

Outer Space Treaty Fiftieth Anniversary

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Oonagh Sands: My name is Oonagh Sands and I'm the co-chair of the American Society of International Law, Space Law Interest Group. We are excited and honored you've carved out time of your schedules to be here today with us.

We would particularly like to thank Georgetown University Law Center, our hosts today, and the Secure World Foundation which has generously sponsored the event.

We've had a diverse audience here today with representatives of foreign ministries, government departments, academia, industry, private law practice, news publishers, think tanks and so forth, so welcome.

Let me take a moment to provide a brief overview of what you will hear today. We will start off with a multimedia presentation delivered by Mr. Christopher Johnson of the Secure World Foundation, and also prepared by Ms. Jessica Sweeney and Mr. Charles Stotler containing historical news reels and photographs related to the signing of the Outer Space Treaty 50 years ago, this very day.

Next, my fellow co-chair Charles Stotler will speak with Mr. Kenneth Hodgkins of the US Department of State on the evolution of the UN Committee on the Peaceful Uses of Outer Space [inaudible 01:42], and the committee's role of negotiating the treaties and principles that serve as the international government's framework for space activities.

Following that, three professors from Georgetown University Law Center, Professors Stephen Mirmina, Robert Dalton, and David Koplow are going to speak specifically about the outer space treaty and the legal methods by one which one interprets the seminal instrument of international law, in light of the technological and scientific advancements over the last 50 years.

In terms of logistics, please go ahead, take your lunch and coffee because we do have a packed schedule. There will be no formal break but we as put microphones on the panelists, you are welcome to top up your tea or coffee and promptly make your way back to your seats.

[laughter]

Oonagh: In this second part of the conference, I will come back up and tell you specifically about the activities of the American Society of International Law and in particular, the new live online briefing in the series, "International Law of the Trump Administration".

Finally, in terms of questions, we will be circulating papers throughout the audience in which you're welcome to jot down any questions and we will feed them through to our panelists,

subject, of course, to time. Without further delay, let me turn the floor to Mr. Christopher Johnson.

Christopher Johnson: Thank you, Oonagh. My microphone is on. You can turn it up a little bit. Good afternoon, everyone. My name is Chris Johnson. I am a project manager and the resident space law advisor at the Secure World Foundation.

The Secure World Foundation is a private, operating foundation. It's a non-governmental organization, an NGO, that is focused and concerned with the peaceful uses of outer space and fostering space sustainability.

What we do is we work with governments, with space agencies, with private industry, with international intergovernmental organizations like the UN, and with academia, in fostering dialogues, discussions and capacity building, raising awareness about issues affecting space sustainability and the use of space assets for human and environmental security here on Earth.

Which brings us to today's event, which is 2017 is the anniversary year of the Outer Space Treaty, the 1967 Outer Space Treaty. To give it its full title, The Treaty on the Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and Other Celestial Bodies.

If you think about it, we often shorten the Outer Space Treaty to just the Outer Space Treaty but you could legitimately also shorten that long title to the Treaty on Principles of Outer Space, or Treaty on the Activities of States in Outer Space, or Treaty on Exploration and Use of Outer Space.

Nevertheless, this is the Outer Space Treaty as the fundamental principle, foundational source of information of space long governance that we use for outer space.

The story that I'm going to tell over the next 15, 20 minutes including video clips, is the story of the development of this international, legal instrument especially as it works its way through the United Nations system as a document and as a deliverable of the United Nations.

I want to start my story, you can start it earlier looking in the 1950's, but I'm going to start my story of the development of the Outer Space treaty with two documents from 1963. The first document, the first thing you should understand and look at in international governments for space activities is the 1963 Partial Test Ban Treaty.

The Partial Test Ban Treaty is security in a non-armament or disarmament treaty that prohibited the testing of nuclear weapons in various domains, and it mentions outer space, so this is the first time that outer space is mentioned in national treaties specific to disarmament.

Article One of the Partial Test Ban Treaty says, "Each of the Parties to this treaty undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion at any place under its jurisdiction control, in the atmosphere, beyond its limits, including outer space, or under water, including territorial waters or high seas."

I point that out for the sake of completeness, that there is a previous international treaty that has to do with non-armament and disarmament. The next document I want to point to is, UNGA

Resolution 1884 of 1963, copies of which are in the back. I printed enough copies of some of the most important relevant documents to be discussed, in the story of the development of the treaty.

UNGA Resolution 1884 solemnly calls upon all states, "To refrain from placing orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction. Installing such weapons on celestial bodies or stationing such weapons in outer space in any other manner."

This UNGA resolution as a UNGA resolution expressing the intentions of the General Assembly in establishing norms or what should happen, what the rights and obligations of parties should be, is still in a non-binding document. UNGA Resolution 1884 serves as one of those forerunners, whose text finds its way into the Outer Space Treaty, specifically, before the Outer Space Treaty.

The next and even more important document is this Principles Declaration of 1963. The UNGA Resolution Number 1962, Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space.

UNGA Resolution 1962 was, as you look at it and copies are available, it contains the principles that find their way into the space treaty, including that space exploration should be for the benefit and interest of all mankind;

That outer space is free for exploration and use by all states on a basis of equality and in accordance with international law. The prohibition on appropriation is contained in this declaration. Outer space and celestial bodies is not subject to national appropriation and other principles to find their way into the Outer Space Treaty.

When you read the treaty and you want to find out where its provisions come from, it inevitably leads back to this principal document, the UNGA Principles of 1962.

Reading the negotiations for this declaration tells you about the issues that were involved in drafting the Outer Space Treaty. Further panels will get more into it.

