Which Future for the "Global Commons"?

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Abstract

The three "global commons (GC)" Antarctica, outer space and the high seas/deep seabed, which do not fall under the sovereignty of States ("State-free"), have become a symbol of peaceful cooperation and coordination of the international community. The international treaties which have already been negotiated from the 1950s show an astonishing degree of foresight concerning common public interest. Today, however, each of the three spaces is at risk in at least one of the following areas: peace and arms control, sustainability of use, and just and fair distribution of resources and benefits. This has gone so far that States have begun questioning the concept of nonappropriation. Could this potentially lead to conflicts - even armed conflicts? A new approach to the preservation and fair management of the GC is therefore necessary and requires appropriate political and diplomatic action. This paper intends to tackle the three GC together in order to identify steps for further developing their governance and to investigate, whether joint diplomatic initiatives for the three GC could be more effective than isolated efforts to deal with single hotspots. It will be argued that the future of the GC lies in the establishment of comparable moratoria, thresholds, fees and codes of conduct drawing from best practices in one or more of the three GC.

1. Innovative international law

In our present time of greed for possession and regulative zeal, it may be considered surprising that the last corners of the Earth are not yet distributed, managed and exploited. However, this is the case due to the existence of three "global commons", whose characteristic features are that they are not subject to State appropriation and all States may have unimpeded access to them. This is laid out in international law and is universally accepted in all three cases, even if not all countries in the world are parties to the individual agreements.

The Antarctic Treaty of 1958 was the first of these agreements, which introduced the status of the continent as a GC in modern international law. It was followed by the Outer Space Treaty in 1967, which stipulates the

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principles of the status of space and its use and also provides for the prohibition of State appropriation for space and the celestial bodies. More recently, following a decade-long bargaining marathon and the merger of previous treaties in 1992, a new maritime law was adopted, stipulating the high seas and seabed to be outside of sovereign national zones and State-free. It is remarkable that in all cases the principle of the GC as State-free was accompanied by additional, innovative elements. In the case of the Antarctic Treaty and the Outer Space Treaty (including its follow-up treaties such as the 1979 Moon Treaty), these elements are non-militarisation as well as arms control. For the Outer Space Treaty, the Moon Treaty and the Law of the Sea these are a very strong orientation towards common goods, including a regulation of the mining of natural resources to ensure fair distribution. Environmental protection is also established in the treaties and is very farreaching, especially in an extension to the Antarctic Treaty (Madrid Treaty of 1991).

It should be noted that the legal framework of the State-free areas took its format 60 to 20 years ago. In this timeframe, an extremely innovative yet often overlooked trend, which could almost be referred to as "concept", was seen developing: the association of the principle of State-free with key topics concerning the world community such as peace, the environment and the common good as part of international legal settlements. Today, only the Paris Climate Accords can be compared with the achievements of the legal framework established for the three GC.

2. Similarities and peculiarities

The non-appropriation by States is the international law constituent of the State-free areas. However, they also show additional characteristics that should create the perception to regard them as one single political and diplomatic context for actions in international politics. The significance of this statement lies in the fact that the political, economic and diplomatic "supervision" of the three State-free areas in all countries is spread over a wide variety of ministries, authorities and organisations. This creates inconsistency in the event of conflicts in terms of coordination and handling as well as an unsatisfactory exploitation of opportunities¹.

This is particularly relevant as conflict formation patterns and conflict types are often similar. This concerns both conflict over order as well as conflicts over distribution. The latter ones are evident. They primarily concern resources and whether and how these may be used or exploited. The practice

¹ Annual overviews of State-free areas can be found in the Yearbook on Space Policy published by the European Space Policy Institute (www.espi.or.at), in the World Ocean Review published by Maribus (www.worldoceanreview.com) and the web resources of the Secretariat of the Antarctic Treaty (www.ats.aq).

regarding "resources' is very broad and may well include mineral resources as well as orbital positions or the use of tourism as a resource. On the other hand, conflicts over order are primarily found at the level of the regulation of the distribution of benefits. This may include the definition of exclusive rights or either the prohibition or permission of certain activities and their monitoring.

