

IAC-07-E6.5.01

THE OUTER SPACE TREATY: 1967-2007

Jonathan F. Galloway
Professor of Politics, Emeritus, Lake Forest College
jfg1939@gmail.com

ABSTRACT

Space law, of which the Outer Space Treaty of 1967 is the magna carta, must be understood in the context of the forces of history which are also disciplines of academic study. These are science and technology, politics, economics, military and ethical forces and disciplines. In this paper, an interdisciplinary analysis of these perspectives will serve to place the law of outer space in context and point the way forward to the challenges and opportunities of our times.

INTRODUCTION

The beginnings of the Space Age in 1957-58 witnessed great promise and great danger for mankind and for the development of international law and organization. Sputnik proved that mankind through the International Geophysical Year (IGY) was capable of substantial cooperation in science and technology. But the same technology that sent scientific satellites into outer

space could also launch weapons of mass destruction against an enemy. During the Cold War, the relations between the two superpowers were fraught with conflict and competition as well as cooperation and peaceful co-existence and détente. After the Cold War, history has taken a new path and we are now participant observers in this new narrative.

The path of cooperation has seen salient advances in international law culminating in the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, colloquially referred to as the Outer Space Treaty (OST). This treaty promised, inter alia, that outer space would be free for all mankind, that there would be peaceful purposes and uses and that "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" (Art. II). According to the ratifying states, the Westphalian system of territorial sovereignty was going to be replaced in outer space by a new legal

Copyright c 2007 by the author.
Published by the AIAA with permission.

regime with some parallels to the Antarctic and Law of the Sea regimes.

Below I examine the context of the new regime. I will not address the detailed evolution of the law per se. Instead, I will examine how the law can be interpreted in an interdisciplinary manner.

SCIENCE & TECHNOLOGY

Without advances in science and technology there would not have been a space age with men on the moon, orbiting satellites and plans to go to Mars. The logic of science is truth and this truth is testable and objective. It is not constrained by national boundaries. It is boundless. I believe that Art. I of the Outer Space Treaty best exemplifies the spirit of science because it calls for free “exploration and use by all States without discrimination of any kind ...” and in the last paragraph that “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.”

There are unfortunately limits to scientific co-operation. It does not necessarily spill over into other domains. Sometimes there can be Faustian bargains and the scientist can be a tool of power. Sometimes, one sees actors speaking truth to power, but, at other times, actors speak power to truth. Perhaps we see such crises when we look at the conflicts over global warming and the weaponization of outer space.

Technical progress cannot be made without a firm basis in science and truth,

but the logic of technology is not without its problems and dilemmas. Technologies can be peaceful and/or warlike. The same technology can be used to make swords or ploughshares. They often have dual uses such as launchers for warheads and launchers for civilian communications satellites. One can also think of navigation satellites encouraging air travel and also missile trajectories. It is hard to think of a technology which is a purely peaceful use or benefit or one which is purely aggressive. Consequently, mankind seeks legal controls over technological programs more than pure science. In the OST this requirement is alluded to in Art. IX where there is a mandate to control “potentially harmful interference with activities of other States Parties.” In short, technological change must be closely monitored to make sure that the effects and consequences are beneficial and peaceful. Technological change is not an independent variable in history. It is mediated by other forces of history,

POLITICAL PARAMETERS

The politics of the Outer Space Treaty represents détente and even some entente during the Cold War. It is an error to conceptualize the Cold War as a purely conflictual encounter. It was one of some non-zero-sum learning resulting in a few win-win solutions rather than all encompassing zero-sum outcomes. (1) One of these favorable results was the OST and in particular Articles II and IV. Other examples of co-operation during the Cold War include the Nuclear Test Ban Treaty, the Non-Proliferation Treaty, the Anti-Ballistic Missile Treaty and the Hot Line

agreement as well as the four other outer space treaties. (2)

Two primary factors explain cooperation and consensus during the Cold War. These are nuclear deterrence and bipolarity. Nuclear deterrence, often called mutually assured destruction (MAD), meant that each side would not go to war with the other because war could no longer be Clausewitzian, that is to say, the continuation of policy by other means. Rather, war would be mutual suicide. Therefore, it was necessary to keep conflict within bounds by developing confidence building measures and agreements such as the Hot Line agreement after the Cuban Missile crisis. Vis-à-vis outer space, reconnaissance satellites helped with transparency and the agreement not to deploy anti-ballistic missiles helped preserve MAD.