For those who don't know, these documents specific to the governance of space, as they are done with the UN system, they are done in COPUOS, the Committee on the Peaceful Uses of Outer Space, which has a legal subcommittee.

This is where this document and subsequent space law, the space treaty and subsequent treaties, were negotiated. When the legal subcommittee has a document and it's finalized, their report is sent to the larger COPUOS.

The larger COPUOS has a document which is then sent up to the General Assembly, the UN General Assembly. Back in the '60s it was sent to the first committee of the General Assembly, then made reference to the General Assembly including reference, included in a General Assembly resolution, so this principles declaration is where we point to.

Today is not about talking about things that were happening in the outer space, in the space race between states and this cold war era where there is a race for a number of firsts, but it is within

that context of space exploration happening in the 1960s that President Johnson in 1966 decides that there needs to be a governance framework.

He writes a letter, a statement, which I'll read in part. He says, "Just as the US is striving to achieve peace in space, we want to do what we can to ensure that exploration to the Moon and other celestial bodies will be for peaceful purposes only. We want to be sure that our astronauts and those other nations can freely conduct scientific investigations of the Moon.

We want the results of these activities to be available to all mankind. We want to take action now to attain these goals. In my view, we need a treaty laying down rules and procedures for the exploration of celestial bodies.

The essential elements of such a treaty would be as follows," and then he comes to layout, essentially reiterating what was already in that previous General Assembly resolution, so, with those instructions, in May of 1966, the legal subcommittee then begins to do this negotiation process on the text of the Outer Space Treaty.

There are drafts offered for the text Outer Space Treaty from the US and from the USSR, copies of which are available in the back if you want to read and see how similar they are, really in their provisions, and how they reflect the previous declaration from 1963 and you can read further into the [French] préparatoires, the preparatory documents of the Outer Space Treaty, to see how the text of the treaty is negotiated.

In August of 1966, Ambassador Goldberg, the US ambassador, returns from negotiations in Geneva and has a press conference in New York, so, this is the first clip that I'll show, a full six minutes total, and you'll see the geopolitical issues also that pop up here.

Video Recording: Ladies and Gentlemen, I'm really glad to see you again. I shall talk very briefly about the space negotiations and then be glad to respond to your questions.

Before I do that, I would just like to say a word of thanks and appreciation to many of you who sent me notes and other comments about surviving a year at the UN. I have survived.

I'll make a brief comment about the negotiations on the Treaty on Peaceful Uses of Outer Space, the Moon, and Other Celestial Bodies. My general observation is one of a feeling of progress and of optimism about concluding a treaty on this most important subject.

The negotiations, which took place in Geneva, are under the auspices of the legal subcommittee of the Outer Space Committee, were conducted in a most businesslike atmosphere. There was what is essential in negotiations, give and take on all sides.

Naturally, we would've liked a little more give, so that we could have had a completed treaty ready to present at this stage to the forthcoming general, which if we are able to make final the treaty would be the most significant disarmament measure or arms control measure made since the nuclear test ban treaty;

Would be part of the product of two of these points. First, Number Six. No party will place any nuclear or other weapons of mass destruction in outer space or on a celestial body. Number Five,

The Moon and other celestial bodies shall be used exclusively for peaceful purposes. This is an arms control measure.

[inaudible 14:53] and I say, "We," that does not mean that we and the Soviet Union are in disagreement on all of the five. It means that members of the Outer Space committee are in disagreement on five points.

There are some points where the Soviets and ourselves are not in disagreement, but other members have raised points which require consideration. The first is the reporting requirement. When you get, this afternoon, there's reproduced...

Video Recording: [inaudible 15:24] or do you think it has not prevented progress in any way?

Video Recording: I did not find that the Vietnamese War entered into the space negotiations. That is what I meant when I said that the space negotiations were conducted in a very businesslike atmosphere. There's only very slight references made to the Vietnamese war in the general debate, were very low-key.

The progress which has been made in a very short period of time was considerable and as I said, there was the spirit of give and take.

If you want the explanation for that, I think I have one. I think it's very much in the interests, national interests of the Soviet Union and the United States and the world community at large, that an agreement of this type should be negotiated.

Video Recording: The time element in this, that the Soviets are as anxious as we are to get an agreement before we land the first man on the Moon?

Video Recording: ...are to be increased or boosted to at least three-quarters of a million men. My question is this. Do you know of any new peace initiative on the part of the United States to try to bring this war to the conference table or, from now on, are we letting military matters take their own hit?

Video Recording: I don't think, Pauline, it would serve the national interest to go into, or the international interest, to go into details to give a response to your question.

I can only say about it, this, that the desire for a peaceful solution and the efforts for a peaceful solution still continue. I can only give you my best judgment about that, which may be disproved by events.

The atmosphere in Geneva indicated that, assuming that we can resolve the points of disagreement and I hope we can. As you see, they are not, I think, not unresolvable. I think they're reconcilable, but the atmosphere in Geneva...Now, we haven't done it and I may be proved to be wrong.

Video Recording: ...major war. My feeling is the fighting might spill over the frontiers. Do you agree with that assessment of the Secretary General's and what is the US attitude towards his three-point plan for peace in Vietnam?

Video Recording: Well, you know, Bill, I never comment directly on the Secretary General's observations. I always listen to them with great interest. I would say, that only with respect to this, that we don't want an escalation of the war and we would hope, certainly, it would not come about.