In this context, a phenomenon is seen to emerge which could appropriately be considered to be a phantom of the 1970s or 1980s: the North-South conflict. While it indeed disappeared from the textbooks and the daily press, it still prevails in conflicts within the framework of State-free areas. As the following section on hotspots will highlight, the North-South conflict is not only pronounced in many of these individual topics, but it must be conceded aside from preserving its original "justification", it has become more even more pronounced and actual. As the North-South conflict at its core is essentially about fair and just order, the GC can be used as a laboratory for establishing an order on a wider scale.

This function of State-free areas as a laboratory can also be attributed to the field of peacekeeping. While this only weakly holds for the high sea, which has always been a battlefield and staging area, it applies rather well to the experience with the non-militarisation of Antarctica and the celestial bodies, i.e. the prohibition of military use even before the emergence of an arms race. It also applies to the regulation of near-Earth space, which is more coined towards arms control. While only weapons of mass destruction are banned there, no arms race involving conventional weapons so far emerged - in spite of technically feasibility and tests conducted. Can lessons learned from the Antarctic and space be derived to benefit terrestrial peacekeeping and security? Or will Antarctica and space be dragged into the maelstrom of widening militarisation and securisation that can be observed in all policy areas? The laboratory provided by States-free areas thus continuously grows in relevance.

Finally, it can be pointed out that the State-free areas brought on the development of a broad range of normative approaches that could certainly radiate even more strongly into global politics and shape their model character. The concept of "common heritage of mankind" is well-known. It was developed as a processing mode of distribution conflicts in the long negotiations on maritime law in the context of the North-South conflict. The concepts of space as "province of mankind" and the astronauts as "envoys of mankind" are less known outside the space community. They have a powerful emotional connotation, as it can be found with the preservation of wildlife in Antarctica (and the Arctic polar bear). In that way, they can be used as signals beyond the context of State-free areas. Another example of this is the view of Earth from space, where national borders cannot be distinguished while the fragility of both Earth's ecosystem and its atmosphere are made evident.

The peculiarities of the three State-free areas are particularly evident when considering the respective threats they are facing. Despite specific regulations, the environment of Antarctica is latently endangered. Space activities are already threatened by space debris and the high seas are on the edge of collapse due to plastic waste and fertilizers. The militarization of Antarctica seems unlikely, space does not see any arms race but is heavily used by the military, and the high seas are, as already mentioned, a traditional staging area and battleground. There are positive characteristics as well. Among other things, international project-based cooperation in space is successful at the highest level and even outlasts tensions (such as the International Space Station with significant American and Russian cooperation), and the regulation of the traffic on the high seas is steadily being expanded (as opposed to space) through concrete arrangements within the framework of specialised agencies such as the International Maritime Organization (IMO). Ultimately, however, these peculiarities are only gradual expressions of similar problems which are being tackled and dealt with in different scopes and levels of commitment. If an evolution model is to be created, then the problem areas mentioned would have to be aligned on respective axes. Where such axes are aiming at can be determined by analysing individual hotspots.

3. Hotspots

The hotspot at the most advanced end of the axis is the use of Geostationary Satellite Orbits (GSO) and corresponding frequencies for satellite services. This orbit is recognised as a "limited natural resource" by international law, as it is the only orbit where satellites move synchronously with Earth and are thus stationary above a certain point on the equator, which is of key importance for telecommunications, direct radio transmissions and meteorology. The Member States of the International Telecommunication Union (ITU) established a regime already in 1988 (WARC-ORB conferences 1985 and 1988) guaranteeing each State at least one position on that orbit. This so-called "a priori planning" goes in parallel with the traditional "first come, first served" principle and highlights an exceptional regime for Statefree areas which is both fair and efficient. It has been established in a long series of negotiations and is not only offering an otherwise unseen level of orientation towards public interest but also includes elements of sustainable use, such as repositioning satellites into "Graveyard/Disposal Orbits" just before the end of their functioning.

