Primary Source Collection #5: Outer Space



Introduction

Included in this source collection are two sources relating to the space race. The first is the Treaty of Outer Space, which was ratified in 1967. The Treaty drew on the Antarctic Treaty of 1959, as well as the Limited Test Ban Treaty of 1963, which banned nuclear weapons testing in the atmosphere, outer space and under water. The second source includes excerpts from an address delivered to the United Nations in 1966 by William V. S. Tubman, the president of Liberia. In the speech, Tubman called on American and Soviet leaders to pause the space race and urged listeners to consider the impacts such pursuits in technology and knowledge had with respect to the global south. Discussion questions are provided for each source to help guide your reading.

PRIMARY SOURCES

TREATY OF OUTER SPACE

WILLIAN V. S. TUBMAN ON THE SUBJECT OF OUTER SPACE

Primary Source 1: Treaty of Outer Space

Late in 1958, during the height of the Cold War, the United Nations established a little-known committee called the "Committee on the Peaceful Uses of Outer Space" to help create rules of conduct for a new type of space for humanity: outer space and satellites. The treaty, which parties ratified in 1967, adopted highly idealistic language that drew precedence from the 1959 Antarctic Treaty and the 1963 Limited Test Ban Treaty. The former called for the shared use of Antarctica for research and banned the claiming of territory on the continent. The



Astronaut Bruce McCandless

latter called for the ban of nuclear weapons tests underwater, in the atmosphere, and in space. Nonetheless, the Treaty of Outer Space was not guaranteed to pass with nuclear powers hesitant to forego, at least in theory, the militarization and occupation of space, and non-space-going countries questioning the need of the treaty altogether. The Treaty also notably fails to address environmental considerations and any means of enforcement.

Source: United Nations, Office for Outer Space Affairs. "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies." December 19, 1966. http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/introouterspacetreaty.html.

Discussion Questions:

- What is the overall objective of the treaty? Some people critique the Treaty of Outer Space for not actually doing anything. Why might people offer that criticism? Do you disagree or agree?
- Why might the authors and signatories of this treaty have agreed to Article II on not claiming portions of the Moon? In what ways was this a response to the land claims, many imperialistic, by countless nations on Earth, including those we explored in previous episodes?
- Why did the authors of the treaty add a stipulation for mutual observation and inspection of space stations and equipment in Article XII? Why might countries like the United States and the Soviet Union (later Russia) agree to this clause?

Annex

The States Parties to this Treaty,

Inspired by the great prospects opening up before mankind as a result of man's entry into outer space,

Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes,

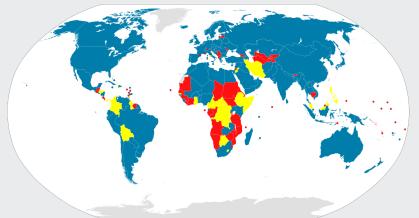
Believing that the exploration and use of outer space should be carried on for the benefit of all peoples irrespective of the degree of their economic or scientific development,

Desiring to contribute to broad international co-operation in the scientific as well as the legal aspects of the exploration and use of outer space for peaceful purposes...

Have agreed on the following:

Article I

The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind.



Treaty parties (blue), signatories (yellow), and non-parties (red)

Outer space, including the moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies.

There shall be freedom of scientific investigation in outer space, including the moon and other celestial bodies, and States shall facilitate and encourage international co-operation in such investigation.

Article II

Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.

Article IV

States Parties to the Treaty undertake not to place in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.

The moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military maneuvers on celestial bodies shall be forbidden. The use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall also not be prohibited.

Article V

States Parties to the Treaty shall regard astronauts as envoys of mankind in outer space and shall render to them all possible assistance in the event of accident, distress, or emergency landing on the territory of another State Party or on the high seas. When astronauts make such a landing, they shall be safely and promptly returned to the State of registry of their space vehicle. In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to the astronauts of other States Parties.

States Parties to the Treaty shall immediately inform the other States Parties to the Treaty or the Secretary-General of the United Nations of any phenomena they discover in outer space, including the moon and other celestial bodies, which could constitute a danger to the life or health of astronauts.