Christopher Johnson: You see that he wants to have a press conference about the good work that they completed in Geneva on the furtherance of the treaty the many articles they've been able to get consensus on and agreement on and the press conference is steered towards, "Well, what about the Vietnam War?" And, "Is the Vietnam War affecting the negotiations in Geneva?"

You can see how these issues in one arena seem...people think that they may affect negotiations in another arena. This is in August of 1966. The next clip that I'll show is when they have reached agreement on a draft text and this is in December of 1966. The COPUOS legal subcommittee has completed the draft text and is referred to the General Assembly and included in a General Assembly resolution.

There's a General Assembly resolution entitled, of course, Treaty on Principles Governing the Activities of States, the title of the treaty, and it contains the text of the treaty in an annex. Here you will see the Chairman, at that time, they called him President of the General Assembly, speak for a little bit.

Then, he'll introduce the Secretary General of the UN, U Thant, to talk about the finalization of the text of the treaty and some other developments that are happening at the UN in relation to space, including the organization of a conference, UNISPACE I, that they're trying to organize for that year, so we'll watch this.

Video Recording: This is entitled International Conference on the Exploration and Peaceful uses of Outer Space. The report of the fifth committee, in document is UN 6627, contains the financial implications which would result from the adoption of this draft resolution.

In the absence of any request for a vote, may I consider Draft Resolution One, adopted unanimously by the General Assembly? It's so decided. Draft Resolution Two is entitled Treaty Governing the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies.

The first committee adopted this draft resolution unanimously. May I take it that the General Assembly also adopts it unanimously? It's so decided.

Draft Resolution Three, entitled Report on the Committee on the Peaceful Uses of Outer Space was also adopted unanimously by the first committee. May I take it that the General Assembly, likewise, adopts it unanimously? It's so decided.

Now, I give the floor to the distinguished Secretary General of the United Nations [inaudible 21:17] of State.

Video Recording: Mr. President, I have asked for the privilege of addressing the General Assembly today because of the importance of this occasion and because of the significance of

the decisions we just made will benefit mankind as a whole and for the purposes and principles of the Charter of the United Nations.

On this occasion, I should like to congratulate the assembly on the success of its work relating to the peaceful uses of outer space. I trust that it is no less fruitful than that of the scientists and engineers who have continued to make extraordinary advances in the exploration of space itself.

I am sure that I speak for all members and all peoples in expressing deep satisfaction at the progress that has been made so far in [inaudible 22:18] treaty to govern the activities of states in space. I know, too, that people everywhere share my hope that the agreement will come into force without delay.

While I'm gratified at the progress made so far, I note with regret that the door is not yet barred against military activities in space. The crux of the difficulty is that space activity is already part of the arms race, a fact which we have to reckon with until humanity reaches a stage of an agreement on full and complete disarmament.

Space disarmament is but one segment of the broader overshadowing problem of world peace and disarmament with which the world has wrestled for so long with a growing awareness of the need but without sustained success.

Eventually, nations must surely realize that their general interests lie in peaceful, rather than military activities and that the activities in space should, thus, be peace-oriented. Mr. President, no less gratifying is the decision of the General Assembly.

We've endorsed the unanimous recommendation of the committee on peaceful uses of outer space, calling for an international conference to examine the practical benefits to be derived from space research and exploration on the basis of technical and scientific achievements and the extent to which non-space countries, especially the developing countries may enjoy these benefits, as well as take part in international cooperation in space activities.

The recommendation is adopted as commendable, as a major step towards bridging the ever-widening gap between the space powers and the non-space powers, particularly the developing countries.

It is my sincere hope that a conference will only be a first step, and will not only explain the practical benefits of space exploration but will result, ultimately, in joint practical ventures that will actually bring the benefits of space exploration to all nations, thus helping to alleviate some of the economic and social problems that beset mankind.

To this end, I assure you that the Secretariat will not spare any effort for whatever may be the implications of space exploration. It is in the obligation of practical benefits that the developing countries have their interest in space and it is my strong conviction that the United Nations channels should accelerate the accommodation of such benefits to the developing countries.

It is my fervent hope that through the work you have just completed, the United Nations will be able to ensure that the exploration and use of outer space shall be a [inaudible 25:56] point of cooperation rather than a new area of conflict and mistrust. Thank you, Mr. President.

Christopher Johnson: There, you see perfectly how he talks about space powers and non-space powers and idea that space exploration should be done for the benefit and the interests of all countries, not just the space powers. That's the statement by the Secretary General. You, also, saw the adoption of the outer space treaty as a draft text in the resolution.

Resolution 2222 requests the depository governments to open the treaty for signature and ratification at the earliest possible date and expresses its hope for the widest possible adherence to the treaty.

With that in mind, and I think our professors can talk later today about, "Is it often the case where treaties are contained in annexes to UNGA resolutions?" I honestly don't know, but, here, that is the case where it is contained in the annex.

This is December 19th, 1966, and from there, we have signing ceremonies set up and executed in Moscow, in London, and in Washington, DC. Our next clip shows, and you can start rolling it.

I show it merely for the sake of completeness, so that I can say and so that you can say, you've seen the signing ceremony, as it happened, in Moscow. There is no sound on this. You can go to the next clip. The next clip is the press release from the London ceremony.

Video Recording: ...in office and a warm welcome to Senator Robert Kennedy. George Brown was host when Bobby was in England for a few days meeting important people.

Meanwhile, the Foreign Minister presided at the signing of the treaty banning nuclear weapons from outer space. He pledged Britain's wholehearted support. Without such a treaty, life on Earth would be under continual threat. A nightmare existence.

