives of Bobbie O. Britton with permission from Graeme Fernie)

Visually, the planes' upward trajectory led to the suspended model of Sputnik I, which let out a signal as if in mid-flight, just below which were the models of the other two Soviet satellites. The staging of these produced a visual narrative that reflected the Soviet understanding of their spatial and evolutionary past as well as their attempt to establish a Soviet imaginary space. As the Soviet Union's premiere symbol, Lenin being visually tied to the cosmic journey of airplane flight and the technology that put the Soviet Union into a new technological class, Sputnik, created a narrative that tied spaceflight to Soviet ideals. The new narrative suggested that the Khrushchev-era space race had attained the spatial heights initiated by the late imperial and early Soviet aviators. While some arguments could be made concerning the aesthetic quality of this installation, museologist Suzanne Mulder's posits that exposition and museum spaces, as staging grounds and narrative environments, seldom present objects as mere pieces of evidence, but rather as active agents serving a substantive narrative idea.156 Expos primarily differed from traditional trade shows because they gave life to the animate objects presented at them – in the past, such a meeting of objects was often used to give a rational order to the universe or educate a wider audience through presenting these goods in a context.157 While this contextualization was not the exact case in the 1958 Soviet pavilion, the objects and decorative displays utilized motifs of spacecraft to create an idea of Soviet ascension to the heavens. In effect, the heightened importance placed on these objects was the narrative of the exhibit.

156 Suzanne Mulder, "From Cathedrals to Disneyland: Archetypes of Narrative Space" in *Narrative Spaces: On the Art of Exhibiting*, ed. H. Kossmann et al. (Rotterdam: 010 Publishers, 2012), 140.

157 Ibid, 143-147.

The central exhibit of the Soviet pavilion was meant to help pull visitors into the 'space' of the Soviet Union and render its technological achievements digestible. The Sputniks, the concept for a future space station and Lenin were at the epicenter of the pavilion floor space. As seen in an official pamphlet for the Fair, the Soviet organizers put together the pavilion with the intent that visitors would move through that central section first, seeing the Sputniks and technological developments in industry and agriculture, before moving into sections dedicated to transport, leisure and sports, and education. Their position in the middle gave the illusion that everything else emanated from the models just as everything also lead up to them.

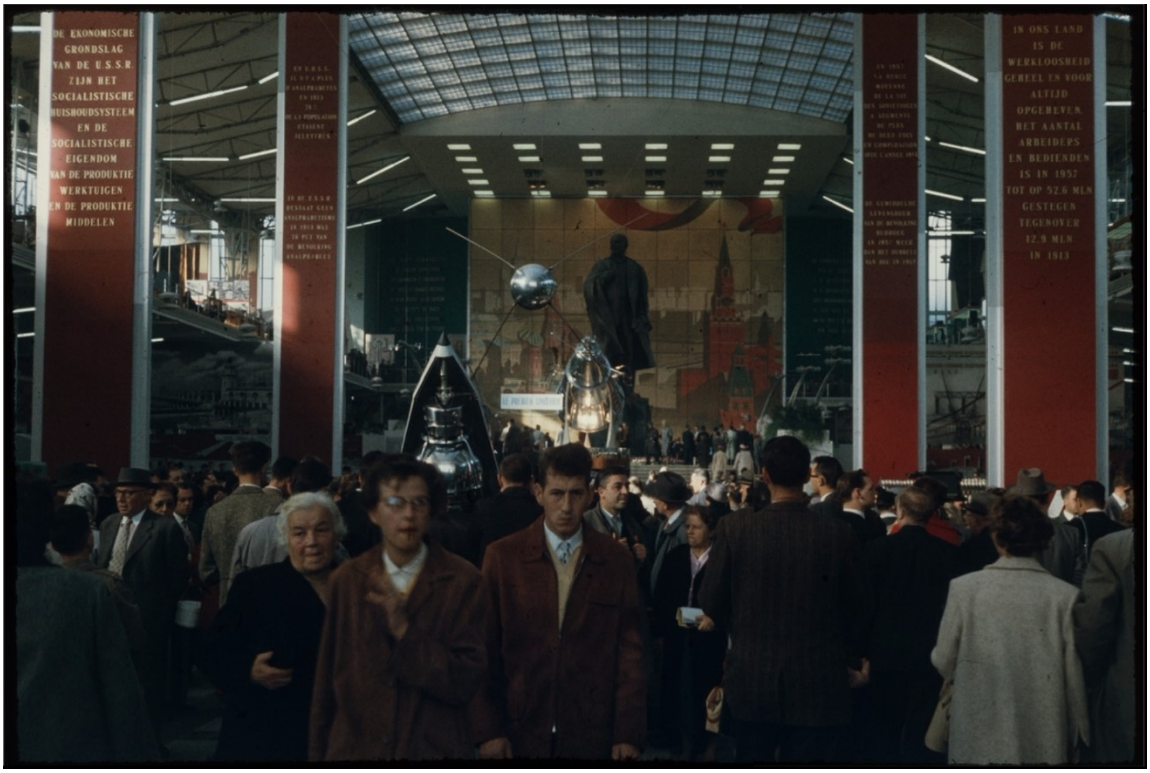

Figure 3.2 Inner Soviet Pavilion, From the entrance looking into the center with Sputniks (From the Archives of Nick Morozov)

Moreover, Lenin and the Sputniks were accessible regardless of a visitor's location in the pavilion. The efforts of the Soviet people, which bracketed the central hall in painted murals showing Soviet farmers and factory workers, and the efforts of the government, as symbolized

by the painting of the Kremlin at the back of the room, lent to this idea of transcendence. The Soviets, through design, created an imaginary continuum between the space reached by the Sputniks and the Soviet people – a new exhibition-promoted Soviet landscape. The Sputniks were a symbol of both Soviet ideals and progress. Vladimir Rodionov, assistant artistic director of the pavilion, made a similar connection when he stated that "the technical achievements that Sputnik embodies are the result of the great social struggle that the genius of Lenin advanced and led" and that such an achievement was due to the "comradely labor of thousands of factories and dozens of combines that enabled the Sputniks to fly at an unheard of speed and unseen heights".158

To further cement the connection between the symbolic transcendence of Soviet achievements and the realness of the Soviet people, Soviet organizers pushed for a tactile experience of the items found at the pavilion's center. As mentioned previously, Constance Classen notes in *The Museum of the Senses*, visitors to museum spaces respond to their environment in bodied ways, sometimes handling objects out of a desire for a connection with stories and people.159 People's "hunger for a sense of reality in connection with the men of the past, [can] only be satisfied by some material link."160 The Sputniks and Soviet machinery served as a relic, in this case, not of the past but of a triumphant present which needed to be felt to be believed. The Soviet organizers understood this desire – in effect they needed to show that the Soviet Union was something tangible – and saw Western audiences as needing to "feel and

158 Lewis Siegelbaum, "Sputnik Goes to Brussels", 178.

159 Constance Classen, *The Museum of the Senses: Experiencing Art and Collections* (London: Bloomsbury Academic, 2017), 1-3.