The second major factor leading to cooperation in the standoff was bipolarity. There were only two superpowers rather than a multipolar balance of power system. Multipolar systems in Europe since 1648 have used war as a means of balancing. In the bipolar world from 1945/47 to 1989/91, balancing principally occurred via internal developments within the USA and the USSR. The two superpowers restricted their external hostilities to ideological antagonisms and proxy wars – not wars face-to-face. In retrospect, it was a negative peace – a peace between enemies – and not a positive peace – a peace based on friendship and justice – but it was a peace nonetheless and the agreement to limit sovereignty in outer space was a significant accomplishment of this era in history.

ECONOMICS

The economic context of the Outer Space Treaty can be understood by examining capitalist, mercantilist and socialistic theories. Capitalism is indirectly referenced in Art. VI. It is assumed that there will be private enterprise in space and that it will be supervised by states. Thus, it is written, “The activities of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty.” It is also assumed that socialist ideals will be respected, thus the common benefit provision of Art. I where it is written that exploration and use “shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic and scientific development, and shall be the province of all mankind.”

There is also a mercantilist aspect to the OST meaning that states will be permitted to protect their national interests and national economies. This is found in all the references in the treaty to “States Parties to this Treaty,” states being the principal objects and subjects of international law – not multinational corporations or mankind in general. These dominant schools of economic thought – Smithian, Listian, and Marxian – are not explicitly identified in the OST but they are implicitly there as they are in the world economy itself. In fact, the new buzz word, “globalization” means three different things according to the three schools. To a capitalist, it means more free trade and free investment and perhaps the free movement of labor; to a mercantilist, it

means defending the national interests of your state; and to a Marxist, it means that borders have no meaning and that there are global industries. (3)

MILITARY MANEUVERING

The Outer Space Treaty does not exclude the military uses of space but it does limit weaponization. In particular, Art.IV of the Treaty says “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.” There is a disagreement in the literature about whether a peaceful use is a non-military use and not just a non-aggressive use. (4) But, in any event, looking at military strategy during the Cold War, we can say that the prohibition on WMDs in orbit reinforced nuclear deterrence, or the MAD variant thereof. (5) It thus reflects the military strategies and actual condition of the superpowers during most of the Cold War. The Anti-Ballistic Missile Treaty of 1972 also legitimated MAD or the balance of terror because it meant there would be no defense against a ballistic missile attack. Both sides had to live in a world where as Winston Churchill writes, “Safety is the sturdy child of terror and survival the twin brother of annihilation.”

ETHICAL PHILOSOPHIES

Let us consider two schools of ethics – consequentialist or utilitarian ethics and Kantian or deontological ethics, i.e., the ethics of intentions. These are both embedded in the OST in terms of the

distinction between peaceful uses and peaceful purposes. For instance, Art. IX states “In order to promote international cooperation in the peaceful exploration and use of outer space ...” and the Preamble recognizes “the common interest of all mankind in the progress and the use of outer space for peaceful purposes.” If a state has peaceful intentions for its policies and programs in outer space and they result in peaceful uses, then all ethical bases are covered. Thus, implicitly, the OST, a legal instrument, has ethical theory to support its legitimacy as well.

These ethical theories can be related to different schools of economic and political thinking. Laissez-faire capitalism is compatible with consequentialist and utilitarian ethics because the invisible hand, or the market, if it is competitive, changes self-interest into the general interest, i.e, the wealth of nations. The right deed can be produced for the wrong reasons. In world politics, if the balance of power is a law of history, the balancing occurs because each great power pursues its own national interests and equilibrium results similarly to the workings of Adam Smith’s invisible hand. Consequently, we should look at consequences – not intentions.