Soviet Ambassador Smirnovsky acted for Moscow. On the right, sat the American Charge d'Affaires. Other signings were made in Washington and Moscow. So far, 31 nations have joined in the treaty. The Russian Ambassador. Philip Kaiser for America. Between West and East, this is the best cooperation for a long time.

[music]

Christopher Johnson: So, signing ceremonies in three countries. I don't know how often treaties are signed at the same day in three depository governments. That must be something that must have happened in the past. The next clip that we have is of, in Washington, DC, the signing ceremony in DC.

Video Recording: It was January 27th. A [inaudible 29:02] achievement, ordinarily destined for the headlines, would in one hour's time, be pushed back to page two. Representatives of 60 nations arrived at the White House to sign a treaty barring military weapons from outer space.

The treaty, proposed by President Johnson, less than a year ago, and drafted at the United Nations, was hailed as a true landmark of man's march towards international peace and security.

At the same time that major signatories applauded the leadership of both the United States and Russia, a similar ceremony was being held in Moscow.

Premier Kosygin toasted the document with champagne, while Mr. Gromyko signed it and in the East room of the White House, Ambassador Dobrynin expressed his hope that other urgent problems could also be solved before long.

Secretary of State Dean Rusk and Ambassador to the United Nations, Arthur Goldberg, signed for the United States.

"Someday," President Johnson remarked, "cosmonauts and astronauts will be on the surface of the Moon, not as warriors, but as brothers."

In the composing room of every major morning paper, banner headlines have already been prepared, heralding the historic peace pact. Within 30 minutes, however, those headlines would be scrubbed.

On Pad 34 at Cape Kennedy, a routine space flight simulation would turn to sudden tragedy. A flash fire, gutting the space capsule, would claim the lives of Air Force Lieutenant Colonel Gus Grissom, Air Force Lieutenant Colonel Edward White, and Navy Commander Roger Chaffee.

Christopher Johnson: That was January 27th, 1967, 50 years ago. It was also a Friday. Those are the remarks that President Johnson made I printed out. They're also at the back. On February 7th of 1967, he transmits the draft treaty to the Senate for its advice and consent. There I end my story, and Oonagh the floor is yours.

Oonagh: Everyone, our next panel will be starting very shortly, but you are welcome to top off your empty coffee in the interim. As I mentioned earlier, I'm going to use this opportunity as we microphone our next set of speakers to tell you a little bit about the American Society of International Law.

For those of you unfamiliar with the American Society of International Law, we are a 111-year-old professional members' association founded by the then Secretary of State, Elihu Root of the Teddy Roosevelt administration.

We are also a non-advocacy, non-partisan society that does not take particular stances beyond our mission which is to foster the study of international law and promote the establishment and maintenance of international relations on the basis of law and of justice.

If you are interested in learning more about the American Society of International Law, please feel free to check out the materials located at the back of the room. Please also go to our website, www.asil.org.

In particular, I invite you to look at the web page for the space law interest groups, and that can be found under ASIL's main web page. Go under community, and then under interest groups and you will find us there.

As I mentioned earlier, I do want to bring to attention one specific event. ASIL is hosting a live-streamed briefing series on International Law and the Trump administration. The first briefing will be held next Wednesday, February 1st, from 11:30 to 12:30. It will address the topic of the future of international agreements.

This is an especially timely discussion given the reports of pending executive orders likely to come out shortly from the new administration. If you are interested, you are welcome to register online www.asil.org/100days. I now invite our next set of panelists to come to the podium. This panel will be moderated by Professor Steven Mirmina of Georgetown University Law Center.

He will be accompanied by two other distinguished professors from Georgetown University Law Center, Professor David Koplow, and Professor Robert Dalton. Together, they are going to be speaking more specifically about the Outer Space Treaty and the methods by which a lawyer must interpret the treaties today.

In particular, they're going to be looking at how the evolution of the last 50 years, what impact that would have on interpretation of the treaty as a matter of international law. Without further delay, I pass you to our next set of speakers.

Steven Mirmina: Professor Koplow, Professor Dalton, thank you for joining me today on the panel. It is an important day, the 50-year anniversary of the Outer Space Treaty signing.

It was interesting to hear referenced in the video, also the 50-year anniversary to the day of the Apollo One fire where NASA lost the astronauts, Grisham, White, and Chaffee.

It was interesting to hear, how they say they had these headlines that were prepared in the newspaper that immediately needed to move to page two based on the NASA tragedy.

I wanted to ask you today about treaty interpretation, in particular, the Outer Space Treaty being 50 years old at this point. Some folks might say it doesn't adequately address some of the initiatives that we have in practice now such as asteroid mining by private companies or issues about space debris.

Is it OK to capture a piece of space debris and then bring it back to Earth or to de-orbit it? How would lawyers today interpret a treaty that is 50 years old and how should it be applied? Are there rules for interpretation, in particular, the Outer Space Treaty? Professor Koplow?

Male Participant: Thank you, and it's a great pleasure to participate in this panel. Before I respond to that question, let me also add my two cents on your first comment which is that it's noteworthy that this is the 50th anniversary of the signing of the treaty, but it's also almost the 50th anniversary of the Senate giving its advice and consent to this treaty and with this treaty entering into force.

The fact that all that was accomplished within a single calendar year, from today's perspective, is perhaps the most anachronistic part of this treaty.

[laughter]

Male Participant: That just doesn't happen anymore. That is to be celebrated as an accomplishment of 1967, as well. I think the interpretation and application of this treaty is especially daunting, in part because 50 years have elapsed, but also because the concept of this treaty was that it is principles above the operation and exploitation in outer space.