160 Ibid, 21-22.

look", in order to establish a material connection. A.T. Kuznetsov, one of the pavilion's planners, believed that "In the West […] thinking about generalization is primitive. They love to feel and look. This aspect has to be kept in mind" and being overly abstract must be avoided.161 Such a mindset might explain the facsimile of Sputnik II being placed close to the ground. Touching it like a relic connected each visitor with the idea of space and space travel. This device that had inspired panic among people in the West clearly also drew fascination.

The continuity between pre-Soviet interest in space and technological achievements under communism was also expressed in published writings at the 1958 Fair. One pamphlet, entitled "Facing the Cosmos", pictured and described aspects of the Sputnik program, including a diagram of the three-stage rocket and its orbit. On the cover, a quotation from Konstantin Tsiolkovskii read: "Man will not eternally remain on Earth: in pursuit of light and space he will venture at first timidly beyond the confines of the atmosphere, and thus conquer all space in the region of the Sun."162 Tsiolkovskii's vision of the future was being tied to a particular vision of a man of the future, and the man in question, as pictured on the cover, was the ideal Soviet worker. Depicted in the same socialist realist style as the statues and art found at the 1939 exhibit, the man of the cosmos was an idealized Soviet physically prepared for any challenge he encountered. With Sputnik 1, "man [had] penetrated the Cosmos" and "taken the first step toward the conquering of cosmic space", akin to the "subjugation of fire" and the "mastery of atomic

161 Quoted in Reid, "Cold War Cultural Transactions", 64.

162 Pamphlet, *Facing the Cosmos*, 1958, EXP 876.48c, Special Collections Research Center, Henry Madden Library, California State University, Fresno, California, United States of America, retrieved from Adams Matthew Digital, exhibition *World's Fairs: A Global History of Exhibitions*, http://www.worldsfairs.amdigital.co.uk/.

energy."163 The scientifically-minded Soviet man would lead on conquering the new cosmic frontier.

The language of conquering space, which was previously discussed in the 1939 pavilion regarding both Arctic and aerial space, clearly dominated the later Soviet presentation of cosmic feats as well. Interestingly, a sense of continuity with past achievements was also alluded to within the pamphlet, where the aviators of the past were connected to the travel attempts of the present:

> The ladder of human knowledge led step by step to the heavens. Men climbed high mountains and the sky seemed a little nearer. When they soared to the fringe of the atmosphere in aeroplanes and balloons they almost believed they were 'knocking on the roof of the sky'. […] Then meteorological rockets were launched to a height over 100 km. […] The first sputnik, called the 'baby moon' gained a height of 900 km.164

A link between past pilots and the sputniks is being explicitly drawn here, though the former is not necessarily Soviet. Such vagaries perhaps signify that the sputniks were being presented not just as a scientific triumph brought forth by Soviet efforts, but as a result of humanity's collective efforts, rendering a Soviet achievement into a global project. Of additional interest, however, is the use of the term 'baby moon' to refer to the first man-made satellite. Throughout the pamphlet, Sputnik I was made out to be a miniature of the larger natural feature, as if it was a natural cosmic phenomenon rather than a man-made construct. Images in Soviet pamphlets typically depicted the moon as the next step in the exploration of space, and thus the Sputnik-moon allusion potentially served to connect one current Soviet 'object' to a future one.

163 Ibid.

164 Ibid.

The anthropomorphization of the sputniks, as evidenced by the pavilion newspaper quoted at the beginning of this chapter, also represented a potential effort to create a hybrid Soviet being. Within the same “Facing the Cosmos” pamphlet that detailed the method used to launch them, a comparison between the first sputnik and its successor positioned the second as more ‘educated’. “In the language of radio,” the pamphlet wrote, “[Sputnik II] was able to tell us in far greater detail what it saw and how it felt.” The satellite containing Laika, therefore, was presented as a more robust sensory machine than its predecessor, not just recording more, but seeing and feeling more in ways that would inform Soviets on the future of human cosmonauts. The satellite could also speak, working with a language that allowed it to communicate to humans in an intelligible way. Speech and sound, therefore, was an important element of the iconography of the sputniks.

The auditory presence of Sputnik was enforced physically in the pavilion itself. Horace Sutton, a journalist for the *San Francisco Chronicle*, noted upon his visit that while looking at the replica of the first Sputnik, the "ears of the visitor are caressed with an incessant, urgent, almost foreboding beep-beep".165 While his description speaks to the Sputnik panic found among Americans after the satellite's flight, it also demonstrates the sort of 'living' presence Sputnik had within the pavilion space. Sputnik I’s primary ‘human’ ability was considered to be that of speech, which, while a result of its potential to be heard around the world, tied into Soviet concerns with sound as a predominant sense. After the October revolution, Soviet discussions about hearing and deafness embraced both Karl Marx’s “understanding of the individual as shaped by communication” and the idea that labour competence made one a member of the

165 Horace Sutton, “Brussels’ Eye Popper: The World Goes to a Grand Fair”, *San Francisco Chronicle*, April 27th, 1958.

Soviet body politic.166 Communication, therefore, was an important element of emerging Soviet identity, one necessary to become a fully-fledged member of society, but not a barrier to entry. The less articulate could dismiss their "backwardness" through proof education and hard work.167 Under Stalin, however, well-spoken language became an indicator of progress, with speech becoming a necessary part of conscious Soviet citizenship. In a 1951 *Pravda* article written by Stalin, he underlined that the deaf would be unable to join Soviet society, as their "having no language" would prevent them from mastering speech and render them "abnormal" in a society that needed communication to function. During Khrushchev's cultural thaw, sight was elevated to the same level as speech, though language was still an important concern. As historian Catriona Kelly has pointed out, Thaw-era Soviet sociolinguists became preoccupied with studying linguistic etiquettes and developing standards of "cultured speech".168 While the Fair occurred in 1958, the emphasis on the 'talking' done by Sputnik is telling about how the Soviets still viewed communication as essential to participation in their community, particularly if it contributed to scientific progress.

The Soviet press occasionally discussed Sputnik in 'human' terms as well. Two days after the first sputnik's launch in October 1957, *Komsomolskaia Pravda* ran an image on its front page that depicted the satellite with a headset and facial features speaking to a similarly

166 Claire Shaw, "Deafness and the Politics of Hearing" in *Russian History through the Senses: From 1700 to the Present*, eds. Tricia Starks and Matthew Romaniello (London: Bloomsbury Academic, 2016), 196.

