

Arctic Governance from the Perspective of “Self-Governance” Theory

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Abstract. The current governance model of the Arctic accords with the theoretical characteristics of Ostrom’s “self-governance” theory to a large extent, such as the multi-centralized governance pattern of the Arctic with self-governance factors, the size of the Arctic Council and the nature of high-level forum. The current difficulties of the Arctic Council’s self-governance are mainly manifested in the unstable external political environment, difficulties in institutional supply and lack of credible commitments. The breakthrough of the dilemma of self-governance and the realization of institutional change can be started from the “nested enterprise” model to explore the multi-level arctic governance pattern.

Keywords: Self-governance; Arctic governance; institutional supply; credible commitment; mutual monitoring.

1. Introduction

The Arctic, especially the high seas of the Arctic Ocean, is a typical global common. There is no treaty system similar to that of the Antarctic to make an overall institutional arrangement. The United Nations Convention on the Law of the Sea (UNCLOS) also contains no specific provisions on the Arctic issue. In 1996, the eight Arctic countries, including the United States, Russia and Canada, signed the Ottawa Declaration, which was born out of the Arctic Environmental Protection Strategy in 1990. As a high-level intergovernmental forum, the Arctic Council was formally established, focusing on environmental protection and sustainable development in the Arctic region. Although the Arctic Council has made many gratifying achievements so far, the environmental problems in the Arctic have become increasingly serious in recent years.

The Arctic Council-led governance model is quite distinctive, which is similar to the theory of “self-governance” proposed by Ostrom in her public policy book “Governing the commons: The evolution of institutions for collective action” and other research results. It is believed that examining the difficulties and solutions of Arctic governance from the perspective of this discipline of public policy can help us grasp the development trend of Arctic governance from a multi-dimensional perspective and provide intellectual support for Arctic Council and Arctic governance.

2. Self-governance theory and its mechanism

In 1968, Hardin published “the Tragedy of the Commons”, which systematically expounded the dilemma of governance in the face of common-pool resources: “Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons [1].” Of course, Hardin was not the first to note the tragedy of the Commons. The traditional collective action theory also has a very classic elaboration on common-pool resources. Institutional economics on how to solve the collective action dilemma and the tragedy of the Commons is very meaningful to explore more. However, the early research results are still based on the dichotomy of the state and the market. The former uses the government or institutions to correct the externalities of the market, thereby avoiding the deviation of collective rationality and individual rationality, while the latter is committed to privatizing common-pool resources to achieve efficiency of resource allocation. The self-governance theory proposed by Ostrom,

professor of political economy at Indiana University, creatively constructs a third way to break the logic of collective action and therefore won the Nobel Prize in Economics for her work on “governing the commons” and other research achievements.

Specifically, Ostrom believes that self-governance emphasizes the formation of a relatively fixed governance framework by small groups in a low external pressure environment, and effective governance can be achieved through the independent management and use of common-pool resources. Furthermore, Ostrom proposed the framework of institutional analysis, namely, to solve the collective action problem of common-pool resources, three problems need to be solved: (1) institutional supply, (2) credible commitment, and (3) mutual monitoring [2].

3. Self-governance factors in Arctic governance

3.1 A multi-center governance pattern in the Arctic

The external environment for the effective application of self-governance is the government's permission or delegation of power. To be specific, first, the common-pool resources are located in remote areas, no matter what happens to them, the political system there is basically unchanged; Second, the common-pool resources are in non-remote areas, and the surrounding political system is indifferent or promoting, and the appropriators adopt new rules to promote common interests, but even if there is a good political system cannot guarantee the success of solving the problems they face; Third, the common-pool resources are in non-remote areas, and government officials believe that they, rather than appropriators, must solve the common-pool resources, when the effect of self-governance is uncertain, depending on the integrity and diligence of officials and other factors. It can be found that for self-governance, the optimal external political environment is just like what Ostrom summed up, “none of the success cases involved direct regulation by a centralized authority [2]”. However, this limitation of external conditions is in fact widely questioned by scholars, who think that this external condition is illusory. For example, Zhu Guangzhong of Nanjing University of Finance and Economics argues that “Limiting common-pool resources to remote areas is neither universal nor contrary to the process of social modernization. Therefore, the external conditions described by the theory of self-governance not only rarely exist, but also cannot be sustained by the tide of the times. In essence, they are similar to the illusion of ‘Peach Blossom Land’ in China [3].”