In contrast to this, the hotspot of future application of precious raw materials in space, especially on the Moon and asteroids, can be placed on a rather opposite trajectory. The treaty earmarked for the regulation of resource management, the 1979 Moon Treaty, has so far only been ratified by 16 States, none of which are a major space power. In a move, controversial among space lawyers, the US in 2015 enacted a national legislation that

allowed property rights over natural resources in outer space. Luxembourg followed suit with a similar national law in 2017, leaving the group of the European States rather critical of this, as it aims to host companies that will organise such future mining operations from Europe. With this development clearly opposing tendencies are visible in State-free outer space, that would actually have to be reunited in a coherent regime.

Maritime law has a regime of deep-sea mining based on fair and efficient regulations, however, it also has numerous hotspots, some of which even at the brink of conflict. The first hotspot concerns the conflict over islands in the East and South China Sea. The conflicting parties are China and Japan as well as China and several ASEAN States. The basic problem is the competing claim to islands, in order to be able to benefit from the exclusive economic zones set up by the 1992 Law of the Sea, which permit not only fishing but also the exploitation of natural resources on and below the seabed.

While these territorial conflicts are bordering both the State-free high seas and the State-free seabed and conflicting parties aim to shift this border, an additional problem is posed by the second hotspot, which is a territorial conflict under the maritime law manifested in the conflict over the Arctic. So far, the Arctic is considered to be part of the high seas, but increasing access possibilities related to changing climate spark a race for Artic resources. With raising of its flag on the seabed exactly at the geographic North Pole, Russia in particular set a signal. It argues with the help of reasoning related to its continental shelf to substantiate its claim to large areas of the Arctic. An area of the State-free high seas and the seabed becomes the subject of conflict in particular for the neighbouring States in the polar region. These States have a discussion platform with the Arctic Council, but walk on thin ice in terms of security policy by increasingly aggressive claims and competition for resources in the old, traditional manner.

This stands in contrast to the hotspot in the Antarctic, which is treated in a positive way similar to the Geostationary Orbit. The environmental protection of the Antarctic is under pressure both from intensified research activities and the expansion of research stations and infrastructures, as well as from tourism, but it can rely on a relatively solid foundation. The Protocol on Environmental Protection to the Antarctic (Madrid Protocol) of 1991 efficiently supplemented the Antarctic Treaty signed more than three decades earlier. In addition, there are individual species conservation agreements that established a web of environmental regulations and restraints on the exploitation of resources until at least the mid-21st century. Such binding environmental regulations are vet to be found in space, even if there are some successful individual areas such as the GSO, but without mitigating the threat posed by an increasing amount of space debris. Further, the maritime law did not prevent the formation of a "seventh continent" composed of plastic. Although environmental protection is slowly challenged in the Antarctic, it has a much greater impact than in the other two States-free areas.

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More recently, cyberspace is being referred to as a fourth State-free space or GC. This stimulates more than just academic interest. Even if cyberspace can hardly compare with those constituents of States, territory, population and State authority, its characteristics and its conflict structures are surprisingly similar to those of the three traditional State-free areas. Of particular practical interest will be whether the categorisation of cyberspace - as a Statefree space, as a telecommunications area or as a critical infrastructure - has consequences for the forum and the form of future regulation. If cyberspace is categorised as an area of telecommunications and the ITU is responsible for the regulation, it can be assumed that the characteristics and principles of the rules and regulations of this organisation will apply. If cyberspace was categorized as critical infrastructure, constituents of examples such as the energy network would be transferred to it. And if cyberspace were to be categorized as a State-free area, then the elements from the Antarctic Treaty, the Space Treaty and the Convention on the Maritime law analysed here would come to fruition.2

4. The future of the "global commons": moratoria, thresholds, fees, codes of conduct

International law and political science in Germany dealt quite intensively with State-free areas in the late 1980s and early 1990s. This resulted in two postdoctoral theses, which exemplarily presented the respective disciplinary perspectives³. Both had in common that they made a final normative statement in prospect of a fairer distribution performance from the existing and the expected regulation at that time. This optimistic view has only partially been fulfilled and is partially overshadowed by new threats and negative developments, as pointed out in the section on the hotspots. Since the 1990s, the three State-free areas have not emerged as one coherent policy area, be it in research or in practical politics. The individual questions were and still are being treated in isolation from each other, thus opening the way for clearly available comprehensive approaches and corresponding diplomatic initiatives.