167 Ibid, 196-197.

168 Catriona Kelly, *Refining Russia: Advice Literature, Polite Culture, and Gender from Catherine to Yeltsin* (Oxford: Oxford University Press, 2001), 334-336.

anthropomorphized earth, who was avidly listening.169 While it was a cartoon and meant to be satirical, it is relevant that the Soviets imbued the machine with the power of human speech. After the Fair, such anthropomorphisms would continue, particularly as the space race reached new heights and speculation about a moon mission entered the popular imagination. One graphic published in *Izvestia* on October 4th, 1959, two years after the launch of the first sputnik, contained a chain of anthropomorphized Soviet satellites – starting with the first sputnik at the bottom and ending with the Luna 3 – with each satellite pushing the subsequent one, with fully humanoid hands, towards the moon.170 The goal of reaching the moon would be a collective effort, in other words, bolstered by the works of previous iterations of the Soviet satellites, much like how the "success [of the first earth satellite] is unthinkable for separate isolated branches of [Soviet] science and technology".171

However, the seamless link that the Soviet pavilion, and media, attempted to create between Soviet technological innovation and state intervention was more an adopted stance than a reality. The announced International Geophysical Year was an important impetus for the development of the first Soviet satellite. In 1952, the International Council of Scientific Unions decided to establish the International Geophysical Year (IGY), scheduling it from July 1957 to December 1958. The IGY was an international program with the goal of studying the earth and its upper atmosphere during a predicted period of intense solar activity. The 18-month event had

169 Michael Khodarkovsky, "'Look Up! Sputnik!' 60 Years Later", *New York Times*, Oct 3, 2017, Accessed December 11, 2018, https://www.nytimes.com/2017/10/03/opinion/sputnik-cold-war-space-race.html.

170 "Long Strides", *Izvestiia*, October 4 1959, Accessed December 11 2018, http://sputnik.tass.com/sputnik_one/.

171 A. Topchiyev, "Great Victory of Soviet Science", *Pravda,* October 16, 1958.

been inspired by past international polar years, which had spanned from 1882-1883 and 1932-1933, and were focused on international research collaborations to increase knowledge of the Polar Regions and electrical geophysics.172 However, the IGY proved to be a source of contention rather than collaboration. For both the Soviets and the Americans, the program morphed into a political and military arena. Korolev and other space enthusiasts knew that it could be an opportunity to both advance exploration into the cosmos and give the Soviets a technological military advantage over their American counterparts. In several memos to Marshal Mitrofan Nedelin, the Deputy Minister of Defense in charge of operating all Soviet missiles, Korolev insisted that the Americans would use the IGY to launch a satellite, ensuring them greater global and military prestige if the Soviets did not do the same. As predicted, in July 1955, President Eisenhower announced that one of the ways that the United States would participate in the IGY would be by launching “small Earth-circling satellites".173 In fact, it was the April 1955 announcement of an academic commission to study interplanetary space travel, and years of publicity by DOSAAF (the voluntary society for the assistance to the army, aviation and navy) on the topic of space travel, that convinced the Eisenhower administration that the Soviet Union was serious about exploring space.174 The West’s interest sparked the Soviet administration’s commitment. In January 1956, the Council of Ministers issued a decree approving of the launch

172 Marcel Nicolet (ed.), *Annals of the International Geophysical Year, Vol. I: The Histories of the International Polar Years and the Inception and Development of the International Geophysical Year* (London: Pergamon Press, 1959), 392–393.

173 Edward Clinton Ezell, Linda Neumann Ezell and United States, National Aeronautics and Space Administration. Scientific and Technical Information Office, *The Partnership: A History of the Apollo-Soyuz Test Project,* The Nasa History Series, (Pittsburgh: University of Pittsburgh *Press,* 1959*),* 18.

174 Asif Siddiqi, *Red Rocket’s Glare*, 330.

of a satellite within the year.175 While there was a drive amongst Soviet scientists to develop technology for exploring the cosmos, the funding and internal approval to finally do so was prompted more by international geopolitical considerations than a scientific legacy.

The centrality of Sputnik within the exhibit could also be explained in another manner. The writer of the "Facing the Cosmos" pamphlet, Vasilii Zakharchenko, was a major contributor to the planning of the pavilion itself, pushing for the exhibit's reorganization along spatial themes. As put by Lewis Siegelbaum, Zakharchenko believed "Sputnik had to be recognized as 'the top of the pyramid of all scientific, technological, and industrial development' and everything – "displays of computers, metallurgy, chemistry, radiotechnology, etc. - should follow from it".176 Thus, he pushed for Sputnik to be considered as an object around which all other achievements in the pavilion should orbit.177 To further emphasize this, Zakharchenko took control and wrote the Soviet's pavilion newspaper, naming it *Sputnik*. This paper was a weekly publication that spoke of events going on at the Fair or in the U.S.S.R. The paper linked activities in the USSR and the pavilion's themes to different space-building endeavours. For example, the issue released on June 7th was dedicated "to the children", as it was one of the sections of the pavilion, but its front page connected youthful Soviet ambition to reaching the moon.178 It envisioned a future where children were passengers on rockets that would bring them to the stars. Topics from nuclear-powered airplanes, to these child-filled rockets to the

175 Asif Siddiqi, ""Sputnik 50 Years Later: New Evidence on Its Origins", *Acta Astronautica* 63, no. 1-4 (2008): 536-537.

176 Siegelbaum, "Sputnik Goes to Brussels", 127.

177 Ibid, 199.

178 "Take us with you to the Moon", *Sputnik*, Brussels World's Fair, June 7 1958, 1, Accessed December 11, 2018, http://www.rarenewspapers.com/view/630097.

moon, to Sputnik III helped produce an image of a modern Soviet Union that was literally "out of this world".

The future of the space program was also on full display at the Fair. A replica of Sputnik III, which had yet to launch when the pavilion opened in April 1958, and a model for a potential Soviet space station were on display in the main hall. The third satellite – the one-ton Sputnik III – was launched a month after the beginning of the Fair in May 1958. The model of the space station was based on a theoretical design created by pavilion advisor Zakharchenko in his story "Journey to Tomorrow", (published in 1950) and was named for Tsiolkovskii.179 The model of the station was contained in a glass frame and accompanied by information on the solar energy the Soviets aspired to use to power it.180 While a Soviet space station would not be built until the 1970s, the Soviets still wanted to show the scope of their ambitions at the Fair. That such a model, and a description of its functionality, found a place at the Fair suggests how strongly the Soviets aspired to build stations in the style of Tsiolkovksii's designs. Zakharchenko's model was displayed in other museums during the same period, particularly in other Soviet-allied states. In one Hungarian postcard, a drawing of the station appeared alongside spacecraft adorned by the Soviet star.181 The inclusion of the station alongside the already-launched Sputniks supports the Soviet conception of time that began under Stalin, in which the future and past took precedence over the present. Stalinist time made it so that the present was merely a path toward

179 Siegelbaum, "Sputnik goes to Brussels", 128.

180 Vasily Yegorov, *Soviet Pavilion at Brussels World Fair, 1958*, April 16 1958, Photograph, 37.25 x 24.53 cm, Getty Images, https://www.gettyimages.ca/detail/news-photo/brussels-belgium-visitors-to-the-soviet-pavilion-at-the-news-photo/522561210.

181*Vegyes*, ca. 1950s-1960s, Postcard, Zemplén Museum, Szerencs, Hungary, https://gallery.hungaricana.hu/en/SzerencsKepeslap/48377/?img=0.

the communist future, with every feat being a "historic" achievement, blurring demarcations in time.182 The future was an imaginary landscape that was considered real, emerging and overriding the present.183 That the Soviets would include a model of a space station and treat its design as inevitable speaks to this belief in the future as real and already present. The design existed and would eventually become real, so it was treated as such.