It was not intended to be a permanent code governing all aspects of operations in outer space. In the intervening years, the style of drafting of some of these treaties has changed.

In other areas, we've seen that the countries have come up with a much more comprehensive set of rules and regulations that would be designed to be of more enduring and detailed operation.

The contrast with the Law of the Sea Convention, for example, is quite striking. That document is hundreds of pages long and tried to nail down the details about multiple aspects of the operation in that environment whereas this instrument was intended in a more modest way to articulate principles.

Over the course of five decades, the development of technology, the development of new political relationships, the development of new aspirations is going to challenge the operation of those principles.

From my perspective, the principles endure, the principles remain, but the lack of detail does provide an awful lot of wiggle room for state practice.

Male Participant: Maybe I could say something about treaty interpretation. There is a convention on the law of treaties -- the Vienna Convention on the Law of Treaty -- which has 114 parties.

It's a codification convention. Even with respect to countries that are not parties, it is, for the most part, regarded as customary law.

The United States, for example, is not a party but when it wants to complain about a state not fulfilling its obligations under international law, it says, of course, the Vienna Convention is customary law and therefore, we make the following articles based on that text.

The Vienna Convention said that its rules would apply in the future, but in fact there is practice of cases decided by the International Court of Justice, where an 1885 treaty has been interpreted in accordance with the Vienna Convention rules and that was OK for most of the parties.

The relevant articles in the Vienna Convention from our discussion are 31 and 32. They're both on interpretation of treaties. They're really pretty simple and they are a remarkable improvement on what preceded them, which I might describe as the exchange of maxims.

There were nice Latin phrases that indicated legal consequences and their antonyms were available in Latin, as well. You had standoffs, but today, the rules in Articles 31 and 32 are pretty compact.

They are generally regarded as customary law. The American Law Institute, which is re-doing foreign relations law of the United States after 30 years has decided that in contrast to what they thought 30 years ago, the United States interpretive practice is consistent with the Vienna Convention on Law of Treaties.

There are provisions for developments, some of which indicate practices that one of our previous speakers indicated, where you look at practice and you look at whether the parties to a treaty can

be regarded as having agreed. That that is what the treaty means today and that is how they would interpret it today.

There is some flexibility in growth and the International Law Commission, which developed at the Vienna Convention, is looking at guidelines that might help in fulfilling the gaps in Article 32. States are being asked to comment on those proposals at the beginning of next year.

We'll see some practice and some development with respect to some elements of the Vienna Convention on interpretation that perhaps need some further development in connection with the changes that have taken place, just like changes have taken place under the Space Treaty. We can live with that.

No one wants to open the Vienna Convention of the Law Treaties for amendment. These guidelines will serve as guidelines. I think that's the introduction to the idea of interpretation of treaties as reflected both in the Vienna Convention and in United States practice.

Steven: Thank you. Earlier, Ken Hodgkins from the State Department was talking about the evolution of treaties, principles, and now, guidelines.

What he essentially suggested was that we're in an era of soft law right now. The treaties had been established. Then we went to these non-binding UN general assembly principles and now we have technical guidelines. Why would a state comply with soft law? Is there any obligation to comply with soft law? When is it useful? What can it be used for?

Male Participant: I think that one can start with the expression "soft law". Soft law is essentially a contradictory concept. If you violate the law of the District of Columbia, it is not soft law.

[laughter]

Male Participant: I think the term soft law is in opposite, but guidelines, which are joined in by states in an informal manner, are useful.

The Vienna Convention uses the term "good faith" seven times in the text and there are only 85 articles, so in regards to these guidelines, states are expected to exercise good faith and that is essentially what we heard earlier today.

Male Participant: I'll just add that from the political perspective, I think part of the story is that the United States and others have become, if not allergic to treaties, at least very hesitant about the articulation of new legally-binding international agreements and that for whatever reason, outer space has become a particularly sensitive topic.

It's an area where, to my way of thinking, many of the agreements, many of the understandings that are now incorporated as non-legally-binding instruments could and should have been written into treaties, but the domestic and international politics have become constipated on international agreements and therefore, we're falling back to a second-best solution.

Male Participant: To follow up on something that Professor Dalton said about states complying with soft law principles or guidelines. In terms of the Liability Convention, liability

on earth is absolute. Liability in space is based on fault. There's a question of how do you prove fault?

You might turn to what are the reactions of a reasonable operator and if states are complying with a certain technical practice and there's another state that doesn't, there may be some presumption of fault that may have liability implications.

There's a line of thinking that even though it's soft law or technical guideline, that it could eventually morph into state practice.

Male Participant: There are also general principles of law and a number of countries follow general principles of law that aren't articulated in treaties but are just generally accepted by the international community as being customary law.

Male Participant: I'd add that from my perspective, the record of state compliance with international law in outer space as it exists is pretty good.

One of the unfortunate aspects of the Outer Space Treaty being so successful is there have not been a lot of controversies, a lot of complaints about violation of the Outer Space treaty and associated instruments.

That might mislead people into thinking that it was not a very ambitious or important undertaking. In fact, I think it contributed a great deal and as Ken Hodgkins said, one aspect of that treaty is that it's mostly permissions.

That is, there are relatively a few instances of 'thou shalt not' in the Outer Space Treaty. It mostly, at least with respect to the military operations, mostly prohibited countries from doing things that nobody was going to do anyway or that nobody had any interest or technical capability of doing.

Again, from my perspective, that's an indication that the time is over-ripe for additional development of new legally binding measures of international law that the international political community has not yet been able to deal with.