Another path links deontological ethics, socialism and collective security. The ethics of intentions is compatible with socialism in economics and Idealism in international relations. Socialism depends on government plans to manage the economy. If the plan works out as forecast, then intentions are matched by results. If the plan fails and there are government failures, then advocates of free enterprise will praise the market.

The same planning goes on in theory in terms of setting up a collective security system under the United Nations. The balance of power is not viewed as a law of history but as a failed policy which has brought much war and devastation. If national security is turned into collective security and global governance, then perpetual peace, the dream of Immanuel Kant and Woodrow Wilson, will result.

Sometimes, of course, the path to hell is paved with good intentions and a peaceful policy may appease the aggressor, or, on the other hand, defensive military program may result in an arms race and, in the case of ASATs, for example, the weaponization of outer space leading to non-peaceful uses of space. This did not happen during the Cold War, but is it happening now?

THE END OF THE COLD WAR

With the end of the Cold War, the promise of peaceful purposes and peaceful uses in outer space may have seemed to have occurred on earth as well. There was talk of a New World Order and increased international cooperation. The major states of the world joined together under UN auspices to push Saddam Hussein out of Kuwait. The World Trade Organization promised more economic interdependence and liberal globalization. The one remaining superpower seemed to be a benign hegemon and not an empire, hyperpower or a uberpowers. (6) But this euphoria and innocence did not last. If it had, the forces of history outlined in this paper would have pushed the world towards beneficial scientific and technological progress with no negative side effects or

Faustian bargains. It would have meant that Realpolitik had been superseded by Wilsonian idealism and collective security under the United Nations. Economically, we would have seen liberal globalization with no problems with protectionism and neo-mercantilist policies and no problems with increased inequalities and the digital divide. Militarily, the world would be moving towards disarmament as promised in the Non-Proliferation Treaty. And, ethically the ideas of Immanuel Kant and Jeremy Bentham would both be integrated into a more perfect philosophy of morality.

But a different kind of reality intervened – not progress in history but the second Iraq War, and, after 9/11, a war on terror. Further, the flat earth model of Thomas Friedman, the idea of pure capitalism without national boundaries was undermined by competing national interests. As an example vis-à-vis outer space we can note the competing global navigational satellite programs (GNSS) – GPS, Galileo, Glonass, and a Chinese program as well. (7) Another example of why free trade is not totally free involves the question of trade in dual-use technologies. Thus, issues of neo-mercantilism and fairness are still very much with us.

Certainly, the most worrisome development has been the prospect of the weaponization of outer space. (8) Instead of expanding Art. IV of the Outer Space Treaty (9), legal opinions have been enunciated and programs undertaken which could bring an arms race to space. Here, we can note the recent ASAT test by China (10) and the view in the United States that no further arms control measures are needed to provide for common security (11). If

these types of programs and this type of thinking continue, the promises of the Outer Space Treaty of 1967 might not be fulfilled in our times.

PRESCRIPTION

As lawyers and political scientists, we must push for clarity of thought about the law and the lessons of history. We must be informed by science and technology because laws or policies which do not conform to scientific fact, e.g. the Bogota Declaration (12) will create unnecessary misunderstandings. Military strategies which promise space dominance may be pie in the sky because with space debris there may be no such thing as space dominance.

What we should remember is that law itself can be a force of history, i.e., the rule “of” law and not the rule “by” law. In the history of international relations, unipolar moments are usually short. The arrogance and overstretch of the hegemonic power gives rise to imperial temptations where the law is viewed as an instrument of power by the forces that be. As the realist Josef Joffe writes concerning international law, “Yet what the law is – what is legal or illegal – is an open question. For international law has always been Silly Putty in the hands of states, to be kneaded and pummeled until it fits their self-serving purposes ...” (13). A more correct view of international law has been expressed by Louis Henkin, to wit, “almost all nations observe almost all principles of international law and almost all of their obligations almost all of the time.” (14) This is the force of law in international relations!

And this is the force of the law of outer space – the Outer Space Treaty, the subsequent treaties and UN Resolutions, states’ national laws and the evolution of customary international law. These developments have not been a steady march of progress. There are many challenges, especially concerning an arms race in space, but we in the space law community can be optimistic about peaceful purposes and uses to date. They are witness to beneficial competition and productive cooperation for “the common interest of all mankind.”