Regardless of these innovations, the senses were given a muted role in the discussion of the cosmos. Some of this discontinuity with the 1939 exhibit may be attributed to the emerging impetus within Soviet aerospace to place the machine over human beings. As historian Polly Jones has previously noted, contradictory trends emerged during the Khrushchev era about the New Soviet Person: they were to be an active agent of change, possessing an individual identity, but also a member of the collective, dutifully working for all Soviet people.184 Slava Gerovitch has discussed how the cosmonaut identity, as it emerged in the early 1960s with the acceleration of the space program, was constructed as part of a spacecraft system design. Cosmonauts would eventually be trained as if they were a part of a control system. As the Soviets began developing spacecraft that could house humans, Korolev envisioned a nearly completed automated technological system in which the cosmonaut, as a being with extreme self-discipline, could carry out precisely programmed actions.185 Above all, Korolev believed the traits of

182 Jeffrey Brooks, *Thank You, Comrade Stalin!: Soviet Public Culture from Revolution to Cold War* (Princeton, NJ: Princeton University Press, 2001), 79.

183 Ibid, 78-80.

184 Polly Jones, *The Dilemmas of De-Stalinization: Negotiating Cultural and Social Change in the Khrushchev Era* (London: Routledge, 2006), 9.

185 Slava Gerovitch, *Soviet Space Mythologies: Public Images, Private Memories, and the Making of a Cultural Identity* (Pittsburgh, Pa.: University of Pittsburgh Press, 2015), 55.

“assiduousness, self-discipline and the unwavering determinism to reach the set goal” would best benefit the Soviets in the cosmos, but they must operate in a controlled environment.186

The systematic purpose of the Soviet body in space tied in well with the resurgence of the field of cybernetics during the Khrushchev era. Cybernetics, and its terminology cyberspeak, used technical terms to describe organic processes in both biological and ecological systems. In the late 1950s, Soviet scientists and mathematicians began to see cybernetics as the basis for a potential unification of human knowledge that existed outside of the purview of philosophy.187 The new unified discipline extended mathematics and engineering into the human sciences in order to show how "humans and machines were two kinds of control systems, which, operating in certain environment, pursued their goals […] by communicating with this environment, that is, sending and receiving information about the results of their actions through feedback."188 During the Thaw, cybernetics provided a convenient alternative to the ideological structure that had dominated Soviet science and mired it in discussions of Soviet philosophical dialectical materialism. Within cybernetics, the Stalinist image of a proactive, creative and disciplined Soviet worker became less important than the position of a Soviet body within a system of order and progress.189 A cybernetic model of human physiology positioned the body as "the most perfect of all known cybernetic machines".190 Man-machine metaphors became deeply

186 Ibid, 53.

187 Slava Gerovitch, *From Newspeak to Cyberspeak: A History of Soviet Cybernetics* (Cambridge, Mass.: MIT Press, 2002), 200.

188 Ibid, 87.

189 Benjamin Peters, "Normalizing Soviet Cybernetics," *Information & Culture: A Journal of History* 47/2 (2012): 156.

190 Gerovitch, *From Newspeak to Cyberspeak*, 224.

ingrained in public discourse during the 1950s and 1960s, with cyberspeak references becoming essential ways to discuss scientific biological processes. Nikolai Bernshtein, for example, used cyberspeak to discuss his theory of locomotion, where he interpreted human action as the activities of a self-regulating machine receiving external information that it would encode into a model, program into actions and then construct movements.191 These physiology cybernetic ideas were applied in the training of cosmonauts, as mathematical theories were applied to the construction of movements in weightlessness, dispelling fears about human motor skills in space.192 Little attention, therefore, was paid to the feeling of the body under cybernetic conditions, but rather it was focused on the potential of calculated movement. More than with pilots, the spatial body was one of precision, stasis and precise programming.

It is of note that, unlike the 1939 Fair, little place in the 1958 exhibit was devoted to Heroes of the Soviet Union. None of the murals that appeared in the 1958 Fair depicted real people, while greater importance was given to the non-heroic Soviet citizens and the Soviet technical genius. Within written ephemera like pamphlets, government-given titles were rarely discussed. Of the many named individuals – academics, scientists and politicians – who appeared within the pamphlet *URSS*, none were accompanied by titles associated with Heroes of the Soviet Union. Andrei Tupolev, for instance, twice honoured as a Hero of Socialist Labor before the 1958 Fair for his contributions to aircraft design, is simply referred to as an Academician within the text. These individuals were defined by either their professional position or their involvement in the Soviet system, in contrast to the figures of import who greeted visitors at the

191 Ibid, 219-220.

192 Ibid, 226.

1939 pavilion and, at least artistically, led the Soviet people. The disappearance of the hero coincided clearly with contemporary changes in the literary and political landscape. In the 1930s, Socialist Realism had emerged as a style where writers were meant to follow the lead of the contemporary Soviet press - i.e. "amplify the press's coverage of heroes and heroines, and hence blur the boundary between the imagined and the observed."193 Soviet achievements were presented in a different manner under Khrushchev. The secretary's criticism of the cult of personality during the Twentieth Party Congress ended the most-overt deification and veneration of party leaders as well as overzealous celebrations of the individual. The heraldry of the Soviet Union had put heroes into a larger cultural context, making them not just record-holders or inventors but models of Soviet behaviour. The Thaw period saw a more realistic depiction of conditions and a more nuanced take on individual identity. For example, the importance of the Stakhanovite movement was re-evaluated, with it eventually being downgraded in importance in official literature and omitted from publications discussing socialist emulation.194 Thaw-era leadership began distancing the public from the concept, searching for more objectively real perceptions of worker motivation to offer an alternative to a movement closely identified with Stalin. Literary heroes, previously models for ideal Soviet behaviour, became more nuanced. Now they could hint at bureaucratic and social conditions, while other characters could be villainous and without the potential for improvement.195 Such nuance allowed for the emergence of a revised New Soviet person who did not need to follow the idealistic standard set

193 Brooks, *Thank you, Comrade Stalin,* 110.

194 Vladimir Shlapentokh, "The Stakhanovite Movement: Changing Perceptions Over Fifty Years," *Journal of Contemporary History* 23/2 (1988): 262-264.

195 Thomas F. Rogers, "Trends in Soviet Prose of the "Thaw" Period," *The Bulletin of the Rocky Mountain Modern Language Association* 22/4 (1968): 200-203.

by Heroes of the Union. Thus, at the World's Fairs, the previously unadulterated celebration of heroes was replaced by almost muted presentations of Soviet creators.