Article IX

In the exploration and use of outer space, including the moon and other celestial bodies, States Parties to the Treaty shall be guided by the principle of co-operation and mutual assistance and shall conduct all their activities in outer space, including the moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty. States Parties to the Treaty shall pursue studies of outer space, including the moon and other celestial bodies, and conduct exploration of them so as to avoid their harmful contamination and also adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter and, where necessary, shall adopt appropriate measures for this purpose. If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including the moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including the moon and other celestial bodies, may request consultation concerning the activity or experiment.

Article X

In order to promote international co-operation in the exploration and use of outer space, including the moon and other celestial bodies, in conformity with the purposes of this Treaty, the



States Parties to the Treaty shall consider on a basis of equality any requests by other States Parties to the Treaty to be afforded an opportunity to observe the flight of space objects launched by those States. The nature of such an opportunity for observation and the conditions under which it could be afforded shall be determined by agreement between the States concerned.

Article XII

All stations, installations, equipment and space vehicles on the moon and other celestial bodies shall be open to representatives of other States Parties to the Treaty on a basis of reciprocity. Such representatives shall give reasonable advance notice of a projected visit, in order that appropriate consultations may be held and that maximum precautions may be taken to assure safety and to avoid interference with normal operations in the facility to be visited.

Astronauts Neil Armstrong and David R. Scott boarding the Gemini-Tital VIII, 1966



William V. S. Tubman

Primary Source 2: William V. S. Tubman on the Subject of Outer Space

William V.S. Tubman, who served as president of Liberia for over a quarter of a century, was known for courting foreign investment while championing decolonization of and unity between countries in Africa. He also secured women's suffrage and pioneered the National Unification Policy, which helped ease the divide between Americo-Liberians who had migrated from the United States and indigenous Liberians. In his speech, which he delivered to the United Nations' General Assembly in 1966, he called on leading technological superpowers, like the United States and Soviet Union, to hit pause on the space race. He pointed out that while technology had brought about positive change for humans, it had also led to new forms

of inequality. A religious man, Tubman questioned the reckless pursuance of knowledge, which he viewed as coming at the expense of humans, especially those in the so-called Third World.

Source: Tubman, William V.S. "Excerpts from an Address Delivered on Thursday, 8 December 1966, by President William V.S. Tubman, President of the Republic of Liberia, Relating to the Subject of Outer Space." Report of the Committee on the Peaceful Uses of Outer Space. United Nations General Assembly. December 12, 1966. A/C.1/941. https://www.unoosa.org/pdf/garecords/A_C1_941E.pdf.

Discussion Questions:

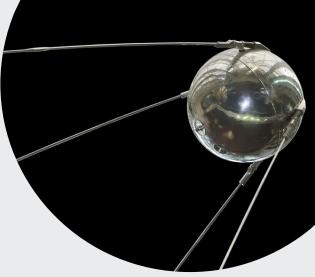
- How did William V.S. Tubman distinguish between knowledge and understanding? Why is he skeptical of the former?
- In the passage, Tubman identified a link between science and power, and he cited several historical examples of when scientific discoveries led to widespread suffering. Would you add space exploration and the internet to this list of scientific discoveries causing suffering? Why or why not?
- The majority of people on our planet cannot access outer space. It has become a highly privileged space. Should those of us who cannot access space have a say in what others do up there? How can Liberia and other countries that do not have a space program contribute to and shape what happens in outer space?

Apart from the instinct of man's self-preservation and the perpetuation of his kind, no emotion so pervades the history of man as his remarkable thirst for knowledge. From the moment we glimpse man's activity on earth, we see him engaged in a persistent, daring and often dangerous preoccupation with the world about him—always seeking to unveil another of its mysteries, always striving to control another of its forces, always aspiring, it would seem, to wrest power over the universe and from the hand of God...

We are surrounded by proof that knowledge can enhance our lives, that learning can lessen suffering, broaden horizons, and enrich our days. We are the beneficiaries of mankind's unquenchable thirst for knowledge. We can only join the sages of the past in praising knowledge and in appreciating those who seek it and use it.

And yet man's history gives rise to doubts. We question whether it is knowledge alone that we should seek. We cannot, after all, be blind to the fact that it was for tasting the fruit of the tree of knowledge that our first parents were banished from Paradise! We do not believe that God would have man live in ignorance, but we do believe that man's goal should be wisdom and understanding, rather than mere learning or knowledge...