Steven: Earlier today, Chris Johnson spoke about the treaty, and in particular he called our attention to the title of the treaty which is Principles Governing the Activities of States.

We're essentially at a stage of development now where you'll have a private company such as Space X build a rocket to go to a private space station or eventually a space hotel where there will be no NASA involvement or no National Space Agency involvement. How do we take a treaty that was written to govern the activities of states and apply it to individual private actors?

Male Participant: It won't be easy, and in part, that's because of the genesis of this instrument during the Cold War. The original Soviet concept for an Outer Space Treaty was that all activities in outer space must be undertaken by states.

The government would do the activity and the United States, back then already having an idea about private activities in outer space, wanted to clear the way for more corporate or individual activities in outer space.

The solution was some of each. To say that private activity can be done but the state is responsible for the activities done by their private individuals and corporations.

That was a solid amount of compromise in 1967, but it's not completely in keeping with the modern political, economic, social structures around the world following the collapse of the Soviet Union.

Male Participant: If a state has an obligation under the Outer Space Treaty and we now have the technology to do things that we didn't have originally.

Doesn't good faith require a state to be responsible for its corporate activity by specifying that, enacting a domestic law saying that it licenses in the following cases, and the licenses have aged on the international obligations of the United States, as a party through the Treaty on Outer Space, so the controls regulates in good faith the conduct is national.

Male Participant: I think that's a good solution, but it may not be a complete solution, or an easy solution, if you're dealing with things like multinational corporations, or joint enterprises that are undertaken by individual or corporations from many countries.

Whose national is responsible? Which country is responsible, for registering, regulating and overseeing that activity?

Male Participant: It clearly is a better solution than the solution that the Outer Space Treaty has for activity of international organizations, which doesn't regulate that at all, leaves that to hope.

Male Participant: It's also, I think it should be said, not surprising that the Outer Space Treaty is structured as an agreement that deals with the responsibilities of states.

That's basically what international law does, and especially 50 years ago. The players of international law were states, and so that's the logical starting point for an international agreement, especially from that era.

Steven: How should we address the question of asteroid mining? A private company going into space, mining an asteroid, let's say. There are different scenarios.

They could sell the resources up in space. They can bring them back to earth and sell them. How do we square that with Article Two of the Outer Space Treaty, which bans any national appropriation of outer space?

Male Participant: If you bring it back, I'm not sure that you're exercising sovereignty into space. It becomes property as you bring it back.

Clearly, it's not an easy question to solve. For example, the expenses of, say, mining, and getting there and getting it back, are hypothetical today. We can't really regulate that.

It does seem to me that as time goes on, there may be principles that are involved, that states agree to as being suitable for this new development as a result of technology.

Male Participant: I think this is a prime example of the age of the Outer Space Treaty, and its inelegancy for dealing, effectively and in a detailed and universally accepted way, with the possibilities of modern technology and modern economics.

The language of the Outer Space Treaty talks about countries not being allowed to claim sovereignty, or to appropriate outer space in other ways. To me, the clear thrust of that would be that mining the moon or an asteroid is quite problematic as a legal matter.

It might be possible for sharp lawyers to interpret that provision as not applying to extracting the resources of the moon. One could argue that by privatizing minerals you're not claiming sovereignty or otherwise appropriating outer space.

The debate might be joined in that way, but I'd suggest that's not a very satisfactory way for developing the international law. Instead of having debates among the lawyers on interpretation of a 50-year-old text, we should have a new text.

We should have a new understanding. It won't be easy to hammer out a new international agreement on mining, but to me that's the better way of dealing with the new possibilities.

Male Participant: So, you're suggesting essentially a treaty developing time on mining or on resources as opposed to maybe reopening the Outer Space Treaty, or renegotiating Article Two, or adding a protocol to the treaty, having something specific on mining, the way we had on registration or liability.

Male Participant: To me, that would make more sense. There's always a danger, when you amend or open up a treaty, that people will find additional things they'd like tweak. To my way of thinking, the Outer Space Treaty is best left alone, but new law can be crafted, somewhat independently.

Male Participant: One of my frustrations is the Convention on the Law of the Sea. My frustration is that it has so many parts and so many protocols and so many annexes, and a lack of index and guidance, that it's almost impossible to find what you want and need to know, unless you're a specialist in the Law of the Sea.

I would be concerned at amending the Outer Space Treaty by protocols and annexes and other documents that would complicate. I also wonder whether the parties that you have today would give the same priority to becoming a party to amendments, as we saw at the...It just takes longer today.

Take the Vienna Convention on the Law of Treaties. It took 11 years for it to enter into force. We recently found out that Paraguay ratified the Outer Space Treaty in December 2016.

It seems unlikely that if the Treaty is amended, that Paraguay would rush to become a party of the amended treaty. It's not, in my judgment, a very effective way to deal with questions.

Steven: I'm going to ask one more question before opening the panelists up to questions from the audience, but I wanted to ask you about Article Three, the Outer Space Treaty. Article Three is the one that says that activities of states in outer space, have to be conducted in accordance with international law.

Apart from what's written in the Outer Space Treaty, what other international law applies in space? Alternatively, did any law apply in space before the Outer Space Treaty went into effect?

Male Participant: I don't think so.

Male Participant: Indeed, I think this is one of the great unheralded contributions of this treaty is to make clear that outer space is not a law-free zone, where nothing applies unless it is specifically designated to apply, and to fill that gap by saying the UN Charter and the rest of the corpus of the international law applied is avoiding what could have otherwise been a black hole.

Steven: No pun intended. Does international environmental law apply in outer space, or humanitarian law, does that apply in outer space?