More attention was paid to the individuals who created new technologies than the people who used them. For example, in the aforementioned French-language pamphlet entitled *URSS*, several pages were dedicated to the automobiles and aeroplanes being contemporaneously built by the Soviets. One page notes "un événement remarquable dans l'histoire de la civilisation est l'apparition sur les lignes aériennes du monde des avions soviétiques <TU-104>, qui permettent à l'homme de triompher de distances énormes avec une vitesse encore inconnue."196 Notably, it is the plane being celebrated and not the pilots who flew them. No longer is the focus on heroic figures capable of triumphing over large distances at great speeds, but it is instead on the craft that permits them to do so. By comparison, the only figure within the pamphlet who is acknowledged as having received the highest award for his efforts is Andrei Tupolev, under whom, the pamphlet emphasizes, hundreds of model airplanes have been produced.197

Scientists, in general, were better represented within the pavilion than they had been in the 1939 Soviet exhibit, reflecting the USSR's renewed belief in a certain kind of expert. In the late 1950s, Khrushchev hoped to use scientific and technological advancements to improve his position within the party. In order to do so, he presided over the expansion of the scientific enterprise (i.e. increasing the number of institutions, scientists and publications), pushed for the creation of special science research cities, and supported the increased autonomy of scientists. Scientific autonomy was especially important, as it allowed scientists to differentiate theory and

196 Exposition Universelle et Internationale, Sección U.R.S.S., *URSS* (Bruxelles: [s.n.]., 1958), 32.
197 Ibid, 43.

practice, thereby getting rid of a Stalin-era unity that equated non-socialist science with capitalist ideals.198 The cult of science emerged during the 1940s and had grown unchallenged during the 1950s, strengthened by successes in space and nuclear technology, to the point where science and technology were viewed as the panacea to Soviet social and economic issues. Scientists and engineers gained greater political visibility as they were viewed as important to national security and economic development.199 The generally-accepted symbiosis between science and economic development can be seen in *Pravda* not long after the launch of the first Sputnik, when A. Topchiyev wrote “each step in the development of socialist industry provides food for science and sets new tasks before it. Science, in turn, influences technology and [economic] production.”200 Soviet branches of science and technology, strengthened under Khrushchev, were not just celebrated as essential elements of Soviet production, but as an essential element of progress. Scientists, therefore, were of great importance.

Similarly, the 1958 pavilion tied the new Soviet spatial achievements to developments on the ground. In one Fair pamphlet simply entitled *U.S.S.R.*, the launching of the sputniks was treated as a natural extension of other projects in the Soviet technological push for progress. It drew a direct line from the state of technology under the beginning of communism, where "wooden ploughs and harrows” were the 'machinery' inherited from the past, to the sputniks, which were deemed “the fruit of the creative thought and hard work of our people, bare

198 Paul R. Josephson, "Soviet Scientists and the State: Politics, Ideology and Fundamental Research from Stalin to Gorbachev," *Social Research* 59/3 (1992): 601-603.

199 Ibid, 607.

200 Topchiyev, “Great Victory of Soviet Science”.

testimony to the technological maturity of Soviet industry".201 It was through this trajectory that they claimed “we have [reached the summits of technological progress] in forty years, one hand working, while, the other had to hold a rifle.”202 The stars were reached through the efforts of the Soviet workers cultivating Soviet industry and the fighters who fought for its defense. Both the cosmos and the everyday were connected.

Thus, while much of the pavilion emphasized transcendence, there was also an active effort to reinvent *byt* space as well. The architecture of the Soviet pavilion was one thing involved in evolving this Soviet spatial narrative. Like many other nations in 1958, the USSR created a pavilion colloquially called a "glass cage" by visiting journalists.203

201 *U.S.S.R.*, 1958, 3, Special Collections Research Center, Henry Madden Library, California State University, Fresno, California, United States of America, retrieved from Adams Matthew Digital, exhibition *World's Fairs: A Global History of Exhibitions*, http://www.worldsfairs.amdigital.co.uk/.

202 Ibid.

203 "'Glass Cages' at Brussels Exhibition," *Times*, May 6, 1958, 15, *The Times Digital Archive* (accessed January 17, 2019), http://tinyurl.galegroup.com.lib-ezproxy.concordia.ca/tinyurl/8oj7W6.

Figure 3.3 Outside of the Soviet Pavilion (From the Archives of Bobbie O. Britton with permission from Graeme Fernie)

As noted by Vladimir Paperny, the building's suspended walls "floated as if imitating a spacecraft" supporting the spatial narrative inside while also stepping away from the monolithic style that had dominated previously.204 The glass cage symbolized transparency, lightness and openness. It was not about competition, this design suggested, but visibility and exchange. Much like the official position of peaceful coexistence between the USSR and other states, the pavilion was not a confrontation, but an invitation for discussion. This openness differed greatly from the previous era of Stalinist architecture and monumentality, in which an imperial style was meant to showcase the power of the communist state. In effect, as scholar Danilo Udovicki-Selb points

204 Vladimir Paperny, "Hot and Cold War in Architecture of Soviet Pavilions (1937-1959)", in *Architecture of Great Expositions 1937-1959: Messages of Peace, Images of War*, eds. Rika Devos et al. (Burlington, VT: Ashgate, 2015), 90.

out, previous pavilions had put forth a mythos of peace and communist salvation at a time of Stalinist repression and isolation.205 The new design pointed to the new cultural project of space under Khrushchev, in which the "superficial, showy side of architecture" would give way to the practical and everyday.206 In the case of World's Fair pavilions, the aim was to bring the pavilions structure down to earth and serve as only an invitation for the marvels within.

Transparency and openness were also alluded to in the exhibits of the pavilion itself. An exhibit toward the designated 'end' of the pavilion invited visitors to it to step beyond the imagined space of the pavilion into the Soviet Union proper. As stated in the official pavilion map, the final part of the exhibit housed a travel agency offering "tours that can give you an almost complete idea of the curiosities, historical monuments, museums, exhibitions and painting salons of the Soviet Union, as well as the life and culture of the multiple nationalities that populate it."207 The presence of this invitation for exchange would not have occurred at the last Fair, since even though Intourist, a state-run agency for foreign travelers, had been created in 1927, hostilities in Europe and increasing fears of espionage led to restrictions on the number of people who could enter the USSR until the 1950s.208 After the death of Stalin, long-suspended forms of cultural exchange, such as student exchanges and trade exhibitions, were resumed and longer term visas were granted. Moreover, in 1956, the complicated avenues to acquiring visas

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205 Danilo Udovički-Selb, "Facing Hitler's Pavilion: The Uses of Modernity in the Soviet Pavilion at the 1937 Paris International Exhibition*," Journal of Contemporary History* 47/1 (2012): 29-30.

206 Paperny, "Hot and Cold War in Architecture of Soviet Pavilions," 90.

207 Section de L'URSS a l'Éxposition Universelle et Internationale de Bruxelles 1958*, Pavilion de l'U.R.S.S.: Guide,* (Brussels: USSR Section, Brussels Universal and International Exhibition, 1958).

208 Frederick Charles Barghoorn, *The Soviet Cultural Offensive: The Role of Cultural Diplomacy in Soviet Foreign Policy* (Princeton, N.J: Princeton University Press, 1960), 46.

were simplified and foreign travel agencies became more involved than the state in arranging visits to the USSR. As Soviet scholar Frederick Barghoorn put it, such an endeavor was part of a Soviet desire to "achieve greater respectability in non-communist eyes" and engage in a kind of cultural offensive, in which innocuous cultural exchanges would showcase Soviet strength.209 Both at home and abroad, the Soviets wanted to visually and metaphorically make everyday Soviet life more visible to the world.