So, it is our desire at this time to draw the subtle but essential line between an unbridled, unthinking, hollow quest for knowledge and the purposeful, thoughtful, creative search for understanding.



Replica of Soviet satellite Sputnik I

History readily demonstrates how easily, how often and how unhappily man's knowledge outstrips his understanding. Man's discoveries have repeatedly liberated some only to enslave others. Man's imperfection is never more clearly seen than in his inadequate and painful employment of the fruits of knowledge.

The Pharaohs advanced the frontiers of engineering knowledge, creating monuments which are admired down to our times—but their discovery caused the lives of tens of thousands of their fellow men.

The gin made possible the cultivation of cotton on a scale never known before—and the resultant demand for slaves has scarred the history of our continent.



The spinning jenny and flying shuttle brought mass production of cloth and clothes to people who could never before afford them but the machines consumed the lives of children as the cotton fields did the lives of Africans...

The energy of the atom has been released and controlled with still unimaginable promise for the good of man-but its principal use is still to hold in terror most of mankind.

Now, we watch in awe and apprehension as man reaches into the very heavens with the same imperfect hands and inadequate understanding that have marked his progress through the ages...

We do not think that man is yet mature enough, disciplined enough, wise enough, to lay his hands on the very secrets of the universe. When we think of the suffering which has so often accidentally and blindly followed man's past advance in science, we can only believe that man now owes it to himself to pause and reflect before plunging willfully on the path he has chosen...

Apollo 11 Saturn V liftoff, 1969



William V. S. Tubman with U.S. President John F. Kennedy, 1961

We believe that all men would be benefited by an international agreement to refrain for a given, reasonable period, five years perhaps, from engaging in any experiments in space not specifically accepted in advance by international agreement. We believe that such a period could be used to collate, to study, to evaluate, to understand the data already collected...

Whatever the approach to details, the substance of the agreement would be the same—to remove the element of competition, of haste, of heedlessness from man's exploration of the heavens, and to oblige man to take the time to arrive at a mature understanding of the forces with which he is dealing before he risks plunging himself and all humanity into a cataclysm which none could foresee, took the time to look for, or could remedy...

Liberia and its neighbors are, of course, not direct participants in the "space race" today. But no matter how small, no matter how struggling, no matter how poor we may be, we share the same heavens with the greatest Powers. Their catastrophes are usually ours; their failures of understanding affect our lives as intimately as their own; their concentration of money, imagination, scientific endeavor and national ambition on a headlong, impatient and wasteful race for knowledge which they cannot even take the time to study affects our lives, our hopes, our future just as it does their own.

In this context we do not think it awry, and we hope that none take it amiss, that we should propose in this manner, to commence an effort to obtain an agreement to halt, or at least to limit and control, the space race for a period of five to ten years, that we should call upon our sister African States to join us in developing specific steps leading toward the negotiation of such an agreement, that we should, further, look to the co-operation and assistance of all those who share with us a compulsion to take every step necessary to assure that man's lust for knowledge is not allowed to ravish his wisdom and understanding.

We may, I think, rightly paraphrase Alexander Hamilton in comparing knowledge to a great river, "kept within its bounds it is both beautiful and useful, but when it overflows its banks, it is then too impetuous to be stemmed; it bears down all before it and brings destruction and desolation wherever it comes."



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Astronaut Bruce McCandless II, February 11, 1984, NASA, Public Domain, https://en.wikipedia.org/wiki/File:Bruce_McCandless II during EVA in 1984.jpg

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Commander Neil Armstrong (right) and pilot David R. Scott prepare to board the Gemini-Tital VIII, March 16, 1966, NASA on The Commons, no known copyright restrictions, https://commons.wikimedia.org/wiki/File:Boarding Gemini VIII.jpg

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William Tubman, 1943, Library of Congress Prints and Photographs Division, Public Domain.

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The Apollo 11 Saturn V space vehicle lifts off at the Kennedy Space Center's Launch Complex 39A, July 16, 1969, NASA, Public Domain,

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Page 7:

Luncheon in honor of William V. S. Tubman, President of Liberia, with President John F. Kennedy, October 19, 1961, White House, Public Domain,

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