² See the IISL Working Group on Cyber Law at http://iislweb.org/wp-content/uploads/2017/11/IISL-Working-Group-on-Cyber-Law_final.pdf

³ Ruediger Wolfrum: Die Internationalisierung staatsfreier Räume. Die Entwicklung einer internationalen Verwaltung für Antarktis, Weltraum, Hohe See und Meeresboden, Berlin u.a. 1984. Klaus Dieter Wolf: Internationale Regime zur Verteilung globaler Ressourcen. Eine vergleichende Analyse der Grundlagen ihrer Entstehung am Beispiel der Regelung des Zugangs zur wirtschaftlichen Nutzung des Meeresbodens, der geostationären Orbits, der Antarktis und zu Wissenschaft und Technologie, Baden-Baden 1991.

It seems certain that there will be no policing force in any of the three State-free spaces, and certainly not for their entirety. On the other hand, it is evident that achievements of one individual State-free area can also benefit other State-free areas. A specific measure would be moratoria. It is the basis for the Antarctic Treaty by simply freezing claims. The positive experiences could be applied on one hand to territorial claims in the East and South China Sea as well as to resources in space on the other. The Antarctic Treaty also has a stabilizing effect because in case of expiration or termination, not only would the situation be reset but, moreover, further claims would become a possibility and thus lead to chaos.

The introduction of thresholds would be another instrument. While these are nowadays commonplace in environmental law, they could potentially be used to a much greater extent and with a coordinated intention in topics ranging from fishing, tourism in the Antarctic and to space debris. In connection with this, consideration should be given to levying usage fees. This versatile instrument is also potentially widely applicable in the three States-free areas and could be used to create funds modelled on e.g. COP21, which promote the maintenance of State-free areas (cleansing of the seas of plastic and the space debris in space) and their responsible use by supporting "latecomers". However, the most important stabilizing element would be comparable codes of conduct as well as transparency- and confidence-building measures. The relevance of aligned frameworks concerning the three State-free areas would become very clear by the generation of synergies and the promotion of acceptance. Based on individual best practices and experiences, such as regulations by the IMO (or in a neighbouring field by the International Civil Aviation Organization ICAO), space could introduce urgently needed "Rules of the Road" in the form of space traffic management, which would extend beyond existing soft law.

Moratoria, thresholds and fees, codes of conduct and transparency- and confidence-building measures can therefore be introduced for a more stable and more equitable arrangement of the use of the three State-free areas. Incentives for doing so can be found in many individual areas: the added value of a holistic consideration of State-free areas as one coherent problem area of international relations and consequently of international law lies in a universalisation of best practices. For this purpose, a raising awareness among both the public and decision-makers is necessary in order to recognize this political context and to trigger a dynamic regulation. The alternatives are conflicts that have so far been peaceful, but which may well escalate in the future. It thus becomes understandable that security policy has recently focused on considering the State-free areas as a coherent policy area.⁴

⁴ A first example for this was: Mark Barrett et al.: Assured access to the global commons. Maritime, air, space, cyber, Allied Command Transformation, Norfolk 2011.

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International organisations and fora are available as negotiation platforms. More than ever, States are needed which are willing to adopt conceptual and diplomatic leadership and provide sufficient credibility. This must be accompanied by a peaceful but also robust encounter of attacks on the basic principle of the freedom of the use in these areas. Ideally, any actions should combine sustainability and distributive justice. All States, regardless of their preferences in developing international law and regulations, should join in developing an international order for the GC based on the principles and supported by the mechanisms outlined above. This can be guided by pragmatism and enlightened self-interest together with a catalysing dose of responsibility for the future.