Additionally, a new understanding of private space was emerging. In the late Stalin period, architectural design had prioritized grandiose buildings that celebrated Soviet figures, resulting in the creation of monumental buildings with lavish ornamentation. In his industrial building speech in 1954, Nikita Khrushchev criticized the excesses of the architectural contemporaries who had focused on creating unique buildings rather than efficient living spaces. A greater emphasis had been placed on aesthetic concerns, he believed, as evidenced by articles published by the Academy of Architecture dictating the purposes of architecture. Khrushchev pointed to important figures within the Academy, who claimed "architecture serves the purpose of satisfying the people's aesthetic requirements" and that this "creation of important works of architecture calls for constructional volumes not dictated by direct practical need", for the inefficacy of contemporary construction projects and the wastage of resources.210

Khrushchev aimed to reinvent architectural space to create a better *byt* for the everyday worker. He considered the private space of the home as a vital site of invention and cultural construction necessary to the Soviet Union being viewed as a modern society. Khrushchev's

209 Ibid, 73-74.

210 Nikita Khrushchev, "Industrialised Building Speech - December 7 1954", *Volume*, March 1 2009, Accessed May 14h, 2019, http://volumeproject.org/industrialised-building-speech-1954/.

agenda to reinvent the everyday surroundings of Soviet citizens was largely expressed in his housing construction programme, initiated in 1957, which aimed to provide every Soviet family with an individual apartment by the year 1980. Within this vision of everyday life, the role of the individual apartment and its concomitant social unit, the family, often became subordinated to collective forms of residential organization. Advice manuals produced by stylists endorsed a rationalized and functional domestic interior, using laconic and austere forms, including things like transformable furniture, with open plans meant to promote utilitarian, scientific rationalism in everyday life. Soviet scholar Susan Reid argues that this community-oriented vision of *byt*, circumscribed as it was by strict social and aesthetic norms, mobilized the domestic space as a tool of the 'regimentation of life'.211 The push for home construction could be found at the Fair as well. In the pavilion pamphlet *Living Standards in the USSR,* the Soviets claimed that the Second World War hindered the development of housing conditions, and thus it was up to the sixth Five-Year plan, which had begun in 1956, to eliminate the housing crisis that had resulted.212 The goal was to provide an apartment for every worker in need of one. However, it was the people themselves, the pamphlet suggested, and not just the will of the state that would ensure that that would come to pass. The pamphlet claimed that it was the workers who had begun building sixty-five new houses for their fellows alongside their typical work.213 Thus, work and home were aligned, connecting the body of labour and productivity to the new domestic place, creating continuity even if this new *byt* was more consumer friendly.

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211 Susan E. Reid, "Women in the Home," in *Women in the Khrushchev Era. Studies in Russian and East European History and Society,* ed. Melanie Ilič et al (Basingstoke: Palgrave Macmillan, 2004), 163-164.

212 *The Living Standard in the Soviet Union* (Brussels: USSR Section, 1958), 85-86.

213 Ibid, 91.

An example of such a home could also be seen and entered in the Soviet pavilion in 1958, where a slice of a model apartment was included. The exhibit consisted of two life-size models of furnished apartment interiors representing the new type of standard, prefabricated, small-scale flats designed for single-family occupancy that formed the basis of the Khrushchev-era housing campaign.214 To showcase the newfound resurgence in consumption and the improvements in the manufacturing industry that affected private life, the model apartments were "fully furnished in a conservatively modern style, and included kitchens where one could see domestic equipment including refrigerators, vacuum cleaners and other electric appliances."215 The exhibited home was meant to be an idealized form, with the newest models that would show how far the Soviet Union had progressed production-wise, even if few Soviets realistically possessed such goods.216 Machines were given an important place, since they were meant to free up the Soviet individual for community activities and effectively automate the home process. While the new home was more spacious and meant to limit one's sense of connective touch with others, it was also intended to be governed by specific aesthetic rules. These new rules equated form to function, understanding a need for individuality while still stressing how the home should be largely functional. Comfort and consumerism were a post-war concern in the Soviet Union and were encouraged as part of the competition with the United State, but were still presented with a communist-morality slant.

The home was not meant to symbolize a withdrawal into a private space, but another location to shape the socialist character before channeling one's energy into collective activities.

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214 Susan E. Reid, "The Soviet Pavilion at Brussels '58", 43.

215 Ibid, 44.

216 Ibid, 46-47.

As put by Christine Varga-Harris, architects "strove to synchronize their planning and construction directives with the activities of interior designers organizing domestic space [...] Their objective was to collectively resolve every aspect of the housing question - [...] to ensure the fulfillment of their vision, these experts provided consumers with precise instructions for setting up their home."217 Design experts wanted interiors to match the rationality, harmony and simplicity of the exterior spaces they were placed in. These experts advised that furniture should generally conform to the spatial dimensions of a home, urging the inhabitants of the new homes to go for streamlined designs that often fulfilled dual purposes, capable of either being converted to other uses or used in multiple ways.218 Some professionals did this by fusing modern design with scientific rationality, claiming that too great a variation in furnishings "overstrained the eye" and had a "harmful influence on the entire organism of a person."219 The ability to manipulate furniture, and the encouragement to personalize and re-arrange space, offered Soviet citizens more tactile control of their environment, giving inhabitants the sense that it was a more personal space that one could exhibit mastery over. Much like the cosmonauts, consumers and homemakers had to exercise creativity while adhering to prescribed ideals and ideas of the home. Every appliance and piece of furniture, like every part of a machine, had a function and purpose that could not be wholly determined by the Soviet consumer. Every Soviet person who lived in these apartments, as much as the spaces they inhabited, was meant to be orderly and unburdened by excess.220 Thus, the items and the bodies that used them were to be regimented – with a

217 Christine Varga-Harris, *Stories of House and Home: Soviet Apartment Life during the Khrushchev Years* (Ithaca: Cornell University Press, 2015), 37.

218 Ibid, 38.

219 Ibid, 39.

220 Ibid, 41.

prescribed purpose and method of action. The home was meant to be simple and function, a place of strength and security, which was characteristic of Khrushchev's ideal for the communist future. Apartments, unburdened by purely aesthetic clutter, were meant to increase efficiency and productivity.

In accordance with this change in *byt* space and touch, there were also changes in *byt* taste. In the Fair pamphlet *U.S.S.R.* corn was frequently referenced as a natural crop and food of the steppe. The pamphlet spoke of "wonders in the steppe", where once "there was not a living soul, not a field of corn, not a single harvester in this region", now millions of young people, "heroes of the virgin soil" have come to "plough, sow and reap corn" as well as build civilization on the frontier.221 As mentioned beforehand, corn became an important new food item during the Khrushchev era, as the leader of the Soviet Union attempted to create an American-style Corn Belt in the Siberian landscape. The Corn Campaign was meant to aid Khrushchev's May 1957 promise that Soviet milk and meat production would overtake American levels of production. This effort had not initially succeeded because of a lack of proper feed, amongst other factors.222 Corn was intended to improve upon this deficiency, making proper animal feed more readily available and thus this kind of husbandry more alluring to collective farms. Only a year after the start of this declaration, milk and meat consumption, and corn, found their own place at the fair. The importance placed on meat and dairy can be seen in the *Living Standards of the Soviet Union* pamphlet that was distributed at the Fair, where, emphasis was placed on the

221 *U.S.S.R.*, 3.