However, this usually harsh prerequisite does not pose a difficulty in the context of Arctic governance. First of all, the Arctic is naturally located in a remote area, and there is no treaty system similar to that of the Antarctic. In other words, there is no systematic rule of international law to regulate it, and there is no centralized governance system, just like the “peach Blossom Land” in international law. The Arctic Council, for environmental governance, is not a regulatory international organization but more akin to a high-level forum. In the 1996 Ottawa Declaration on the establishment of the Arctic Council, the Arctic Council is established as a high-level forum to provide a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic. Take the member state of the United States as an example. Since the establishment of the Arctic Council, the United States has always insisted that the Arctic Council should play the role of an intergovernmental high-level forum and limited its work to promoting regional sustainable development and environmental protection. “Washington remains committed to supporting the Arctic Council as the primary forum for Arctic States and indigenous peoples to discuss matters of mutual concern,” said U.S. Special Representative for the Arctic Robert Papp [4]. Therefore, it can be said that the Arctic Council's governance model has basically formed the multi-center governance mentioned by Ostrom.

3.2 The Arctic Council is limited in size

The core of the self-governance theory is that “the group appropriating from the common-pool resources is relatively small and stable” [2]. It is important to note that Ostrom also adds that when considering collective action issues, emphasis is often placed on the group size involved, but that there are other variables that are more important than the number of appropriators involved in common-pool resources. But the essence of Ostrom’s theory is a summary of experience, and the successful experience of self-governance is basically gathered in small-scale common-pool. The largest system involving “limited shared resources” has only 15,000 resource appropriators [5]. It is easy to understand that the closer common-pool resources are to a center of other economic activity, the more likely it is that the appropriators of the area, the value of resource units, and the acquisition of appropriators in the vicinity of a common-pool resources will adversely affect the output of that common-pool resources.

The land, islands and coastal waters of the Arctic belong to the United States, Canada, Norway, Russia, Denmark, Iceland, Finland and Sweden. These countries have direct interests in Arctic affairs, presenting a small but stable governance situation, and the governing body meets the requirements of self-governance in terms of size. In addition, the Arctic Council includes the United States, Canada, Russia and other superpowers, which makes it difficult for external forces to break the scope of subjects involved in Arctic affairs and minimizes external political pressure. Despite the Arctic Council in the process of reform, development and constantly improve the status of the indigenous groups, expand the scope of the observer countries and permissions, as Article 5 and Article 6 of the “Arctic Council Observer Manual for Subsidiary Bodies”, decisions at all levels in the Arctic Council are the exclusive right and responsibility of the eight Arctic States with the involvement of the Permanent Participants. All decisions are taken by consensus of the Arctic States [6]. The observer, as the name suggests, has only the right to observe, not the substantive decision-making right in the Arctic Council. In this case, the Arctic Council’s decision-making circle remains limited.

3.3 Informal rules -- validity of soft law

Another notable feature of the theory of self-governance is that it emphasizes the validity of informal rules rather than being limited to legal rules. In Ostrom’s new form of game, people are able to enter into binding contracts that commit them to their own co-operating strategies. This mode of self-governance does not rely on a government regulatory agency to supervise, but supervises each other under the drive of self-interests, thus avoiding wrong sanctions caused by incomplete information and dereliction of duty or even capture of supervisors of government regulatory agencies. The “working rules” under self-governance may or may not come close to formal law in the form of legislation, administrative regulations and court rulings. In many declared common-pool resource scenarios, the working rules used by appropriators may be quite different from legislative, administrative, or court regulations [7]. Ostrom believes that the working rules used by appropriators can come from a variety of sources. The lack of a national, formal law regulating the occupation and provision of common-pool resources is not the same as the lack of effective rules. The importance of “arenas” as formal or informal decision-making venues is also emphasized, and the relationship between arenas and rule selection and enforcement should be seen.