Male Participant: Yes.

Steven: Let's open to questions from the audience. Chris, are you stepping up to the mic?

Male Participant: I'm going to step up to the mic.

Steven: Perfect, thank you.

Male Participant: In the US, we have the common law of tradition. Countries that are accepted from the UK have a common law of tradition, of judge-made law, but other states have civil law traditions. Countries with civil law traditions, France, other countries in Europe, they're also parties in the Outer Space Treaty.

On the international level, is the international legal system a common law system, or is it a civil law system? How do we use our common-law approaches to international law, and how is that different from someone in France thinking about international law and the Outer Space Treaty?

Male Participant: I think I would say that a state can use whatever system it has for expressing its consent to be bound. When you ratify a treaty, you express your consent to be bound. If you have, what I understand to be the British System, Parliament has to act.

If you have systems where it's not necessary for Parliament to act, you can express your consent to be bound depending probably on the nature of the treaty. There are certain treaties for the United States in which we have special procedures.

Then, there are other agreements, 95 percent of the agreements we do, we express consent to be bound by the executive. International law just requires that you use one of four devices for labels for expressing your consent to be bound and they can differ domestically.

Male Participant: With respect to the rule of courts, what I say, is that the International System is neither a civil-law nor a common-law system.

It's the International System, and, since some countries use the civil, some use the common. There are multiple other legal systems around the world. The International System is its own program.

Specifically, on the role of international courts, for the International Court of Justice, the statute of the ICJ specifies that the decision of the court has no binding force except as between the parties in that particular case, seeming to reduce or to deny much of the common-law tradition in international courts.

Nonetheless, you frequently see the International Court of Justice citing to its own precedents and indeed, citing to the precedents of the permanent Court of International Justice or other international tribunals, not quite as controlling authority the way US courts use stare decisis but to a similar effect.

Male Participant: Please.

Male Participant: I was going to ask, it was said earlier that perhaps a debris problem is a constraint on anti-satellite activity but I wonder if you might talk about the issue, do we need to regulate and do we need, very quickly, to try to regulate some of these anti-satellite weapons?

Because, of what I've seen, it sounds like the notion is that you could actually make space almost an area we couldn't even get into because it would just be so dangerous if there is a large anti-satellite activity.

I think it was interesting, somebody mentioned earlier, there are no sanctions, I guess, or what would be the mechanism for enforcement of some of these outer space treaty prohibitions?

So, first, does the outer space treaty even reach things like anti-satellite debris problem? It's a military activity. It was not prohibited to do military activities, as long as you're not involving the station of nuclear weapons and weapons of mass destruction.

Secondly, is it something that you feel we should be addressing, here quickly, as soon as we can, on this issue, as a space-faring nation or is it simply impossible to address, so have to deal with it with maybe just through general diplomatic processes or something like that?

I was interested in your comments. I know you've written a really good paper on this and I'd like to hear some more from you.

Male Participant: Well, thank you. Let me just say, it's typical of a law professor when he asks a question, he asks four or five questions.

[laughter]

Male Participant: What can you do? I think you're right. The starting point is that the outer space treaty does not have much to say about anti-satellite weapons.

Article Four of the treaty has the few limitations on military activities but they're not really constraining the kinds of anti-satellite weapons tests or activities that countries are contemplating today.

As long as you're not using a nuclear weapon or a weapon of mass destruction, the treaty doesn't do much, and I think you're just right, that the problem of debris is an enormous and still

somewhat underappreciated problem. That poses a great hazard to peaceful, profitable exploitation of outer space.

Space is a very big place and therefore, the fact that there's lots of debris out there does not mean that the entire regime is in trouble but not all parts of outer space are equally valuable.

The debris tends to cluster in the regimes, the orbits of outer space that are particularly valuable, so it's a huge and growing problem. Finally, to answer your seventh question...

[laughter]

Male Participant: Finally, I think one trend we observe is that in the United States and Russia and China and elsewhere, the trend regarding anti-satellite weapons now favors the particular kinds of anti-satellite weapons that do not generate big clouds of debris.

That is, instead of using interceptors that collide with or explode near a targeted satellite and thereby, generate additional clouds of debris, the flavor of the month is non-destructive, not explosive anti-satellite weapons that might, nonetheless, damage or destroy the target satellite, but not explosively.

You do it with laser beams or you do it with cyber weapons or you do it in some other way that would not contribute as much to the debris problem. Still, poses enormous challenges for international peace and security, but at least, it minimizes the danger and exposure of additional debris.

Steven: One thing just to add to that. Although Article Nine certainly wouldn't have any prohibition against anti-satellite weapons, there is the prohibition in Article Nine about harmful contamination of outer space and the obligation to conduct activities with due regard for other nations.

I wanted to ask Professor Dalton, due regard. How substantive of an obligation is that, to conduct obligations with due regard for another state? Is that something actionable?

I don't think there's ever, there certainly never been a claim, I think, under Article Nine, but have you seen it in other treaties or other contexts?

Male Participant: No, but I would think that a state would be reluctant to launch astronauts that were suffering from certain diseases even if it wasn't, but it could affect the environment of space I think responsible states would have rules in place to prevent that. That is part of the good faith obligation of the Article that you cited.

Steven: Mr. Koplów.

Male Participant: Well, I just wanted to point out quickly if there are no questions. In today's celebration of the outer space treaty, we shouldn't pretend that everything is perfect.

Indeed, one of my complaints about the outer space treaty is the country's general failure, part of its general failure to implement Article Nine, specifically the provision that requires a country to

undertake international consultations prior to undertaking an activity that might cause potential harmful interference with space activities of other states.