222 Anton Masterovoy, "Engineering Tastes: Food and the Senses" in *Russian History through the Senses: from 1700 to the Present*, ed. Tricia Starks and Matthew Romaniello (New York: Bloomsbury Academic, 2016), 177.

improved consumption of these two food groups. “In 1956”, the pamphlet read, “the consumption of meat and fish products was almost three times the pre-war level, and of butter more than three times,” such an improved consumption was considered as a victory for Soviet progress.223 In trying to further show improved living standards, the pamphlet discussed how higher income had allowed all levels of society to experience “the fruits of modern culture,” bringing them not only greater accessibility to industrially-produced fabrics and technology, but also a better diet. The diet of workers and farmers had become more balanced, meaning that “while bread consumption was somewhat less than pre-war, the consumption of meat and fish products, sugar, confectionery and manufactured goods increased sharply”.224 The ideal Soviet person, who reaped the benefits of the communist state, was one whose taste was geared toward meat and sugar.

In the postwar period, the Soviets strove to humanize technology and connect automation with a revised kind of Soviet hero. Technology was also presented as a replacement for human endeavours. This tied in to the emerging ethos surrounding the ideal cosmonaut, who, while spirited, capable and quick-thinking, was considered a cog in the machine that he or she piloted. The senses of the new Soviet ‘machine’ would still prioritize sound and touch – sound was essential to Soviet communication and touch was necessary to prove the impact of the Soviet person on the Cosmos – but in so doing the senses would render the device a Soviet body. It would speak and relate to the Soviet center much like pilots would have in the 1930s. At the same time, a rejuvenated Soviet *byt* would re-prioritize space, taste and touch as ideal qualities of

223 *The Living Standard in the Soviet Union,* 46.

224 Ibid, 77.

the new Soviet individual space; these qualities would exist on a different standard from their Stalinist counterpart and celebrate a life moving forward under Khrushchev. From new corn-based and corn-fed goods to new appliances to individual family dwellings, the life of a 1950s Soviet citizen was to be more sensorially abundant than its predecessors. The Soviet body as conqueror was in continuity with the past while the Soviet person as citizen was not, allowing for a story of Soviet progress that was both familiar and different to a foreign audience.

What is most novel about the Soviet presentation at the Brussels' Fair was the way sight was more of a spectacle for the Western public and a promise for the future than an actual Soviet reality. The view of the cosmos was not a contemporaneous actualization, but a reality in the process of being so, a promise that would take shape with the first cosmonauts. The models of the sputniks were an example of "seeing as believing" to the Western public and a way of ensuring their prominence to the Fairgoer rather than necessarily a part of the language of travel and conquest used by the Soviets. The "beep beep" of Sputnik I and the movement of Soviet bodies into space was on greater display than the language of sight used by the aviators in the 1930s pavilion. What this may suggest is a change in the Soviet sense hierarchy to reflect more realistic conditions, as well as a new approach to a language of spatial conquest. Soviet mechanical bodies were the first to enter space, and through cybernetics they were as 'humanly' Soviet as the forthcoming cosmonauts, but they importantly opened a path for the realistic possibility that a Soviet person would be the first human to "face the cosmos" and conquer it.

Conclusion: Soviet Bodies and World's Fairs

The World's Fairs offered visitors the opportunity to gaze at a promised Soviet world, one filled with both real accomplishments and future ambitions. Just as importantly, they offered an opportunity to showcase *Homo Sovieticus*, an idealized figure capable of conquering the elements, who had mastered the senses, who worked for the collective and showed the moral fortitude required of building communism. The largest World's Fairs before and after the Second World War proved to be fertile ground for showcasing how this idealized Soviet person worked in conjunction with other more technologically-based symbols of progress. Under Stalin in 1939, the pavilions in New York focused on highlighting the economic and cultural differences between the Imperial and Soviet Russian states. Under Khrushchev's leadership in 1958, on the other hand, while Soviet triumphs were still contrasted with previous eras, more attention was paid to the forward momentum of Soviet technology, to the changes in the Soviet home and to the expansion of Soviet consumerism. Some of these overall differences can be linked to internal shifts in Soviet politics. The 1939 Soviet pavilion embodied a megalomania that was common in contemporary Soviet architecture and was meant to reflect the triumph of socialism in one country, as Stalin had claimed the USSR had achieved in 1937. The Stalin-era ideal Soviet person was exemplified by the devoted-to-progress Stakhanovite and the courageous, yet humble, aviator or explorer. Khrushchev's policy of 'peaceful co-existence' and the opening of the country to a greater number of tourists occurred simultaneously as the rise of cold war tensions and the need to construct a narrative of consumer progress to offset the attractions of America.

At both Fairs, the Soviet installations placed similar emphases on the senses, but who embodied these senses and how they did so differed. In 1939, the sense of sound was emerging

as an important element that connected the Soviet periphery to the center. Radio served to both orient people in the Far East with Moscow and connect explorers with the Soviet people who they were away from. The way in which sound was discussed at the Fair demonstrated the link that existed between Soviet identity and sound. In 1958, the Soviet pavilion spoke of sound in a similar capacity, though the speaker had changed. It was the Sputniks, the first satellites that had entered the uncharted territory of space, that spoke to the center in the late 1950s, and these small balls of metal were anthropomorphized in a number of ways. The 1958 Brussels' Expo proved fertile ground for turning machines into a pseudo-Soviet body, a process that was presented as uniquely a product of the communist system as the people who lived under it. The sense of touch and sight often intermixed in both Fair exhibitions, with the placement of maps and the presence of artefacts being particularly important. Objects that penetrated rare spaces – like Chkalov's plane at the 1939 Arctic Exhibit or the facsimiles of the Sputniks placed in the main 1958 pavilion – were put on display in close proximity to fairground visitors. These artefacts, that had accomplished extraordinary things, offered those who saw and touched them a chance to make them real.