From this perspective, the Arctic Council and its governance model rely on decision-making scenarios and rule forms with a strong sense of self-governance. Apart from the above-mentioned nature of the Arctic Council as a high-level forum, which is consistent with the “arenas” under the theory of self-governance, the extensive soft law governance of the Arctic Council has also become its representative feature, such like the Arctic Environmental Protection Strategy, the Nuuk Declaration, the Inuvik Declaration, the monitoring and assessment reports of various pollutants, and various reports and guidelines with respect to issues of climate, pollution elimination, oil and gas, emergency prevention and so on. Such international soft law norms of the Arctic Council completed the institutional supply well. Unlike treaties, “zero” binding is an effective feature of soft

law, and Article 1.2 of the Arctic Offshore Oil and Gas Guidelines makes it clear: “While recognizing the nonbinding nature of these Guidelines, they are intended to encourage the highest standards currently available. They are not intended to prevent States from setting equivalent or stricter standards, where appropriate.” It is an indisputable fact that the high cost of the formation of treaty mechanism and customary law in international law, even if soft law does not surpass hard law, its efficiency is not necessarily inferior to hard law. It is the existence of soft law as a “working rule” that maintains the minimum order in the Arctic, reduces the exclusivity of Arctic interests, promotes cooperation, realizes “credible commitment”, and lays a foundation for the hardening of soft law in the future, which is conducive to the flexible solution of Arctic issues.

4. The dilemma of self-governance in Arctic governance

4.1 Instability in the external political environment

The birth scene of self-governance theory is the domestic common-pool resources of a country, and the biggest variable that extends its application to the global public domain is that the domestic peripheral political environment, which is already vulnerable, will evolve into a more uncertain international political environment in the international community. With the decrease of sea ice in the Arctic, the value of the exploitation and utilization of Arctic resources is increasing. The practical problem is that countries and organizations outside the region will also pay more attention to the Arctic. An example is that countries are putting forward their identity positions conducive to participating in Arctic affairs. For example, “Near-Arctic State” and “Pan Arctic State” are proposed by Chinese scholars. “Arctic Stakeholder” is proposed by British scholar Geoffrey Parker, and Japanese scholar Aki Tonami proposed “non-Arctic Coastal States” and so on. How to realize the cooperation in Arctic governance at a larger circle in the future will be a major problem.

Although in the foreseeable future, the existence of the UNCLOS can make the Arctic coastal countries enjoy the sovereignty or jurisdiction in territorial sea, contiguous zone and exclusive economic zone, the governance of the high seas of Arctic Sea should still rely on the principle of freedom of the high seas. The environmental governance of the Arctic high seas cannot be realized by only relying on the UNCLOS. In addition, the situation is similar with regard to the Spitsbergen Treaty, since state parties have the right to free access to specific areas of the Arctic and equal rights to scientific research, production and commercial activities within that specific area in accordance with the law. In May 2013, China, Japan, South Korea, Singapore and India joined as Arctic observer states, similarly demonstrating Asia’s growing interest in the Arctic. The European Union in 2008 issued “The European Union and the Arctic Region”, European Commission and High Representative of the European Union for Foreign Affairs and Security Policy released on June 26, 2012, titled “Developing a European Union Policy towards the Arctic Region: progress since 2008 and next steps”, and “The inventory of activities in the framework of developing a European Union Arctic Policy” and “Space and the Arctic”. Therefore, in general, many countries outside the Arctic region are actively participating in the Arctic affairs unilaterally and trying to integrate themselves into the governance pattern of the Arctic Council. In the future, it is very likely to further affect the governance pattern of the Arctic Council and realize institutional changes and even fundamental changes in the governance pattern of the Arctic.