END NOTES

1. See my article “Game theory and the law and policy of outer space, Space Policy, vol. 20. no.2 (2004), 87-90.
2. The OST is the magna carta of space law followed by four additional space treaties – Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1968); Convention on International Liability for Damage Caused by Space Objects (1972); Convention on Registration of Objects Launched into Outer Space (1975); and Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (1979). The last agreement represented cooperation while being negotiated by consensus through the UN Committee on the Peaceful Uses of Outer Space

- but has been the source of great controversy since and has only been ratified by 12 states.
3. A modern “Marxist” in this sense is Thomas Friedman. See his The World is Flat: A Brief History of the Twenty-First Century (New York: Picador, 2007), 233-35. For further elaboration of the three schools of international political economy, see Jonathan F. Galloway, “Responsible Transnational Corporations?” in John Harbeson, Raymond F. Hopkins and David Smith, eds., Responsible Governance: The Global Challenge (Lanham: University Press of America, 1994), chap. 10.
 4. Bin Cheng, Studies in International Space Law (New York: Oxford, 1997), 521-522.
 5. MAD stands for “mutually assured destruction.” With Ronald Reagan’s call for missile defense in 1983, some commentators began to call for a war-winning nuclear strategy – colloquially called NUTS, or “nuclear utilization target selection.” For an analysis from those days, see Spurgeon M. Keeny, Jr. and Wolfgang K.H. Panofsky, “MAD versus NUTS,” Foreign Affairs, vol. 60, no.2 (Winter 1981/82), 287-304. Today, there is great worry that the nuclear strategies of the United States and Russia are returning to MAD or even NUTS. See, e.g. “U.S. Nuclear Buildup: A Return to MAD?” Friends Committee on National Legislation, Washington Newsletter, no. 717 (May, 2007).
 6. See Josef Joffe, Uberpower: The Imperial Temptation of America (New York: W.W. Norton, 2006) and Cullen Murphy, Are We Rome? The Fall of an Empire and the Fate of America (Boston: Houghton Mifflin, 2007).
 7. The New York Times, June 9, 2007, p. B2
 8. For an excellent annual examination of security issues in space, see the workshops on space security held at McGill University’s Institute of Air and Space Law. See, e.g. Space Security 2004, eds., Simon Collard-Wexler, et. al. (Waterloo, ON: Northview Press, 2004) and SpaceSecurity2006, SpaceSecurity.org (July, 2006). Online at <http://www.spaceSecurity.org/SSI2006.pdf>.
 9. Eilene Marie Galloway, “Expanding Article IV of the 1967 Space Treaty: A Proposal,” Proceedings of the 25th Colloquium on the Law of Outer Space, 1982(AIAA, 1983), 89-92.
 10. William J. Broad and David E. Sanger, “Flexing Muscle, China Destroys Satellite in Test: Hints of a New Arms Race,” The New York Times, January 19, 2007, A1 & A11
 11. The 2006 new National Space Policy of the United States posits that the U.S. “will oppose the development of new legal regimes or other restrictions that seek to prohibit or limit U.S. access to or use of space.”The White House, Office of Science

- and Technology Policy, "U.S. National Space Policy," August 31, 2006.(released on October 6, 2006). Online at <http://www.ostp.gov/html/US%20National%20Space%20Policy.pdf>. For further elucidation of this policy and China's space policy, see my paper, "Maintaining Space for Peaceful Purposes and Uses Through International Cooperation," Proceedings of the Forty-Ninth Colloquium on the Law of Outer Space (AIAA, 2007), 547-551.
12. The Bogota Declaration of 1976 asserted the sovereign rights of the equatorial states to the portions of the geostationary orbit which were over their territories. This argument made no scientific sense because the GSO 's special characteristics are caused by the whole earth's gravity and not by the gravity of particular states.
13. Joffe, op. Cit., 206.
14. Louis Henkin, as quoted in Richard H. Steinberg and Jonathan M. Zasloff, "Power and International Law," American Journal of International Law, vol. 100, no. 1 (January, 2006), 64-87, 78.