That provision in that article is of potentially enormous value in admitting some of the potential areas of conflict and the short-sighted failure to take advantage of or to insist upon others taking advantage of that provision is I think is a profound failure.

Steven: We are approaching the end of the hour, but let me just look around the audience. Wes, did you have a question? There's one more in the back after.

Male Participant: We've talked a lot about the actions and enforcement on actors in space with reference to states or even multinational corporations.

But we're rapidly approaching the point where we're going to have long-term communities in space whether that be in colony situations or in space stations or something like that. That's when you set up the situation where there are humans acting as humans do towards other humans in space.

Now we've got whether it be nationally driven things like espionage or conflict or just interpersonal relationships where humans are acting as we do towards our fellow human beings. How do we regulate that?

How does international law which can't govern that kind of thing effectively on our planet whether it's actually sovereignty and you can expect a particular country to hold its individuals to account because of jurisdiction under territory.

How do we do that when we have the first assault or the first murder in space and where do you...how does international law engage with that idea and that reality?

Male Participant: We have had some murders in Antarctica. States have expanded their jurisdiction to be able to prosecute and convict for that, so states could certainly enact criminal law that would be applicable to their states or to their people, or their entities if there were a general rule willingness to do that.

Male Participant: Well, another modest partial precedent, the Treaty on Chemical Weapons that prohibits countries from possessing or using chemical weapons also has a provision requiring each party to adopt its own domestic law to prohibit its citizens from doing things with chemical weapons that the treaty directly prohibits the country from doing.

That's the way of passing to each state an obligation to extend its own domestic law to deal with at least some of these extraterritorial circumstances.

Steven: In the context of the international space station, there's the intergovernmental agreement which is public international law enforcement which has, it might be Article 21 or 22. It's on criminal jurisdiction.

It gives authority to the commander to arrest a subject and it gives authority to the states on Earth to prosecute crimes that might occur in space. Although we don't have the Martian colony just yet, we do have some similes, some metaphors that we might be able to use as an analogy.

Steven: There was a question in the back? Was it Rob, maybe?

Male Participant: Yes, sir. Back to Article Four for a second, I just want to see if either of you have thoughts on the conflict of laws problem.

Steven, you mentioned environmental law had applied, but to the extent of conflict of law between environmental treaty provision and another provision of the outer space focus, another example might be on conflicts as conflicts arise in outer space.

How on the theory of *lex specialis*, then can they create a hierarchy among legal norms? How do you to approach that problem? What factors do you consider? How would you resolve it, to the extent you find them in conflict?

Male Participant: [inaudible 74:18] .

[laughter]

Male Participant: I'm not sure that the example that you gave us is regulated by Article Four. I'm not sure that it necessarily has to be regulated. I certainly would be delighted to hear other suggestions if they propose a more acceptable answer to your question.

Male Participant: At the moment, I think this is in the realm of hypotheticals that law school professors make up for exams.

[laughter]

Male Participant: Where you might in fact have two *lex specialis* regimes whether the applicable most special rule is the law on conflict, or the more special regime is law of outer space. We don't have the answer for that.

Steven: I just wanted to add that the International Law Commission's report on privatization from 2007 discuss that, so you might want to look that up.

Oonagh, did you want to come up?

[background noise]

Oonagh: Before I formally close proceedings I have one question myself.

[laughter]

Oonagh: Panelists take liberties, but I know that even in UNCLOS we have the terminology that's the Law of the Sea Convention which is the common heritage of mankind and we speak the national resources on the seabed and in the oceans.

I notice that the language in the Outer Space Treaty is different, preeminently speaks of the common interest of mankind. Then we also have the phraseology that says the exploration and use of outer space is the common province of mankind.

On a purely textual basis those appear to be different about similar things. What do those terms mean to you or do you associate them as being one and the same thing? Do the rules of treaty interpretation and the object and purpose of the different treaties and the intention of the parties help you or not?

Male Participant: I would believe they don't mean the same thing.

Oonagh: Why so?

Male Participant: Because if they meant the same thing they would use the same language.

[laughter]

Oonagh: Culturally, we have some quirks and tribunals take let's say a partisan approach to treaty interpretation or a teleological approach, and in many ways some of the aims of UNCLOS are not dissimilar to the OST.

Male Participant: The Moon Treaty does use the phrase common heritage of mankind. That in large part explains the lack of acceptance of the Moon Treaty.

The regime that in the Law of the Sea you mentioned has some genuine teeth to declaring that the resources belong to the world and cannot be mined without permission from the world through the structure of the authority. The Moon Treaty would perhaps set up with a similar sort of regime. The Outer Space Treaty and the others deliberately do not.

Steven: Just one thing to add is the moon agreement was negotiated at a similar time as the Law of the Sea Convention, so they knew what was going on when they used the common heritage of mankind in the UNCLOS convention and they deliberately used it in the moon agreement.

That, in Article 11, is one of the most problematic articles that prevented the Senate from ratifying the moon agreement, so I would say that the promise of mankind in the outer space treaty had clearly and intentionally has a different intended meaning than common heritage of mankind in the moon agreement.

Oonagh: Thank you very much for your answers. With that I formally close today's conference. I'd like to thank you all for taking the time out of your schedules to come here. I very much hope that you can stay in touch with the activities of the American Society of International Law.

I would like to thank again our hosts Georgetown University Law Center and the very kind sponsorship of Secure World Foundation, and I would like you all to extend a warm round of applause to each of our panelists for their very thoughtful discussion.

[applause]