4.2 Institutional supply of the Arctic Council

Although self-governance is the third way of governance different from the state/market, it does not hinder the need for an effective internal governance system to achieve governance effects. In fact, Ostrom observed that, from the reality, many common-pool resources were not provided a set of effective or sustainable institutional arrangement, resulting in the degradation of common-pool resources, while an effective institutional supply usually conforms to the eight design principles mentioned above. Ostrom also points to the difficulty of institutional change, meaning the replacement of an old system by a new one [2].

Arctic governance is facing core obstacles such as insufficient institutional supply and difficult institutional change. First, the Arctic high seas cover an area of about 2.8 million square kilometres, which lies outside the exclusive economic zones of the five coastal states of the Arctic Ocean. According to the provisions of the UNCLOS, this part of the high seas area will apply the principle of freedom of the high seas, which belongs to the typical global commons and is most prone to the tragedy of the commons. In the UNCLOS, however, only the terms of Article 234 are designed for the Arctic Ocean, but only give the right of coastal state to formulate and implement non-discriminatory laws and regulations on vessels within the exclusive economic zone frozen areas with respect to the issue of marine pollution. In such manner of speaking, the Arctic Ocean environmental governance is still in a relatively systematic legal vacuum. In the 2010s, the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic was signed by the member states of the Arctic Council, and the Polar Code was adopted under the auspices of the International Maritime Organization. What's more, the Five Coastal States of the Arctic Ocean and other invited states or regions, including China, signed the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean in 2018. These legally binding rules of international law have provided institutional supplies on some issues. However, it is undeniable that there is still a lack of enforceable rules of international law in many important areas, such as the exploitation, conservation and utilization of Arctic living resources, oil and gas extraction and marine microplastic pollution.

Secondly, as mentioned above, the Arctic Council's soft law norms maintain the minimum order in the Arctic. However, on the one hand, the emerging problems in the Arctic and the increasing seriousness of the problems require more in-depth cooperation among member states of the Arctic Council, and the soft law governance of some issues has been inadequate. On the other hand, as stated in China's Arctic Policy, a white paper issued by the State Council Information Office of the People's Republic of China on January 26, 2018, the future of the Arctic bears on the interests of Arctic States, the well-being of non-Arctic states and mankind as a whole, and Arctic governance requires the participation and contribution of all stakeholders. The internal cooperation of the 8 Arctic countries cannot extend to solve the erosion of the Arctic environment caused by some activities of countries outside the Arctic region.

More difficult is the institutional change in the Arctic Council. At present, there is a strong call for the reform of the Arctic Council, which involves regional security, rearrangement of working groups, funding, observer status, climate change and so on. For example, officials and scholars of many member states have called for the inclusion of traditional security issues in the agenda of the Arctic Council [8]. Funding was also a challenge, not only for the Secretariat but also for the Working Group. The Working Group relies on one or two countries to finance the Secretariat, but funds for existing projects are limited. Almost all operations are specially funded by the countries supporting them or individual experts themselves raise funds from national sources. As a result, funding often drives projects, not the other way around, making it difficult for the Arctic Council to plan strategically. On climate change, Canada and other countries have shown little interest, with the indifference of the United States and Russia [9]. Commissioned by the Ministry of Foreign Affairs of the Finnish government, which took over the rotating presidency of the Arctic Council in 2017, Center for Strategic & International Studies of the United States conducted a study on the reform of the Council and published a report entitled "An Arctic redesign: Recommendations to rejuvenate the Arctic council" The report makes a detailed study of the current problems of the Arctic Council and lists four options based on different reform intentions and goals: defer governance maintenance, attempt some repair of existing structure, outsource policy implementation, or seek a new design plan (Arctic Security and Cooperation Organization) [10].