The body, however, could occupy a multi-faceted role. For the Soviets, the body was both something to master and an extension of the Soviet politic. In 1939, nature, and by extension some human senses, were wild elements that were meant to come under Soviet control and be aligned with Soviet science. The conquering of space remained an important theme at both Fairs, since it showed the domination of the land by Soviet touch and sight, and thus the expansion of Soviet territory. The Arctic was claimed by the Soviets visually, often by using flags, but also with a haptic implication. The placement of a Soviet flag was a substitute for a Soviet body, and its presence turned the land around it into Soviet territory. That the Arctic flag

bore Stalin's image further supported this notion, for the leader of the Soviet Union was tied to the *narodnost* of the Soviet people.225 In 1958, this haptic power would be transferred over to the Sputniks, who would 'touch' the cosmos and thus render the Soviets, the uncharted territory's first explorers, the masters of space travel. The movement of Soviet bodies in space, as seen through both the physical body and the mechanical one, was a theme that differed between 1939 and 1958. How trains and planes united Soviet space in the 1930s, and then ultimately expanded it, was not a central theme in discussions of space within the 1958 pavilion. Living space, and how the Soviet body maintained and occupied it, was of greater significance. Some of this may be attributed to the need to rival the American display of consumerism at the 1958 expo, but it was predominantly also connected to changes in living conditions under Khrushchev. The new *byt* that emerged privileged the Soviet individual, functioning in tandem with other Thaw-era relaxations. However, new Soviet spaces were subject to Soviet 'regimentation of life' and thus Soviet bodily ideals, needing to balance a precarious mixture of personal ingenuity and anti-capitalist restraint, which essentially affected Soviet mastery over their space. Interestingly, the Soviet hero had to balance a similar level of restraint – acting as both an innovative explorer and as someone reliant on the leadership's guidance.

Heroes of the Soviet Union, as the beings who mastered and guided the senses, were of reduced importance by 1958. In 1939, heroes greeted visitors to the main pavilion as soon as they entered, and they authored most of the pamphlets that were distributed during the Fair. Whether scientists, explorers or pilots, these award holders were chosen as representatives of the Soviet Union for the Fair's international audience. They image they presented, through

225 Victoria E. Bonnell, *Iconography of Power: Soviet Political Posters Under Lenin and Stalin* (Berkeley: University of California Press, 1997), 142.

interviews they provided and pamphlets they wrote, was meant to make them appear as if their dedication to the Soviet mission allowed them to overcome physical limitations. Cold could be ignored for the sake of beating a record or waiting for aid from Moscow. Mastery over the sense of taste left pilots more capable of determining proper provisions for a long flight than scientists. As embodiments of the ideal Soviet person, these heroes could see and handle more than the ordinary person and projected almost a god-like ability to control the body. In 1958, Heroes of the Soviet Union and other public figures were no longer mainstays of the pavilion. People mentioned in pamphlets were mainly technical experts, knowledgeable with the machinery that appeared at the Fair and about the changing industries of the Soviet Union. Only Konstantin Tsiolkovskii, as a narrative link to the current space program, was given any significant place, and in not nearly as laudatory a fashion as past figures. The venerability of important political figures like Stalin and Lenin waned in the wake of Khrushchev's his criticism of the cult of personality. The mastery of the senses was no longer an important part of the international Soviet narrative, though the idealized Soviet still appeared. It was not heroes who were leading the people in the steady march of socialist progress, but machines.

The Soviet government saw the Fairs as venues to trumpet their current advances and point toward future development. The improvement of *byt* was as important element of progress as the record-breaking feats of heroes or the advancement of Soviet technology. The discussion around improvements to everyday life, and the tangible ways Soviet peoples experienced said improvement, was important in both pavilions. The foci of these changes were what differed between the decades. In New York, the Soviets were intent on showing the modernizing of the Soviet Union from the less-industrialized Imperial period. These changes were given equal place in industry, electrification and the sciences, and were meant to show the rise of the Soviet citizen

worker, both in terms of working life and leisure. In Brussels, while leisure and convenience were still of great importance to the Soviet exhibition, it was the personalized space of the worker which was given greater focus. Food, as well as the home, were promoted as the changing face of Soviet *byt*. While the later was given more space, both literally and figuratively, than the former, and was meant to give a glimpse to visitors on how the everyday Soviet lived and consumed. Meat, milk and grains were toted to be increasingly consumed by the average Soviet due to Khrushchev's corn campaigns and the 'improvements' it provided to agriculture. Such refinement meant the Soviet diet contained more meat and sugar. The home was said to be more personalized and private, a space for proper comfort and rest. The body, therefore, was to be accommodated in ways that would be pleasing to the senses of taste and touch.

Ultimately, the arrival of the cosmonauts reinvigorated the Soviet cult of heroes, staging their return at the end of the Khrushchev era and reaching greater heights during Leonid Brezhnev's tenure as head of the Communist Party. The melding of human and machine that found its way into the Soviet pavilion of 1958 accompanied the rise of the cosmonauts. In April 1961, the USSR became the first country to send a capsule into space with a human on-board. The pilot, Major Yuri Gagarin, became a newly minted Soviet celebrity and idol from the moment he entered space. He served as a repository onto which "Soviets and Russians began inscribing their dreams, hopes, fears, values, ideological preferences, manias and perversions."226 The cosmonaut iteration of the new Soviet person was meant to be, in the words of historian Andrew Jenks, a "perfectly integrated man-machine – of strong mind and

226 Andrew L. Jenks, *The Cosmonaut Who Couldn't Stop Smiling: The Life and Legend of Yuri Gagarin* (DeKalb, IL: NIU Press, 2012), 8.

body, muscles and ideas perfectly in sync with the demands of the motherland."227 Yet the morality of the "pioneers of space" was tied to burgeoning culture of celebrity that associated Yuri Gagarin and the other cosmonauts with consumption and aesthetic beauty as much as morality. While, on the one hand, the cosmonaut was to embody the traditional Soviet traits of dynamism, optimism, atheism and being future oriented, they were also meant to show the average Soviet how to be properly cultured.228 Much like the explorers before him, both human and machine, Yuri Gagarin became a symbol of Soviet progress, an essential figure in a narrative that had begun with the Arctic explorers and pilots of the 1930s and came to encompass the first humans to enter the cosmos. Gagarin and the cosmonauts provided a human face to space travel, while also giving a final breath the system of Soviet heroism that had begun to decline after the death of Stalin.

Sense history and its ties to identity, especially socio-cultural identity, is a point of study worthy of further exploration. While the senses and how they are perceived cannot definitively defined by national boundaries, various cultures approach and prioritize the sense of touch, taste, sight, sound and smell differently. World's Fairs and Expos are venues for cultural exchange and national posturing, allowing a visitor to see an idealization of a nation and its values. Fairs are good grounds for viewing the cultural values and concerns of a moment, either reflecting global tensions, goals or a country's preoccupations. While both fields are evolving in different directions, I believe World's Fairs can continue to be a good source for discovering the sensory on a national scale, whether during the Fairs' height in the late nineteenth and early twentieth

227 Ibid, 197.

228 Ibid, 198.

centuries or in the more recent past. The continuing influence of cybernetic thought, and its confluence between the human and the mechanical, offers another opening for sensory research, especially as the language of cybernetics flows into everyday speech. While the confluence is more of a contemporaneous concern, it is important to keep in mind how technology has exploded onto the cultural consciousness over the past century and had an impact on how humans interact with everyday life. All of these topics deserve more attention than they are paid here and likely need full books and dissertations in their own right. This thesis offers a glimpse into the evolving sensory world of the Soviets as well as their own understanding of the ideal Soviet person. However, as with all such complex topics, it only scratches the surface of those subjects and only offers a snapshot of Soviet culture.

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