In order to solve the above institutional supply dilemma, the core requirement is for the Arctic Council to realize institutional change, but the heterogeneity of interests in Arctic governance may become a key obstacle to institutional change. According to the Ottawa Declaration and the rules of procedure of the Arctic Council, any resolution of the Arctic Council must be unanimously agreed

by Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States. Therefore, if the G8 fails to reach an agreement, the reform process of the Arctic Council will be difficult to start. The most typical issue is regional security. As the United States was worried about weakening its dominant position in the Arctic region and did not want its military authority to be limited, it insisted that the Arctic Council should only be an intergovernmental forum rather than an organization with a policy making role when negotiating the establishment of the Council, and made it clear that the Council should focus its work on environmental protection while traditional security and military issues should be avoided [11]. Moreover, the rejection of non-regional countries to participate in Arctic affairs by some members of the Arctic Council makes it more difficult for the Arctic Council to expand its membership.

4.3 Credible commitments between arctic states

Apart from the problem of institutional supply, another difficulty of self-governance theory lies in credible commitment. In the initial phase, an appropriator may agree to the proposed rules in order to get along with others after estimating his or her expected future revenue flow in the event that a majority of appropriators agree to follow the proposed rules. In later periods, however, the benefits readily available to the appropriator for violating this or that rule are often likely to be higher. Once one appropriator breaks the promise and cheats or even betrays others, this state of good self-governance may be on the verge of collapse, and after all, the rest of the others will not be willing to become the victim and continue to keep the promise. Therefore, the biggest difference between the self-governance model and the state/market model is that self-governance requires sufficient mutual trust among participants to support long-term cooperation and mutual benefit.

One of the challenges of governance in the Arctic region lies in the tense geopolitical atmosphere and the complex direct relationship between the Arctic countries. The existing geopolitical groups in the Arctic region include the Five Arctic States, the Eight Arctic States, and the Barents Euro-Arctic Council. The Five Arctic States have the most dominant power in Arctic affairs, and they strongly hope to regionalize rather than internationalize the Arctic issue [12]. The five Arctic littoral countries--United States, Canada, Russia, Denmark and Norway jointly issued the Ilulissat Declaration in 2008 which explicitly says, "We therefore see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean." Governing the Arctic Ocean requires only their sovereignty, sovereign rights and jurisdiction over most of the Arctic Ocean and measures under international law to ensure the protection and preservation of the Arctic Ocean's fragile Marine environment. But the declaration was met with protests from other Arctic nations, including Finland, Sweden and Iceland. Thus, credible commitments at the Arctic Council level are, in fact, very difficult to secure. In addition, the Arctic region has border disputes exist in history, such as Norway and the former Soviet Union on Spitsbergen islands about 6 square miles of the Arctic shelf controversial [13], dispute between Canada and the United States for the boundary problem of the Beaufort Sea, and the continental shelf dispute between Canada and the Former Soviet Union over the Alfa Ridge and so on [14].

What cannot be further ignored is that the United States, Russia and other countries are constantly strengthening their military deployment in the Arctic, which has intensified the militarization of the Arctic region. The 2019 "Report to Congress Department of Defense Arctic Strategy" of the United States calls for the joint forces to maintain their competitive military advantage in the Indo-Pacific and Europe, and to maintain credible deterrence in the Arctic and Russia approved the "Basic Principles of Russian Federation State Policy in the Arctic to 2035" on 5 March 2020 as well, which set up a conventional force and coastal defense system in the Arctic region to improve the combat effectiveness of all Russian Arctic forces and improve the three-dimensional integrated control capabilities of air, ground and underwater forces, so as to safeguard military security in the Arctic region under different military and political conditions. At the end of 2020, Russia and the United States happen to coincide arrangements for military

deployment in the Arctic. Once Arctic governance enters into a military tussle, it will be even more difficult to achieve a high level of mutual commitment among the participants.

5. Conclusion

Based on the theory of common-pool resources, the dilemma of Arctic governance can only be solved in a real sense by going to two “distant places”. One is to continue along the self-governance mode, but need to complete a degree of institutional change, achieve what Ostrom said “Nested enterprises”, construction of multi-level governance. Such design principle is regarded as “All of the more complex, enduring CPRs meet this last design principle” by Ostrom. The second is a complete “betrayal” of self-governance towards the traditional sense of the state/market model. Of course, it is impossible to realize the most effective governance model of common-pool resources theoretically through the market model, since under the regulation of UNCLOS, the claim of sovereignty over the high seas in the Arctic Ocean has been explicitly abandoned by the international community. Besides, the state model or the so-called government model is now also only having the possibility of theory. The difficulties of building a core administration and also building up a set of system of centralized type is far more than deepening self-governance system, and is relatively more difficult to obtain the support of Arctic States and even the entire consensus of the international community.

Similar solutions have been proposed by scholars such as Sun Kai, associate professor of Ocean University of China, who pointed out that the governance of Arctic affairs could follow the decision-making mode of EU affairs under the framework of multi-level governance at the supranational level, national level, sub-government and nongovernmental level. The influence of different levels is different due to different issues, and the actors and decision-making methods of different levels are also different. However, each level is complementary to each other in function, overlapping in authority, interdependent in action and coordinated in goal, thus forming a new decision-making model [15]. “Success in starting small-scale initial institutions enables a group of individuals to build on the social capital thus created to solve larger problems with larger and more complex institutional arrangements [2].” Larger, more inclusive organizational units nest smaller, more independent organizational units that manage to govern themselves more quickly. As a result, smaller organizations become part of a more inclusive system without giving up fundamental autonomy. The value of the lower-level units is nested rather than absorbed or marginalized, and from the perspective of the “vertical” assurance issue, this is an issue that arises as governance becomes multi-level. At the same time, introducing a higher level can help lower-level participants solve their “horizontal” assurance problem [16]. And when small systems fail, there are larger systems to call upon—and vice versa [17].

Currently, supranational organizations in Arctic governance include various UN affiliated organizations covering Arctic affairs, such as the United Nations Environment Programme, the Arctic Council and the Barents-European Arctic Council. The national level mainly refers to the eight Arctic States plus relevant countries outside the region. At the sub-government level, representatives are the Alaska Government of the United States and the Northwest Territories, Yukon and Nunavut of northern Canada, and non-governmental organizations include indigenous non-governmental organizations in the Arctic region, such as the Arctic University, the International Arctic Science Committee, and the International Union of Arctic Social Sciences. In fact, such a multi-level governance pattern has already begun to take shape, but the fundamental problem lies in that although there are layers between multiple governance subjects, they are not subordinate to each other, are not related to each other, and there is no nested relationship. In this way, the main body of governance at multiple levels may restrict each other and increase internal friction in the continuous struggle for governance power.

The most urgent task for the self-governance of Arctic governance is to set up a connection channel between organizations at all levels, grant them a certain degree of autonomy, allow them to

conduct self-governance, actively promote institutional supply within them, and ensure that the right of organizations at all levels to design their own systems which is not challenged by the Arctic Council. Take the current Permanent Participants of six Arctic Indigenous organizations as an example, although they invested a lot of energy in the Arctic Council, and actively participate in the various working group and individual projects, even the Inuit Circumpolar Council as one of the first Permanent Participants also authorized to participate in the Senior Arctic Officials meetings and Ministerial meetings, but due to the subordinate status of indigenous peoples and their organizations, their decision-making power in Arctic affairs is still low and they have no right to determine the international direction of Arctic governance. Thus, it is imperative for the Arctic Council to create a relaxed external political environment for them.

It can be imagined that if the self-governance structure of “Nested Enterprises” can be realized, the Arctic Council will not specifically participate in the governance activities of the sub-organizations, and its responsibilities and functions will be more reflected in the formulation of strategic direction, discussion and coordination, dispute settlement and monitoring and implementation. In this way, the Arctic Council will no longer be obsessed with the status of member states and observers, and truly realize the value and original goals of the Arctic Council.

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